

HINDENBURG EXPLOSION (1936)

THE MUSEUM OF ACCIDENTS PAUL VIRILIO

"When it comes to information distrust the probable. Always begin by believing what seems incredible." Emile Gaboriau

To innovate the vessel was already to innovate the shipwreck, to invent the steam engine, the locomotive, was again to invent the derailment, the rail catastrophe. So it goes for the birth of aviation, airplanes innovating air-crashes, the air catastrophe. Not to mention the automobile and car pile-ups, electricity and electrocutions, nor especially those major technological hazards produced by the development of chemical and nuclear industry ... each period of technological development, with its instruments and machines, brings its share of specialized accidents, thus revealing en negatif the scope of scientific thought.

The military object, armaments or diverse devices, invert the tendency to privilege **SUBSTANCE**; on the contrary, the logic of war requires the **ACCIDENT**, disasters as a principle: canons, shells, tanks or missles are then nothing but cumbersome war artifacts to be lightened and minaturized as quickly as possible while their destructive effects (range, impact...) are constantly improved and made more spectacular in a bid to obtain the *absolute weapon* (atomic or otherwise), the absolute expression of major technological risk, the absolute form of fear, and thereby, one would hope, the beginning of wisdom.

Indeed, the beginning of wisdom would be, above all, an awareness of the symmetry between substance and accident, instead of constantly dissimulating them. To acquire a tool, a new piece of industrial equipment or whatever, is also to acquire a danger, a particular risk; it is to open one's door, to expose one's intimacy to hazards, slight or major. To censor evidence, as is so often the case, is to practice dissimulation, ensure disinformation, and so contribute to a loss of confidence in the effects of science, analogous today only to what happens in politics. Hence the disinterestedness, the decline of curiosity in the most varied fields, reckoned to the unprecedented development of electronic or other images, though *the simulation industry* marks the rise of contradiction and even a certain compensation. Exposing the accident in order not to be exposed to it is, at present, the main function of simulators used to measure the performance of technological objects. It seems to me, the same should hold for the new museography, especially that which claims to deal with science and industrial products.

SCIENCE MUSEUMS: A PROBLEM OF "POSITIVISM"

With the opening of the latest French museum at La Villette, there is left only to unveil the hidden face of industrial production, namely (that which is constituted through) failure and breakdown. The aim is not to construct an "Anti-Museum," but to demonstrate the very notion of "museum" as applied to experimental research, and in this way contribute to the constitution of what may one day be *the science of an anti-science museum*: the public platform for what never exposes itself, yet nevertheless exposes us incessantly to major risks.

At a time when headlines and newscasts are almost permanently preoccuppied with voluntary or involuntary accidents, dramas, natural or terrorist-induced catastrophes, the problem facing a museology of science is not so much a choice between the gallery of machines, *the depository museum* similar to an "Arts et Metièrs" and *a laboratory museum* like the "Palais de la Découverte," but rather one of a philosophical and scientific positivism. It is the choice of a lyrical illusion of progress whose purpose is to continously mask all that is negative in the name of science, as if exact science would progress by dissimulation, or censorship of its own errors and false calculations ...

There is an urgent need, it would seem, to make room in public information for "fallibility," that tendency particular to the work of certain theoreticians who preach the research priority of refutation within each scientific discipline. A "post-positivist" approach, insofar as it goes beyond an ideology of linear and continuous progress, would exclude the importance of the avatar and beneficent error.

It is pointless to rehabilitate the traditional criticism or auto-criticism used by scientists, it is a *question of inversing the relation to the proof:* proof by failure, exemplary refutation, and not solely by spectacular success.

For our "anti-museum" of accident simulation would not, as we often find, resemble substantial dissimulation where one is given to see, in order to overshadow truth, but rather it would be a matter of *inversing the relation to the exhibition* ... rather like methods of experimental approximation where the failure to achieve the object, leads to a continual testing of *what cannot be*. Or again, using negative procedures, not to terrorize researchers (engineers, scientists...) but to *familiarize them with the unusual*, so as to prepare them to react predictably and efficiently, thus avoiding the dangers of habit – that professional deformity born of a routine confidence in the reliability of technological objects. "Exhibiting the accident" consists therefore, in *exposing what is improbable, what is unusual and yet inevitable.*

THE EXPLOSION OF CHALLENGER *LIVE* IN FRONT OF MILLIONS OF TV VIEWERS.

Pontifical infallibility does not exist when it comes to major catastrophies; the "Challenger" disaster is there to prove it. Moreover, if we observe what has happened, given that the techology was so recent (4 to 5 years at the most), it is undoubtedly NASA's complacency, its derisory estimation of the probable risks, that is responsible for the catastrophe. With all the disparate and heteroclite technologies used for the launching [ie. the "space-shuttle" (sophisticated), the two boosters (not very different from the V2s used in the last war) and the enormous container of liquid hydrogen], the accident is not so much that the space-shuttle exploded in mid-air but that it actually lifted off!

