



HAL
open science

The commitment of polar expedition members to a project: declared motivation or mobilization in situation ?

Michel Récopé, Pascal Lièvre, Géraldine Rix-Lièvre

► To cite this version:

Michel Récopé, Pascal Lièvre, Géraldine Rix-Lièvre. The commitment of polar expedition members to a project: declared motivation or mobilization in situation ?. *Project Management Journal*, 2010, 41 (3), pp.45-56. hal-00800071

HAL Id: hal-00800071

<https://hal.science/hal-00800071>

Submitted on 13 Mar 2013

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Michel Récopé*, Pascal Lièvre** & Géraldine Rix-Lièvre*

*UFR STAPS, Université Blaise-Pascal, PAEDI équipe ExPraCor (EA 4281)

*Université d'Auvergne, Groupe ESC, CRCGM (EA 3849)

Michel.Recope@univ-bpclermont.fr

The commitment of polar expedition members to a project: declared motivation or mobilization in situation?

Abstract

The commitment of participants to a project under extreme conditions, such as a polar expedition, has a vital bearing on its end result. This finding is consistent with many studies (Baron 1993; Garel 2003; Picq 2005) which suggest that in a project an individual's performance depends more on his actual motivation than on his inherent skills and their suitability for the functions the project needs. But how can one apprehend the very notion of commitment? Its meaning is more complex than it seems. In fact, we have to distinguish the actors' "declared" motivations from what actually mobilizes them in the situation (Récopé et al., 2006). Work from the field of motivation psychology (Nuttin, 1985; Lazarus, 2001) and more broadly from the philosophy of experience (Merleau-Ponty, 1942; Canguilhem, 2003) has made a decisive contribution to this distinction and to establish the importance of the mobilization, norms, and sensibilities underlying it. Having defined and situated these notions we shall show how they throw a light on the participants' behaviour throughout the polar expedition and the project's progress. To account for this result empirically we shall use a case study involving within the same expedition two participants from which personal sensitivity are different. Our conclusions lead to a reconsideration of how to recruit for project teams, highlighting as they do, on the one hand, the importance of commitment not just in terms of intensity but also of meaning, and on the other, the difficulty of using this criterion for recruiting in so far as this commitment may be separate from the motivation expressed.

key words: project, commitment, declared motivation, mobilization in situation, norm, sensibility, polar expedition.

1. Introduction

The actors' commitment to a project in extreme conditions – such as a polar expedition – has a vital bearing on its success. This statement is consistent with work in the field of project management (Baron 1993;

Garel 2003; Picq 2005) suggesting that in a project an individual's performance depends more on his actual commitment than on his intrinsic skills and their suitability for the functions the project requires. But in management sciences this issue has not been investigated specifically (Garel, Giard, Midler, 2003)¹. Moreover some research work (Récopé et al., 2006) has shown that the actors' "declared" motivations should be distinguished from what actually mobilizes them in situation. This calls the notion of commitment into question and raises the issue of its nature. Research from the field of motivation psychology (Nuttin, 1985; Lazarus, 2001) and, more broadly, the philosophy of experience (Canguilhem, 2003; Merleau-Ponty, 1942) has made a decisive contribution to dealing with this issue – especially through the notions of mobilization, norms, and sensibility. Having defined and situated these notions we shall show how they throw a light on the participants' behaviour throughout the polar expedition and the project's progress. To account for this result empirically we shall use a case study involving within the same expedition two participants from which personal sensitivity are different. Our conclusions lead to a reconsideration of how to recruit for project teams, highlighting as they do, on the one hand, the importance of commitment not just in terms of intensity but also of meaning, and on the other, the difficulty of using this criterion for recruiting in so far as this commitment may differ from the motivation expressed.

