



Management of Extreme Situations

*From Polar Expeditions to
Exploration-Oriented Organizations*

**Edited by
Pascal Lièvre
Monique Aubry and Gilles Garel**



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Preface



The *Centre Culturel International de Cerisy* proposes, each year from the end of May to early October and within the welcoming context of a 17th-Century castle, an historic monument, meetings to bring together artists, researchers, teachers, students, social and economical actors, as well as the wider public interested in cultural and scientific exchanges.

A long cultural tradition

– Between 1910 and 1939, Paul Desjardins organized the famous “decades” in Pontigny abbey, to unite eminent personalities for debates on literary, social and political themes.

– In 1952, Anne Heurgon-Desjardins, while repairing the castle, created the *Centre Culturel* and continued, with her own personal touch, the work of her father.

– From 1977 to 2006, her daughters, Catherine Peyrou and Edith Heurgon, took the lead and brought a new dimension to the activities.

– Today, after the departure of Catherine and then of Jacques Peyrou, Cerisy continues under the management of Edith Heurgon and Dominique Peyrou, supported by Anne Peyrou-Bas and Christian Peyrou, also part of Cerisy castle’s Civil Society, as well as with the support of an efficient and dedicated team led by Philippe Kister.

A like-minded original project

– They receive, in a prestigious setting far removed from urban disturbances and for a relatively long time period, people who are animated by the same attraction for discussion, in order to, through communal contemplation, invent new ideas and weave lasting connections.

– The Civil Society graciously puts the premises at the disposal of the *Association des Amis de Pontigny-Cerisy*, with no lucrative purpose and recognized for its public interest, currently presided over by Jean-Baptiste de Foucauld, the inspector general of finances.

A regularly supported action

– The *Centre Culturel*, the main means of action of the Association, has organized nearly 750 *symposiums* broaching, through completely independent routes, the most diverse of themes. These symposiums have given rise, through various editors, to the publication of approximately 550 *books*.

– The *Centre National du Livre* ensures continuous support to the organization and publication of the symposiums. The *territorial collectivities* (Normandy Region, department Council of the Manche, Coutances Mer and Bocage) and the *regional directorate of cultural affairs* bring their support to the Center, which also organizes, alongside the *Universities of Caen and Rennes 2*, encounters on themes concerning Normandy and the Great West.

– A *Cercle des Partenaires*, circle of partners, formed of enterprises, local collectives and public bodies, supports and even initiates *prospective* encounters on the main *contemporary challenges*.

Since 2012, a new modern and accessible conference room has allowed for a new formula: the “Entretiens de la Laiterie”, days for exchanges and debates, a collaborative effort from the partners of the Association.

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Cerisy Symposiums

Selection of Publications



L'Activité marchande sans le marché ?, Presses des Mines, 2010.

Le symbolique et le social (Pierre Bourdieu), Université de Liège, 2005, republication 2017.

Civilisations mondialisées : de l'éthologie à la prospective, L'Aube, 2004.

Communiquer/transmettre (autour de Régis Debray), Gallimard, 2001.

Les nouveaux régimes de la conception, Vuibert, republication, Hermann, 2014.

Connaissance, activité, organisation, La Découverte, 2005.

Déterminismes et complexités (autour d'Henri Atlan), La Découverte, 2008.

Le Développement durable, c'est enfin du bonheur !, L'Aube, 2005.

L'Économie de la connaissance et ses territoires, Hermann, 2010.

L'Économie des services pour un développement durable, L'Harmattan, 2007.

L'Entreprise, point aveugle du savoir, Éditions Sciences humaines, 2014.

Europe en mouvement – 1. À la croisée des cultures, Hermann, 2018.

L'Homme des sciences de l'homme, Presses universitaires de Paris Ouest, 2013.