These "extreme situations" [situations-limites] require the utmost vigilence against routine; it should be the same when it comes to information on 'extreme technologies,' and this should apply not only to professionals, those responsible for the programs and other decision-making executives, but also to the amateurs and naive spectators of recent technological achievements.

In this sense, it could be said that the real exhibition of science and technology at this, the end of the twentieth century, is not to be found in the showcases of the "Musée de la Villette," but rather in the explosion of the "Challenger" just above the Kennedy Space Center, live, in front of hundreds of millions of TV viewers sitting in front of their cathode windows.

"To expose or to be exposed, that is the question," to be or not to be conscious, scientifically speaking, of risks, of what befalls without consent: accident, the hidden face of all natural or man-made substance. Given that all simulation studies emphasize the search for suprise (expecting the unexpected), we should today refute Aristole's dictum: "there is no science of accidents," since this new generation of image simulators constitutes the "science" of a progressive unveiling of the accidental which, until recently, was impossible to imagine. Scientific speculation and exhibition are frequently limited (as they are for art) to "human accessibility." In otherwords, their capacities of aperception of the environment, capacities linked to their only organs of perception, organs which today are relieved by, an impressive ensemble of prostheses (audio-visual, automobile) which permit *indirect* access to another space/time in order to apprehend extreme phenomena.

A NEW SCENEOGRAPHY WHERE ACCIDENT EXPOSES ITSELF.

"What actually happens is so far ahead of our thinking, of our intentions, that we can never reach it and never know its true appearance." Rainer Maria Rilke This insolvency, if it still carries a profound truth, does not totally reflect actuality since the essence of numerical exposition has as its objective, the updating of that unactualized appearance, that surprise rupture, the sudden disfunctioning or the grave perturbation. How can we therefore under such conditions, dare present to the public, in a place that was, lest we forget, the theatre of a monumental error in programming, the feat of rationality without exposing the priority of that other scientific feat, namely the meteorological forecast of catastrophe? The exploration of a future time, a "time" which is the very space of tomorrow, rapid space which comes uninvited into the lives of the machine, men and even society through the economic and political side-effects of resounding failures ...

At a time when the public is interested in outer space, it might be worth constructing a mental image of each incident, each accident that *happens*, like some sort of "fire-bolt" whose impact is being prepared in obscurity, in the deep temporality of the material, of the machine: a propitious obscurity, similar to that of the firmament concealing future collisions.

In this preventative perspective, the accident cannot be reduced to its fatal consequences, to its practical results, ruins or wreckages but must be related to a *dynamic and energetic process, to a kinetic and cinematic sequence* that seems unable to relate to the relics of destroyed objects, demolitions and wastes of all kinds.²

In this way "the exposition of the accident," the exposition of that which habitually exposes us, calls for a new museography, a sort of meta-museography capable of overexposing and under-exposing the matter and systems threatened, a way of showing what happens when the unexpected occurs, signaling the absolute necessity for techniques of rapid "cinemacrophotography" and computer generated images.

It would no longer be a question of simply exposing new objects or the aftermath of disasters, nothing to stimulate the morbid curiousity of visitors which would only favour a new romanticism based on technological ruin in the manner that a beggar exaggerates sores to inspire pity. After having polished the brass on the first steam engines, in the twentieth century museums we won't deliberately blacken the burnt out ruins of advanced technology. No, what is needed is a new scenography where only *what is exploding or decomposing is exhibited*. A paradoxical *mise en scène* of the obscene, where decomposition and disintegration follow artistic display and high-tech design.

"The aesthetic of disapperance" be it progressive or instantaneous, is no longer that of appearance, of a style or a genre or a scientific author; visitors will no longer file past galleries since the "space" of the exhibition will have lost all interest, its museographic attraction will be replaced by *the time of exhibition*, depths of time comparable to those of the most vast horizons, the most vast landscapes: *landscapes in which "events*" replace the old exhibition halls, where architectural spaces disqualified on the one hand because of their orthogonal geometry, ³ and on the other hand because of the necessities of an "urgent" projection, would have nothing to do with the hanging of photographic or graphic work, an exhibition of objects or industrial products.

Finally, as we saw on the TV news (18.2.86), the live demolition of a large building in a Paris suburb, the transmutation in 8 seconds of a 180m high-rise building into 70,000 tons of rubble: the "museum of accidents" already exists, I've seen it: it is the TV.

Translated by Yvonne Lawrence

NOTES

1"This article appeared as part of the inauguration of the new science & technology museum La Cité de la Villette in March '86. Originally published in *Art Press* no.102 (April '86): p13-14.

2 In this field recall the precursive character of the exhibition by Sacha Ketoff: *Air Crash* Galerie Lacloche, June 1978.

3 As in the case of the exhibition Les Immatériaux Spring 1985 at Centre Pompidou.