2. The contributions of motivation psychology and the philosophy of experience to the notion of commitment

2.1. The contributions of motivation psychology to the notion of commitment

We shall start with a few preliminary definitions of motivation. According to Vallerand and Thill, the concept of motivation is the "*hypothetical construction used to describe the internal and/or external forces that produce the behaviour's activation, direction, intensity, and persistence*" (1993, 17). As Patrice Roussel (2000), a specialist in human resources management, puts it, this definition is the most representative of the field's major psychological contributions and an essential support in management. It also avoids the dispersed definitions psychology puts forward. Roussel proposes classifying the various theories of motivation – a rapidly expanding field – using the taxonomy proposed by Ruth Kanfer (1990) into three major paradigms: a) the paradigm of needs, mobiles, values: the theory of needs (Maslow, 1943, Herzberg, 1959, the theories of intrinsic motivation

¹ From among the few articles that deal with the issue of motivation within a project we can cite: Tabassi, A. A. & Abu Bakar, A.H. (2009). Training, motivation, and performance: the case of human resource management in construction projects in Mashhad, Iran. *International Journal of Project Management*, 27 , 471-480; Whittom A. & Roy M.-C. (2009). Considering Participant Motivation in Knowledge Management Project. *Journal of Knowledge Management Practice*, Vol.10 (1), March; Gällsted M. (2003). Working condition in projects: perception of stress and motivation among project team members and project managers. *International Journal of Project Management*, 21, 449-455.

(Deci & Ryan 1985, Hackman & Odham, 1980), the theories of organisational justice and equity (Adams, 1965; Greenberg, 1990), b) the paradigm of cognitive choice: the classic cognitive-interactional approach (Atkinson, 1957), the intermittent cognitive approach (Vroom, 1964), the action dynamics approach (Kuhl & Atkinson, 1984), c) the auto-regulation-metacognition paradigm: the objectives fixing theory (Locke, 1968), the socio-cognitive theory (Bandura, 1991), the control theory (Carver & Sheier, 1981). Faced with this dispersal some theorists, such as Michel Dalmás (2007), try to build frameworks integrating these various theoretical tendencies. Owing to its complexity it is difficult to reduce the notion of motivation to only one of these approaches. In a recent survey the same author concludes by reporting a resurgence in interest in the actor's own world, in his "self": no system aiming to enhance motivation at work is conceivable without taking as a starting point "*identifying the internal levers pushing them [the actors] to act lastingly to commit their energy persistently and in a definite direction*" (Dalmás, 2007, 34).

Given that these studies argue motivation is manifested by characteristic behaviour in situation (Ryan & Deci 1985, 2000), one would expect research interested in evaluating motivation would be based on an ethological approach and thorough and systematic qualitative observations carried out *in situ*. Paradoxically, however invaluable they may be, the analyses and classifications of motivation [e.g. the Sport Motivation Scale (Pelletier & al., 1995) or the Passion scale (Vallerand et al., 2003)] are essentially based on methodologies using interviews-based enquiries, or filling in a questionnaire or the scale, the answers being given outside the practice context. In fact, they rely on the expression outside situation of judgements, interests, tastes, and motives associated with personal, social, or cultural representations and desiderata. When a behaviourist observation is used, it is on the one hand used in experimental situations, and on the other limited to a period of time spent on one particular activity out of a list of possibilities (Ryan & Deci, 2000): such is the case, for example, with the classic Free Choice Measure (Deci, 1971), as an indicator for measuring intrinsic motivation defined as:

"the doing of an activity for its inherent satisfactions rather than for some separable consequence. When intrinsically motivated a person is moved to act for the fun or challenge entailed rather than because of external prods, pressures, or rewards. The phenomenon of intrinsic motivation was first acknowledged within experimental studies of animal behavior, where it was discovered that many organisms engage in exploratory, playful, and curiosity-driven behavior even in the absence of reinforcement or reward (White, 1959)" (Ryan & Deci, 2000, 56).

Another paradox: while the theoretical definitions motivation psychologists propose give pride of place to the desiring sphere, the notion of personal desire is not examined deeply enough. Eminent affective sciences

psychologists acknowledge this. Thus, according to Scherer, while the phenomena of motivation and goal-directed behavior are central to behavioural science, “*the terminology in this area is rather confusing: there is no consensus on the differential usage of terms such as drives, needs, instincts, motives, goals, concerns, and so on*” (2001, 96). In his opinion the use of the term “goal” does not imply the existence of conscious goal /plan structures: “*Goal/needs stands for any desirable state the organism is motivated to attain, without consideration of the source of this motivation or the consciousness of intentionality associated with it*” (Ibid, 119). What is more, according to Lazarus (2001) the effort to define the personal desires of the individuals studied does not go far enough: to the extent that the process is individualized – that is, depending on a person’s goals and values-, we would have no hope of understanding it without detailed knowledge of the person. In psychology this effort is concerned rather with how to distinguish intrinsic and extrinsic motivation (Ryan and Deci, 2000) or on the issue of achievement goals while distinguishing learning goals from performance goals (Dweck, 1986; Nicholls, 1984). However, it is accepted that intrinsic motivation is rooted in *the needs and desires* of an individual who regulates the direction, intensity, and persistence of the behaviour (Deci and Ryan 1985). Vallerand and Thill (1993) for their part evoke *internal forces* producing these behavioural characteristics. Coquery (1991) stresses the appetitive or aversive values conferred on the elements in the environment on which the action takes effect. All these authors highlight motivation’s adaptive and affective character, but concentrate their attention neither on the bases of the affects, desires, and values, nor on what underlies them.

