

The problems of the defining the risk: the case of mountaineering

Seigneur, Viviane

Veröffentlichungsversion / Published Version

Zeitschriftenartikel / journal article

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:

GESIS - Leibniz-Institut für Sozialwissenschaften

Empfohlene Zitierung / Suggested Citation:

Seigneur, V. (2006). The problems of the defining the risk: the case of mountaineering. *Historical Social Research*, 31(1), 245-256. <https://doi.org/10.12759/hsr.31.2006.1.245-256>

Nutzungsbedingungen:

Dieser Text wird unter einer CC BY Lizenz (Namensnennung) zur Verfügung gestellt. Nähere Auskünfte zu den CC-Lizenzen finden Sie hier:

<https://creativecommons.org/licenses/by/4.0/deed.de>

Terms of use:

This document is made available under a CC BY Licence (Attribution). For more information see:

<https://creativecommons.org/licenses/by/4.0>

The Problems of the Defining the Risk: the Case of Mountaineering

*Viviane Seigneur**

Abstract: A central assumption in sociology is that the view on the risk is essentially a construction rather than a strictly objective perspective. However, this approach has a tendency to forget objective knowledge and tangible facts. Our research on risks in high mountains compares the available information on risks (scientific literature, safety information, media coverage and political discourse) with our empiric observations. Our work shows that there are differences caused by lack of fundamental reflection on the definition of the risk as a social construction. We propose to reconsider the definition of the risk with concepts closely connected to risk such as: uncertainty, emotion, phobia and danger, and to point out problems of confusion in several works of authors (e.g. those dealing with sensational activity, such as bungee jumping, as if it was dangerous).

1. Introduction

Currently, the theme of risk continues to attract increasing attention and research on risks follows this trend. However, analysis within studies on risks is not always developed in a very rigorous way. This paper will focus on problems with defining risk, in particular in the French-speaking literature. Filing behaviours that are dangerous, suicidal, criminal, marginal etc., under the same notion of “risk-taking” must alert us to the scientific evolution of a definition of

* Address all communications to: Viviane SEIGNEUR, Groupe de Recherche Innovations et Sociétés, Université de Rouen, France. Centre interdisciplinaire scientifique de la montagne, Université de Savoie, 284 Chemin des Favrans, 74 400 Chamonix, France ; e-mail: viviane.seigneur@tiscali.fr.

First published: Seigneur, Viviane (2006, January). The Problems of the Defining the Risk: The Case of Mountaineering [27 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research [On-line Journal]*, 7(1), Art. 14.

Available at: <http://www.qualitative-research.net/fqs-texte/1-06/1-06-14-e.htm>.

risks and on some limits of the constructivist viewpoint. This viewpoint can generate typical traps, such as qualifying “risk-taking” for behaviour actually quite safe that is misunderstood or not recognised as such.

Moreover, the qualification “risk-taking” tends to discredit some categories of people. Thus, some populations are easily stigmatized, also by the scientists. Marc SOUVILLE’s example (2003) of AIDS illustrates this well. He shows how false knowledge cultivated by fear and transported by rumours actually influences health professionals. The rationality of the medical knowledge is weakened by unbridled phobias associated with the illness and its stereotypes (such as homosexuals, prostitutes and drug addicts). The link between risk and transgression or marginality is clearer then. Off-piste skiers and the snowboarders experience this kind of spin. Indeed, the image of the off-piste skiers or snowboarders is frequently associated with dangerous transgressive or at least criticisable behaviour. Jean Marie BROHM evokes the dangers of sports for fanatics (1995), for example new sports in the mountains. But the link between this kind of winter sports and transgression is clearer in the works of Alain LORET (1996). LORET argues that these attitudes do not abide by the law or social rules. Some of the people skiing and surfing off-piste were arrested by the French police, but then quickly set free because justice was unable to justify this action. Françoise SERVOIN points out this lack of legal justification in the case of snowboarders (1999).