- Imaginaire, industrie et innovation*, Manucius, 2016.
- Individualismes contemporains et individualités*, PU de Rennes, 2010.
- L'Industrie, notre avenir*, Eyrolles, 2015.
- Intelligence de la complexité*, L'Aube, republication, Hermann, 2013.
- Renouveau des jardins : clés pour un monde durable?*, Hermann, 2014.
- Nourritures jardinières dans les sociétés urbanisées*, Hermann, 2016.
- Jardins en politique avec Gilles Clément*, Hermann, 2018.
- La Jeunesse n'est plus ce qu'elle était*, PU de Rennes, 2010.
- Des possibles de la pensée (itinéraire philosophique de F. Jullien)*, Hermann, 2014.
- Ce que la Misère nous donne à repenser, avec Joseph Wresinski*, Hermann, 2018.
- Penser la Négociation aujourd'hui*, De Boeck, 2009.
- S'orienter dans un monde en mouvement*, L'Harmattan, 2018.
- De Pontigny à Cerisy: des lieux pour « penser avec ensemble »*, Hermann, 2011.
- La philosophie déplacée : autour de Jacques Rancière*, Horlieu, 2006.
- Prendre soin : savoirs, pratiques, nouvelles perspectives*, Hermann, 2013.
- Du Risque à la menace. Penser la catastrophe*, PUF, 2013.
- Sciences de la vie, sciences de l'information*, ISTE Editions, 2017.
- Des sciences sociales à la science sociale*, Le Bord de l'eau, 2018.
- La Sérendipité. Le hasard heureux*, Hermann, 2011.
- Gilbert Simondon et l'invention du futur*, Klincksieck, 2016.
- Lectures contemporaines de Spinoza*, Presses universitaires Paris Sorbonne, 2012.
- L'empreinte de la technique. Ethnotechnologie prospective*, L'Harmattan, 2010.

Qu'est-ce qu'un régime de travail réellement humain, Hermann, 2018.

Universités populaires, hier et aujourd'hui, Autrement, 2012.

Villes, territoires, réversibilités, Hermann, 2013.

Le moment du vivant, PUF, 2016.

Introduction

The purpose of this book, edited by Pascal Lièvre (CRCGM, UCA), Monique Aubry (ESG-UQAM) and Gilles Garel (CNAM), is to report on the Cerisy symposium held from June 14 to June 21, 2016, entitled “*Management des situations extrêmes : des expéditions polaires aux organisations orientées exploration*”¹. This symposium was supported by Lirsa, CRCGM and Open Lab Exploration Innovation and took place in the always magical setting of the Château de Cerisy La Salle, in a rainy, studious, dense, continuous and friendly atmosphere. Calva and champagne punctuated our academic debates but also our evenings, which were based in a more sensitive register around testimonies/experiences concerning, for instance, the emergence of a new technology in the Himalayas or an identity itinerary of a sea kayaker in the Arctic. It brought together 52 participants. We would like to thank Edith Heurgon for her warm and firm welcome in this collective adventure and to the entire team for their logistical assistance at all times. A very special thought is expressed for Catherine de Condillac who has since moved to other heavens.

In this introduction, we propose first to recall the intention of the symposium and to report on the debates that took place, then to come back to some theoretical definitions and frameworks of the management of extreme situations program, and finally to present the outline of the book, which is an *ex post* rationalization of our work.

I.1. Intent and status of the debates

We set out in the following way the arguments that would form the basis of our reflections. Managers are often confronted with extreme management situations

Introduction written by Pascal LIÈVRE.

1 Management of extreme situations: from polar expeditions to exploration-oriented organizations.

when they face collective action that takes the form of a project, intensive in terms of knowledge, in an evolving, uncertain and risky context. These situations may be intentional or non-intentional, but emergency and/or crisis situations also arise. In all cases, they are the subjects of a specific form of management where organizational creativity and reliability are combined. This conference therefore provided an opportunity to review the principles and mechanisms for managing these situations by exploring different types of terrain: from polar expeditions to innovative disruption approaches and fire rescue services. Research highlights three areas that increase the intelligibility of these situations: the construction of meaning within collectives, organizational ambidextrous capacities and systems for expanding experiential and scientific knowledge. *In fine*, the management of extreme situations appears to involve the management of disruptions that require “situated” learning, the source of which is creative human potential.

This conference was an opportunity to re-question definitions that were taken for granted around the management of extreme situations. First of all, different categories of the extreme have emerged with possibilities of articulation between them: extreme achievement, extreme innovation, extreme urgency, extreme crisis, etc. Extreme situations have been described as “new” but also as the daily prize of managers in the context of a knowledge economy. They have also appeared as “banal” and “old” in the context of wars, storms and diseases but also in the field of maritime, polar, high altitude and space exploration. The extreme management situation has been characterized as both an objective and subjective disruption with a more familiar past situation, moving toward a situation where the radically unpredictable new situation cannot be ruled out and where actions are never trivial, as they can have serious economic, organizational, vital or symbolic consequences. Finally, management has had very different attitudes toward the extreme: it first wanted to eliminate it, then face it and today it wants to generate it through disruptive innovation.

The debates revealed both differences and possible articulations between different ways of investing in this object on a theoretical level: in terms of a management “device” and an action plan in the sense of Hatchuel, in terms of “practice” in the sense of Bourdieu to move toward the notion of a “management situation” in the sense of Girin (1990) or that of a “project as practice” (Blomquist *et al.* 2010) and finally from the perspective of a firm theory in the sense of Cohendet (Cohendet *et al.* 2017). In all cases, an investigation of practices appeared to be somehow unavoidable, raising questions that fall within the scope of anthropology.