This issue is more closely treated by emotion psychologists in the appraisal theories school, according to whom the study of adaptive processes should not dissociate their motivational, affective, and cognitive components any more (Scherer & Sangsue, 2004). The concept of appraisal was recently clarified in the Lazarus’s framework *cognitive-motivational-relational* theory (2001): it refers to an appraisal of the significance of the environment (objects, events) for personal well-being. Appraising is an intuitive, instantaneous, largely unconscious process, inseparable from the aspects perceived here and now in situation, operating on tacit knowledge basis about ourselves and our environment. The perspective is clearly relational: the appraisal of the events is what directs behaviour - not the events themselves. The essential point, for Lazarus, is whether or not circumstances are relevant to personal values and to the existential impact of the goals he pursues (“*primary appraising*”), and on the other he (re)acts in conformity with this appraisal (“*secondary appraising*”). Thus he affirms the relational nature of the two forms of appraisal: the relevance of a situation and adaptive activity in situation. The commitment to achieve a goal or project (*goal commitment*) determines, according to Lazarus, the extent of personal mobilization for a gain or loss: *what is at stake for the person?* This commitment is the main criterion

of appraisal: it determines for instance what a loss is, what importance it has, and what must be done to prevent it (Lazarus & Smith, 1988). This is why Lazarus (2001) regrets very little research until now has been concerned with qualifying the personal values, goals, and projects that are the basis of all subjective experience and adaptive activity.

This perspective is useful for clarifying the issue of the appetitive or aversive values conferred on the elements in the environment on which the action takes effect (Coquery, 1991). It also confirms Nuttin's analyses (1985), according to which motivation is a question of preferential relations which the individual establishes with the world: the behaviour's dynamic and directional aspect is indissociable from it. "*Certain forms of contact and interactions are preferred to others, certain are sought for and even required (...), others are avoided and apparently harmful*" (1985, 15). The logical consequence of this position is that the subject and the world do not form two autonomous pre-existing entities subsequently coming together: "*the basic unit, from the beginning, is the functional network of the relations themselves (...). Outside this functional unit neither individual nor world exists*" (Ibid, 103). These theorists who emphasise the importance of relationship aspects suggest a conception of intrinsic motivation as mobilization in situation able to reduce or even dissipate the paradoxes shown up.

Let us draw up a provisional balance sheet of our analysis. It suggests the appraisal psychologists and certain motivation theorists have made significant progress in treating this issue of actualising mobilization: the individual and the world should be thought of in relational terms; within this relational framework permanent appraisal is at work – it is activated not by the events themselves, but depends on their significance for the individual in the light of his well-being; appraisal must be referred to preferential relations which the individual has established with the world from which action is not separable; the action is characterised by a behavioural dynamic and direction towards certain events evaluated as favourable and away from certain others appearing as harmful; thus, the cognitive, affective, and motor spheres cannot be separated; the individual puts himself to the ordeal through the testing of the world.

Though invaluable these converging orientations do not – it seems to us – go far enough, for lack of radicalisation of the consequences they call for. By implication they establish the necessity of understanding the experience actually lived by the actor in situation, but leave this understanding unsatisfied. This is why we consider – like Carré and Fenouillet (2009) - that a conceptual clarification of motivation not detached from the actors' action and commitment presupposes contributions from certain philosophies of experience such as phenomenology (Merleau-Ponty, 1942). For these authors - who are particularly mindful of improvements to professional practices - the issue of the motives of our acts remains central. They point out that attempts to

explain desire, will, need, passion, and in short all human tendencies leading to action are at the heart of the great philosophical systems. They recall that managers and heads of human resources are faced with the same issues, in that they seek to understand the keys of people's commitment.