In our opinion, the confusion between the case of particular winter sports and transgressive behaviour is the main explanation of this abuse. In reality, some preconceptions from the current language corrupt mislead researchers and magistrates. High mountains are particularly propitious to the development of our general thinking and provide our comments with various illustrations. Our ground is often described as an extreme place but we prefer to be more precise and neutral. We will, however, observe that the concept of “extreme” is not fit for scientific use, indeed.

2. Visiting High Places

Initially, let us specify that the social representations just cover a part of reality of alpine surroundings. This is reinforced by the fact that most people are never in this area and the difference between the real high mountain and social perceptions is particularly prominent.

This inventory of social perceptions is especially helpful when becoming aware of a second range of differences between risks and their social perception. Some authors like DUCLOS (1989) studied tendencies to overestimate or underestimate risks. The perceptions of risks in high mountains undergo strong distortions and provide some examples close to caricature. Before we start defining our approach to high mountains, we have to specify that it is a mythy-

cal environment. The myth is reinforced by quite limited knowledge owing to few visits.

Actually, the summits and the climbers stimulate the social imagination, and the danger of this exotic universe, more or less real, inspires many of preconceptions. However, we observe that the preconceptions also exist in lay and scientific perceptions. Researchers cannot easily access the high mountain areas, and therefore their work is based more on comments about this environment than on concrete, direct and long observations. Often, these comments misrepresent dangers like the omnipresent mortal avalanche quite uncommon in reality and the apathy¹ in connection with much more ordinary heart attacks during a hike in the mountains. The French mass media “keeps the books” of mortal accidents involving climbers in the Mont Blanc Massif, but very seldom mentions mortal accidents of hikers.²

3. Evaluation of the Risks and Risk Evaluations

Moreover, these distortions impinge upon the debate about safety and about the ways in which risks are “brought to life”, a phenomenon that in turn raises the issue of how risk can be strictly defined and how the notion of risk is manipulated.

As Ulrich BECK has pointed out, “the scope, the urgency and the existence of risk evolve as criteria and interests become more diverse” (BECK 2001, p.55), but it must not be forgotten that, in its strictest sense, risk is defined as a potential and more or less foreseeable danger.

In order to be able to talk about risk behaviour, a person must “expose him/herself to a non-negligible possibility of injury or death, of damaging his/her own future, or of putting his/her health in danger” (LE BRETON 2002, p.61). There must, therefore, be a more or less plausible link with danger. A risk is taken when it is impossible to predict what will happen: there is a potential for danger. However, a large amount of work has been carried out on “risk” in situations where there is no real danger. For example, Patrick PERRETTI WATEL’s work (2003) on deliberate risk taking looks at a number of different activities, including bungee jumping and fairground rides, which provide thrills, but are nevertheless completely safe. Sometimes researchers put themselves in a paradoxical situation by talking about risk behaviours and at the

¹ Here we refer to Peter SANDMAN (1994) and his concept of apathy. The social responses to risk (from apathy to panic) depend on the risk perception more or less ordinary.

² When we checked the Le Monde newspaper database, we found eight articles that dealt with “death+alpinism” and two articles that evoked “death+hiking” during the same period of time. Nevertheless, the number of deaths for hikers and for climbers is roughly the same in the Mont Blanc Massif in summer. Death involving climbers received four times more media coverage in comparison to hikers.

same time stating that there is no danger. Cécile MARTHA's research into bolt-protected rock-climbing states: "These factors are most notably characterised by the fear of falling, even though falling is not dangerous given the fall-arrest systems that climbers use (...)" (2003, p.58).

From our point of view, this type of ambiguous comment is generated by a failure to take into account the role of the affect in the definition of risk. However, research into the subject, such as that carried out by Paul SLOVIC (1981, 1999), shows that the affect is an essential factor in the evaluation of risk. Some situations evoke fear or indignation and these emotions play a very important role in these situations being considered risky.