The heuristics of extreme situations were discussed. The construction of meaning was addressed from a variety of perspectives, but also as a certain way of combining “sensemaking” and “meaning”. Natural ambidexterity at the team level appeared as the first example compared to organizational ambidexterity.

The notions of “spark”, “manifesto” and “community” have repeatedly been proposed as a chronological reading grid for knowledge expansion schemes. Other disciplines such as psychology have been invited into our exchanges on several occasions. Expeditions, whether polar or mountain expeditions, have found their full legitimacy in management sciences. We have also been able to show that it is possible to establish links between creativity and reliability within organizations. In the end, it is a question of learning in situations and its regulation that has emerged as a major issue in the management of extreme situations.

1.2. Some framework elements around the management of extreme situations

The starting point of this research program is the emergence of a knowledge economy in the 1990s (Drucker 1993; Nonaka and Takeuchi 1995; Hatchuel and Weil 2002; Foray 2003; Amin and Cohendet 2004) which is leading managers to face a new kind of *management situation* that we call *extreme*: management situations that are *at odds with* a usual way of doing things, with what we used to do before, and that will require actors *to acquire new knowledge* to cope with the situation. Management situations are the conditions where, as we will see later on, the unknown, scalability, radical uncertainty and risk become the elements with which managers must work. These management situations are a total disruption compared to what managers experienced during the 1950–1975 period, in an economy of production and mass consumption, and a smaller but still strong disruption with an economy of quality (1974–1990). But above all, this new economy is characterized by permanent change (Foray 2009), the era of permanent disruptions “the movement” as Alter (2002) calls it. The question of learning, adaptation and innovation is permanently raised as a matrix of the organization’s performance (Nonaka 1994).

This is a new type of management situation that we are addressing in a more precise way, such as “the design and implementation of collective actions in the form of projects, intensive in terms of knowledge, in an evolving, uncertain and risky context” (Lièvre 2016). This type of extreme management situation also corresponds to what some authors such as Hatchuel, Garel and Lenfle call innovative exploration projects that are mainly characterized by the fact that objectives and means will emerge along the way (Lenfle 2008). At the same time, if these new management situations are largely unknown in the field of management, if they must be radically considered as enigmas according to Hatchuel’s expression, we make the assumption that we can learn from ordinary scientists such as polar shippers, for example, who have faced this type of management situation for three centuries. On the one hand, as historians, we have taken an interest in the logbooks of many expeditions (Lièvre and Rix-Lièvre 2013), but we have also take an

interest, on the other hand, as anthropologists, in 10 expeditions from the idea to the return to France by building ethnographic devices capable of investing in the practices located (Lièvre and Rix-Lièvre 2009, 2014; Rix-Lièvre and Lièvre 2010, 2014).

This is why we have chosen in this book to present an exemplary polar expedition, Nansen's mission to explore the North Pole; to invest in the change of plan when the world's first mountaineering project was realized in Patagonia; to gather the testimony of a Himalayan in his approach to expedition innovation; a sea kayaker in the Arctic in terms of his identity and learning path; but also that of Michelin's training managers in charge of this new managerial approach: exploration.

By mobilizing this notion of management situation developed by Jacques Girin (1983), we borrow a particular problem from the management sciences. This is the process of empowerment in relation to the economic and social sciences. We focus on a particular research object, the *management situation*, in a clinical or engineering posture by mobilizing a resolutely interactionist theoretical framework in the sense of the Chicago school of thought, by investing in "situated" practices, and by focusing on the assembly of human and non-human actors constitutive of the performance of collective action.

Let us return more precisely to this notion of the management situation. We will take as a starting point the definition proposed by Girin as early as 1983: the management situation is *a collective activity linked to a result that is the subject of a judgment*, and where *agents are engaged when they recognize themselves as participating to varying degrees in the production of the result* (Girin 1983).

We can distinguish *different management situations* according to the *degree of freedom that the collective has* to engage in the situation but also according to the more or less routine nature of the situation. Two management situations can be opposed according to *their origin*: management is *constrained or intended* to express the degree of freedom that the collective has with regard to the situation.

We can also distinguish two types of management situations depending on *the nature of the collective activity*, which may be of a *routine or project-based nature* following the work of Declerk *et al.* (1983). A two-by-two combination between these four orientations is possible, which we can represent in the form of Table I.1.