2.2. The contributions of the philosophy of experience to the notion of commitment

Norms, vital values and life environment

It seems to us that a philosophy of life and living is best suited to meet these requirements, for it focuses on the relational individual-world unit: experience as lived constitutes the individual's own world inseparable from a mobilization in this world. Although Lazarus indicates that his theoretical framework does not represent classical phenomenology but a modified subjectivism, he agrees with Merleau-Ponty's Phenomenology of perception and "concept of embodied thought" (2001, 51). Let us clarify this question.

Canguilhem defines life as a dynamical activity opposed to inertia and indifference because it is characterised by preference and appraisal: "*Between the living being and its environment, the relationship is established as a debate to which the living brings its own norms with which to appraise the situations, in which it dominates the environment, and adapts it to itself*" (2003, 187). The actual experience of the living being in situation is an ordeal in the affective meaning of the term, an individuated relation to what is normal or abnormal for it: "A norm is only the possibility of a reference when it has been instituted or chosen as the expression of a preference and as the instrument of a will to substitute a satisfactory state of things for a disappointing state of things. Thus, every preference for a possible order is accompanied – most often implicitly – by the aversion for the possible inverse order. What is different from the preferable, in a given field, is not what is indifferent but what is repulsive - or rather the repulsed, the detestable... In short, whatever their form – whether implicit or explicit – norms refer what is real to values, express discriminations of qualities in accordance with the polar opposition of a positive and a negative" (Canguilhem, 2007, 177-178). In this way every living being affirms its identity as the vector of preferences that express its own quality as a living being (Macherey, 1998a). The norms lead to privileged types of behaviour the regularity of which can be detected, "*by the individual's reference to himself in successive identical or varied situations*" (Canguilhem, 2003, 210). The experience to which they relate is to be interpreted as the dynamical actualisation of vital norms that are vital schemes looking for the conditions of their fulfilment – their actualisation. "Vital" is not to be understood strictly as meaning a matter of organic life or death, but refers to what feels vital for the individual. This term designates preferential relations of such importance that their satisfaction is both the reference and the prevailing condition of his (good) life.

According to this perspective the individual no longer faces an objective world – objects, events, and situations - but composes his world and situations, i.e. what makes sense for him here and now in terms of his own norms and values. The “medium” is not an “environment”; it is relative to a living being as such. In fact, *“the proper medium of man is the world of his perceptions – the field of his pragmatic experience in which his actions, oriented and governed by values [...] denote qualified objects, situate them in relation to one another and all in relation to him. So that the environment to which he is supposed to react is originally centred on and by him. [...] Thus, only the usual world of his pragmatic experience has a meaning for the living being”* (Canguilhem, 2003, 195). Barbaras’s phenomenology of life extends these propositions to this world of experience: it is a medium – as is all that the organism is sensitive to – constituted by the organism, *“without, of course, this constitution being based on a faculty distinct from the acts by which the living being acts within this medium”*: the living being *“answers the outside world’s stimuli in accordance with this organism’s proper norms”* (1999, 143).

This way of looking at experience, arising from authors prolonging Merleau-Ponty’s phenomenology (de Saint Aubert, 2006; Barbaras, 2008) is shared nowadays by the neuro-sciences as well as the phenomenology of action: for Berthoz and Petit (2006), our perception is the way in which we affect to external objects perceptive and active characters they only have in relation to our desires and expectations. Canguilhem’s perspective adds that personal desires and expectations are subordinated to proper norms.

So, to apprehend experience presupposes taking an interest in what makes sense for the actor in situation, in what he is sensitive to: in short taking an interest in *his* situation, i.e. the situation as it appears to him, since he himself presents himself to the things, according to certain orientations that are peculiar to him (Canguilhem, 2003, 187): *“The reaction is always determined by the opening of the meaning towards the stimuli and its orientation in relation to them. This orientation depends on the significance of a situation perceived as a whole. Separate stimuli have meaning for human science, but none for the sensibility of a living being. Without recourse to its own vital norms his action cannot be understood”*.