Due to this tendency to confuse danger with other elements, such as phobias or thrills, the concept of risk is generally presented in an equivocal light. Even though phobias and thrills can be experienced in situations where there is no danger, there is a tendency for the producer of the stress-producing fear to "become" a danger and for thrill seeking to "become" a risk behaviour. The image of adventure races is based on just this ambiguity, as Marianne BARTHELEMY has noted:

The ingredients of the adventure are judiciously chosen and often stage-managed to stir the imagination. The uncertainty of the challenge, combined with the difficult race conditions and the distant and hostile environment that is chosen for most of the adventure races considered difficult, make the outcome uncertain and turn the event into an adventure. Although participants often let themselves get carried away by the illusion of risk, they are not fools and are well aware that the outcome of the race will never be fatal (2003, p.84).

The adventure race approach thereby raises the question of what is at the origin of this misconception. Here it seems that the uncertainty mentioned by BARTHELEMY has a role to play.

4. Horror Vacui and Vertigo

Uncertainty describes situations where the outcome is partially or completely unforeseeable, with some possible outcomes involving a potential risk. Consequently, there are two distinct facets to uncertainty. On the one hand, uncertainty suggests the possibility of risk. The link between risk and uncertainty has appeared quite frequently in articles on the sociology of risk, from Anthony GIDDENS (1994) to Ulrich BECK (2001) and BONSS and ZINN (2003). However, whilst the concept of uncertainty is an important element in the sociology of risk, it is also an important part of action theory. In fact, uncertainty appears in any situation where choices have to be made based on information that is incomplete and does not allow the evolution of a situation to be clearly determined. Therefore, uncertainty appears in forms that, to a greater or lesser

extent, prevent people, institutions or societies from acting. Thus, the concept of uncertainty is delimited by the fields of risk and of action (or other elements). When defined in such a way, this concept strongly represents the most prosaic idea of adventure.

Mountaineering adventure is a major theme in the high mountains. To go into the high mountains is undoubtedly an adventure, but more because the climber is moving towards the unknown, and not because he/she is exposing him/herself to danger. The difficulty of the adventure lies in the difficulty of carrying out actions and of not succumbing to indecisiveness. Far from the image of daring-do, the adventure in mountaineering does not generally come from a search for risk in any form. In reality, the adventure comes from the moments of doubt that climbers frequently experience rather than from a “close and permanent relationship with danger”.³ Mountaineers stand out because of their ability to make decisions and carry them through despite a high level of uncertainty, rather than because of a willingness to take risks. The idea of adventure is therefore much more closely linked to uncertainty than to risk.

Moreover, the word “adventure” does not only express this combination of risk and uncertainty, it is used to cover many different circumstances. As some writers who have theorised about adventure⁴ have noted, the word “adventure” refers more to the social representation of a situation than to a real situation. These remarks highlight the ambiguity behind the thirst for “adventure”, which has increased so spectacularly over the last 25 years due to the perpetuation of this very misconception.

The attractiveness of “adventure” has developed through a specific market and a very specific definition of the word. Thus, the increasing number of adventure races and adventure parks shows a taste for “guaranteed thrills”. The “adventurer” comes to play with his/her phobias, but under no circumstances to take a risk. The “adventure” is certain, the thrills are guaranteed, and the activity is completely safety. In fact, the adventure market has developed as a half-way house between a fun fair (for the kind of the device) and climbing Everest (for the image). Society’s definition of adventure has thus become the confrontation with a phobia in a more or less natural-seeming environment. Clearly, this idea of adventure has eliminated the parameter that should most characterise it; i.e. uncertainty. Society consumes this “adventure”, but remains as strongly averse as ever to any idea of uncertainty. In reality, the “adventure” market offers simulations of adventure in which thrills and programmed phobias have replaced discomfort (or even pain) and chance. It is this symbolic slight of hand that is at the origin of the misconception on which the “thrill market” is based and which allows customers to “consume an adventure” through a stage-managed challenge. That being said, the fact that some risk analysts have been taken in by such stage-managed scenes is a real problem, as

³ This is the BAUDRY’s definition of the Alpinism in *Le Corps extrême* (1999).

⁴ Like Vladimir JANKELEVITCH (1976) or Georg SIMMEL (2002).

it perpetuates the confusion between an adventure and the commercialisation of an “adventure” label. On a fundamental level, it maintains the impression, which is firmly anchored in the affect, that phobia and danger are one and the same thing.

5. Scientific Concept and Sensationalism

An analysis of the term “extreme” leads to a similar conclusion as the analysis of “adventure”. The French sociology of risk seems to have adopted these terms without removing the preconceptions of everyday language. Thus Patrick BAUDRY describes “extreme behaviours” as:

going beyond the limits (...) is less about conquering the forces of nature than putting oneself at their mercy (...) than abandoning oneself to their power, to these wild elements: taking part in the delirium of an all powerful Mother Nature (1999, p.143).

It could be asked whether this description actually refers to a real situation or to a phantasm-based image and whether the author is merely describing the image propagated by the media rather than real behaviours. Conversely, Pierre André RHEM⁵ described a much more pragmatic idea of the extreme: “Today, the word “extreme” is used to add spice to any dish. Currently, the term does not mean very much, other than to advertisers who are looking to create an image for their brands” (SEIGNEUR, 1997, p.109). The notions of “extreme” and “adventure” are part and parcel of the way the media covers mountaineering, but, at the same time, they cloud the understanding of real behaviours in the field. In order to clear the observation, it is useful to invoke the notion of phobia.

Phobias shed light on the ways in which risks are constructed. A phobia is an anxiety or fear triggered by an object or a situation that is not in itself dangerous (UNESCO, 1983, p.107). In the high mountains, phobias include anxieties generated by heights, uncertainty or the cold, with vertigo being the most obvious example. In this case, “the existence” of the danger is essentially due to the affective power of the fear of heights, and not to the evaluation of real danger. Thus, a climber who does not seem to be frightened of heights may be considered a “death-dodger”, or a lover of risk: even though there may be no real danger, the impressionable external observer is often convinced of the opposite. The French Himalayan climber Yannick SEIGNEUR refuted the liking for risk when he explained his connection with risk: “I didn’t like to take

⁵ Pierre André RHEM was a mountain guide, as was his father. He specialised in activities that are often referred to as “extreme”, although he did not consider himself an “extreme” sportsman. He was a base jumper (a type of free-fall parachuting that involves jumping from the top of a cliff or structure and opening the parachute at the last minute) and snowboarder who enjoyed the challenge of steep slopes.

risk. I always tried to eliminate the risk in my practice. I never enjoy taking risk” (SEIGNEUR, 1997, p.111). A number of possible attitudes to phobias can be adopted, ranging from complete aversion to attraction. Phobias can be sources of satisfaction or unpleasantness, depending on whether they are regarded as a barrier to overcome or a limit not to be crossed.

Of all the possible responses to a phobia, the contra-phobic attitude appears to be one of the most important. This notion describes an individual defence mechanism where exposure to the phobia is no longer avoided but sought out.⁶ The high mountain environment tends to promote this type of attitude, especially with respect to vertigo, the cold and the unknown (or the uncertain). The pleasure that a contra-phobic attitude can bring comes from successfully facing up to one’s fears rather than from the thrill of cheating death. The satisfaction comes from overcoming anxiety rather from the sharpening of the senses that comes from putting one’s life at risk. However, studies of contra-phobic attitudes often fail to distinguish between fear and danger. For example, Christine LE SCANFF looks at the contra-phobic attitude in mountaineering, but at the same time she evokes “the direct confrontation with a danger that is often life-threatening” (2002, p.60). Clearly, there is some confusion between phobia and danger, and the distinction between a contra-phobic attitude and ordalic behaviour⁷ has not been made. In fact, ordalic behaviour appears to be more a construct of the dramatic imagination than a real behaviour. That is to say, the theme of the mountains as an ordeal figures much less in real activities than in the way these activities are presented by the media and by the “thrills” and “adventure” market. Comments by participants in high mountain activities once again refute the idea that mountaineers or other “extreme” sports people see any meaning in exposing themselves to danger. When asked the question “How do climbers feel about risk in the mountains”, Jérôme RUBY⁸ replied, “It is something you accept. There is a difference between risk and commitment. When there are objective⁹ dangers, you are faced with a choice. Therefore, ... by choice, I would prefer not to die in the mountains!” (SEIGNEUR, 1997,

⁶ The contra phobic attitude takes hold in childhood. For example, parents throw their child into the air and catch it when it starts to come back down. The thrill of the fall and the descent controlled by the parent transcends the fear of falling and becomes a source of pleasure. The concept of the contra phobic attitude, which is described in de FESTA’s thesis (1987), comes from dynamic psychology, but it can be said to have become sociologically rooted in a culture of pushing one’s limits that is related to social phenomena such as: The Cult of Performance, subject and title of Alain EHRENBERG’s book (1991).

⁷ The modern ordeal is no longer a collective, judicial or cultural rite, but an individual undertaking. It is an unconscious process in which an actor “asks” for death, through the intermediary of risk taking, whether his existence still has meaning. This concept is most notably supported by David LE BRETON (1991, 1995, 2002).

⁸ Jérôme RUBY is a mountain guide who base jumps and snowboards down steep slopes, but who, like his colleague A. P. RHEM, does not see himself as an “extreme” sportsman.

⁹ In mountaineering jargon, objective dangers are those due to the environment, rather than those caused by climbers themselves e.g. serac falls, collapse of snow bridges, etc.

p.112). The Swedish Tomas OLSSON, media skier and distinguished by his performances on steep slopes and the highest summits all over the world, answers to the question: Which danger did you feel during your last expedition at 26, 906 feet without oxygen and mainly done alone? "I was never exposed directly to danger during this expedition but I felt a feeling of vulnerability. This feeling is good in order to still be prudent and concentrated in high altitude" (SEIGNEUR 2004, p.10). As can be seen, a much more finely nuanced point of view is expressed by participants in "extreme" sports, in that they do not look for confrontations with obvious risks, rather they reject such an attitude and see no particular sense in taking risks. Once again, it seems that some analysts have confused the views of those involved with views about those involved, and analyses that look at ordalic behaviours generally mix the two together.

6. Pulp Fiction

In the final analysis, it seems that a risk behaviours approach, and especially an ordalic behaviours approach, cannot answer the following question: "How much of the phenomenon being studied is tangible and how much is fictional?" The media image of mountaineering, mock adventures, stage-managed challenges and all the other dramatised activities undoubtedly need to be approached from a "social fiction" point of view. By social fiction, we mean all the tales, images and myths that have built up within a society. Anthropologists such as Georges BALANDIER (1984) and Marc AUGÉ (2000) have shown that the importance of fiction comes from its ability to bring meaning and emotion to the movements of identification or repulsion.

In the domain of the high mountains, Jean Paul BOZONNET (1992) has deciphered the origins and roles of certain fictions. The ways in which risk and the heroic are portrayed are intimately linked to the fact that the mountains are seen as a place of initiation in the collective imagination. BOZONNET shows that the general perception of mountain sports is strongly influenced by the notion of danger, thus the idea of venturing into the mountains assumes the ambivalent character of an initiation, an initiation that always lies between attraction and repulsion.

This ambiguous fascination for the initiatory mountains directly feeds a heroic mythology that is greatly reinforced by the media and by advertisers according to a precisely defined system of symbols.

"The media relies on the collective imagination in a rather ambiguous way. For example, none of the advertising for winter sports mentions the day-to-day risks of being in the mountains. It eliminates the unpleasant aspects of the climate, and the weather itself has become a taboo subject. It is obvious that tour operators would not want to scare away customers. On the other hand,

newspapers give a lot of column inches to spectacular accidents and mountaineering tragedies. This insistence on the dangers of minority activities, such as climbing¹⁰, provides a cheap way of pumping up the average tourist, who can feel part of the heroic adventure when skiing on groomed slopes or walking along signposted footpaths. The double intention of erasing the minor, but real risks and emphasising the great, but imaginary dangers is connected to the increasing numbers of visitors to the mountains and to a more and more watered-down initiatory experience” (ibid, p.206).

The fiction manifested here is most clearly seen in the adventure-park, adventure race and bungee jumping domains. These fictions allow people’s heroic aspirations to be met in a way that is effective, but entirely symbolic in that the danger aspect has been removed.

Once it is accepted that this type of activity does not involve any real danger, the place of danger in activities that actually involve risk can also be qualified! In fact, there have been very few attempts to quantify the dangers of mountaineering because the data is difficult to compile. Therefore, we have calculated the mortality rate for climbers during scientific expeditions.¹¹ Aconcagua, the example given here, cannot be regarded as being representative of the high mountains in general, because danger levels are very specific to each mountain and circumstances. However, these figures show that even for expeditions to the greater ranges, the high mountains can no longer be regarded as charnel houses. The ordinary route is the easiest and most frequently climbed route to the summit of Aconcagua, and it has a mortality rate of 4,63/1000. The more difficult “Polish glacier” attracts different climbers than the ordinary route and has a significantly lower mortality rate of 0,45/1000.

Thus, some behaviours are regarded as being “risky”, whereas the risks from others are rarely considered. In reality, this difference in treatment does not come from the level of danger or risk but from the significance that specialists give to the activity being analysed. From significance to values is but a small step, and one that is frequently taken. Because, as was pointed out in the introduction, the qualification “risky” is rarely free from normative arbitrations and value judgements.

¹⁰ Which proves to be a low risk activity with an exceptionally low mortality rate.

¹¹ Our research in the field (outside the Alps) were undertaken with the help of scientific expeditions with 90 days in the Andes and 70 days in the Himalayas. The figures given here are for Aconcagua, which lies in Argentina, near the border with Chile. At 6962 metres, this is the highest mountain on the American continent. Source: death certificates and the number of climbing permits issued over ten years by the Aconcagua Park

7. Conclusion: The Dark Side of the Mountain

Fundamentally, there are obvious institutional values behind the qualification “risky”, the socio-cultural mechanisms of which have been described by DOUGLAS and WILDAVSKY (1982, 1999) or LUPTON and TULLOCH (2003). Inevitably, the understanding of risk and risk-taking is affected by the cultural environment in which it develops, as well as by personal experience. Therefore, the use of the narrow term “risky” to describe heterogeneous, and sometimes rather irrelevant elements seems to indicate that certain agents are “endeavouring to manipulate the visions of the world” (BOURDIEU, 1987, p.129) and trying to impose their own vision of the world. The feeling of insecurity that is so lauded by the collective imagination has led several analysts to conclude that all risks should be avoided. Because of this, those who go into the high mountains are inevitably dubbed risk-takers, or worse, transgressors. The qualification “risky” for mountaineering, off-piste skiing or for new forms of skiing is, from this perspective, a condemnation of the participants. Thereby, analysts of the extreme, ordeals and other fictions, to a greater or lesser extent “write off” activities that they know almost nothing about. The love of the mountains, exploration, pushing personal limits, applying one’s technical prowess and the values of traditions are among the many cultural elements that fall through the net. Furthermore, as the climbers are usually considered “anomic” (i.e. their “lack of socialisation” being responsible for their “strange” activities), serious analysis of the socio-cultural content of these “risk” activities is pushed further to one side. Finally, the distance from reality that is seen in many of the descriptions of these so-called behaviours is rising: the in situ observation of an activity in the high mountains that has a constant and close relationship with death remains to be done.

References

- Augé, Marc (2000). *Fictions fin de siècle*, suivi de *Que se passe-t-il?* (29 février, 31 mars, 30 avril 2000). Paris: Fayard.
- Balandier, Georges (1984). *Anthropologie politique*. Paris: Presse Universitaire de France.
- Barthélémy, Marianne (2003). *L’engouement pour les raids-aventure ou la société du risque transfigurée par le destin*. *Sociétés. Revue des Sciences Humaines et Sociales. Risque et quotidien*, 77, 84-94.
- Baudry, Patrick (1999). *Le corps extrême. Approche sociologique des conduites à risque*. Paris: Arthaud.
- Beck, Ulrich (2001). *La société du risque. Sur la voie d’une autre modernité*. Paris: Aubier.

- Bonss, Wolfgang & Zinn, Jens (2003). Ungewissheit in der Moderne. *Sozialwissenschaftliche Informationen*, 32(2), 24-34.
- Bourdieu, Pierre (1987). *Choses dites*. Paris: Edition de Minuit.
- Bozonnet, Jean Paul (1992). *Des monts et des mythes. L'imaginaire social de la montagne*. Grenoble: Presse Universitaire de Grenoble.
- Brohm, Jean Marie (1995). La violence suicidaire du sport de compétition: compétitions suicidaires et suicides compétitifs, critique de la modernité sportive. *Quel Corps?* 300-310.
- Douglas, Mary (1999). *Comment pensent les institutions*. Paris: La Découverte.
- Douglas, Mary & Wildalsky, Aaron (1982). *Risk and culture. An essay on the selection of the technological and environmental dangers*. Berkeley: University of California Press.
- Duclos, Denis (1989). *La peur et le savoir: la technique et leurs dangers*. Paris: La Découverte.
- Ehrenberg, Alain (1991). *Le culte de la performance*. Paris: Calmann-Lévy. Coll. Essai société.
- Festa, Christian (1987). *Psychopathologie d'une conduite, l'alpinisme en solitaire*. Unpublished Ph.d. thesis, Faculté mixte de médecine et de pharmacie de Rouen.
- Giddens, Anthony (1984). *La constitution de la société, éléments de la théorie de la structuration*. Paris: PUF.
- Giddens, Anthony (1994). *Les conséquences de la modernité*. Paris: L'Harmattan.
- Jankélévitch, Vladimir (1976). *L'aventure, l'ennui, le sérieux*. Paris: Aubier.
- Le Breton, David (1991). *Passions du risque*. Paris: Métailié.
- Le Breton, David (1995). *La sociologie du risque*. Paris: PUF.
- Le Breton, David (2002). *Conduites à risque*. Paris: PUF.
- Le Scanff, Christine (2002). Motivations pour les sports de l'extrême. In Bagaretta Baddeley (Ed.), *Sports extrêmes. Sportifs de l'extrême. La quête des limites* (pp. 60-70). Genève: Georg Editeur.
- Loret, Alain (1996). *Génération glisse. De l'eau, l'air, la neige ... la révolution du sport des « années fun »*. Paris: Editions Autrement.
- Martha, Cécile (2003). Etude du sens des conduites à risque actuelles. *Sociétés. Revue des Sciences Humaines et Sociales. Risque et quotidien*, 77(3), 58-68.
- Peretti-Watel, Patrick (2003). Les prises de risques délibérées. *Cahiers internationaux de sociologie*. Faut-il une sociologie du risque, CXIV, 125-141.
- Sandman, Peter (1994). Risk communication. In Ruth Eblen & William Eblen (Eds.), *Encyclopaedia of Environment* (pp. 620-62). Boston: Houghton, Mifflin.
- Seigneur, Viviane (1997). *La culture des alpinistes*. Mémoire de DESS. Département de Sociologie. Université de Rouen-France.
- Seigneur, Viviane (2003). *La sécurité en haute montagne. Penser la sécurité : jugement de fait, jugement de valeur et autres jugements*. Approche sociologique et anthropologique. Unpublished PH.D. thesis, Université de Rouen-France.

- Servoin, Françoise (1999). L'introuvable responsabilité des surfeurs. *Tourisme et droit*, 10, 8-9.
- Simmel, Georges (2002). *La philosophie de l'aventure. Essais*. Paris: L'Arche, Coll. Tête-à-tête.
- Slovic, Paul (1981). *The assessment and perceptions of risk*. London: The Royal Society.
- Slovic, Paul (1999). Trust, emotion, sex, politics, and science: Surveying the risk-assessment battlefield. *Risk Analysis*, 19(4), 689-701.
- Souville, Marc (2002). Le savoir et le risque : appropriation et adaptation des connaissances en médecine générale. *Sociétés. Revue des Sciences Humaines et Sociales. Risque et quotidien*, 77(3), 21-31.
- Tulloch, John & Lupton, Deborah (2003). *Risk and everyday life*. London: Sage.
- Unesco (Ed.) (1983). *Terminology of special education*. Paris: Ed. Rêv.