Failing to follow this approach the normal ways of treating motivation continue implicitly to accept the hypothesis of *an* environment existing independently of the actors - a ready-made world, a world ready for man and his computations (de Saint Aubert, 2006). This environment is postulated as a symbolic reference system: to know it well presupposes getting to know it better by progressively reducing the gap between its representation or interpretation and its real properties; acting well inside it is essentially a matter of appropriating tried and tested effective techniques and skills – the correctness of the appropriation determining the extent of the actors’

skills. The hypothesis posits everybody perceives and shares (more or less well) the *same* external world. According to this still prevailing conception, the executants' subjectivity resides essentially in their motivations, i.e. their preferences, interests, and tastes *apply externally to a certain extent to this potentially common reference*: the personal commitment is supposed to reflect the strength of motivation for the activity considered according to the satisfactions they find in it, i.e. according to their appraisal. In the same way, this hypothesis posits the existence of an identifiable and shared repertoire of actions to undertake in this world: everybody is (more or less) committed to produce (more or less well) the *same* actions; the *same* action is capable of being performed with a weak or strong motivation, i.e. the personal commitment is expressed by the quantity of energy the subject invests. Obviously, a phenomenological position breaks with this hypothesis. It asserts on the one hand that the constitution of a personal environment and relevant actions in this world are inseparable, and on the other that their common origin lies in individuated norms and values. These are the foundations for explicit and implicit identity-promoting projects and strategies, making the world that matters to us apparent – that is what is relevant in the world, and mobilizes us by orienting the actions aiming at satisfying them. In other words, acts cannot be split up by separating their qualitative from their quantitative or intensive aspects.

Norms, Sensibility, and mobilization

If Barbaras points out that, strictly speaking, “to talk of a *sensitive world* is a tautology” (1999, 102), the essential thing for our purposes is that he admits this world is constituted according to individuated norms. So to terminate the analysis it is necessary to take a look at the relations between sensibility, proper norms, and mobilization. This clarification will complete our distinction between motivation expressed outside context of action and actual mobilization in situation. It goes back to philosophical perspectives on the theme of desire.

Aristotle (*De Anima*, III, 10) firmly states: “there is only one moving principle – the desiring faculty”. According to Spinoza², a desiring faculty, or conatus, is the basis of all living beings' affects and behaviours: it indicates “a power that, always active, is inseparable from the dynamic of its actualisation [...] in the double sense of an attempt and a commitment” (Macherey, 1998b, 80). The conatus reveals the desiring nature or the appetitive character that constitutes a living being's essence, but it is expressed materially in the relations to external objects (beings, events, circumstances). So it appears that this desiring faculty, specifically manifested in desires for particular things, is the source of the appetitive or aversive value conferred on sought or avoided external objects (Coquery, 1991) and forms of contact and interactions (Nuttin, 1985). According to Ribot, who refers to

² Damasio (2003) highlights besides that Spinoza prefigured best the results of modern neurobiology concerning the emotions, sentiments, and social behaviour.

Spinoza, desiring faculty and sensibility are equivalent: ‘“sensibility is the faculty of feeling pleasure or pain”. I should say, using their terminology: sensibility is the faculty of tending towards or desiring and *consequently* feeling pleasure and pain’ (1896, 2). On this precise point Barbaras agrees with Ribot: desire is at the heart of feeling (2003); it is tendency, aspiration, and movement towards relating to external objects as occasion or condition for its possible satisfaction (2008). Following our analyses, sensibility (Récopé, 2008) can be conceived very generally as desiring faculty, but apprehending individuals’ concrete experiences in situation requires the specification of their individuated nature, i.e. the preferential relations each individual has constructed in a particular field of activity – in this case polar ski expeditions. It is then necessary to specify the particular desires, i.e. the preferential relations we have previously interpreted as personal vital norms. The concept of *norm* does not only replace that of particular desire as it implies a constitution of the world referring to these norms in the field of activity considered. So taking an interest in the actors’ personal sensibility is necessary to pinpoint *what they are sensitive to*: in other words, what are the norms with such importance or vital value that their satisfaction is a prerequisite for a favourable life? These are the norms that form the medium of life, i.e. what count as relevant objects or events because of their property of favouring or thwarting their realisation. “All these types of objects “are”, in so far as they meet certain expectations” (Berthoz and Petit, 2006, 88): the external objects are assigned perceptive and active characters they only bear in relation to vital activities. These norms, as we have indicated, mobilize the actor by orienting, beyond the distinction of qualitative and quantitative aspects, the actions necessary for personal well-being by propelling him towards a satisfying state of things. In our eyes the associated concepts of norm and sensibility are best suited to account for the relational nature of knowledge, affectivity, and motion (or motricity) in living beings. Now thinking of these three aspects *together* amounts to rejecting the notion of *motive* (“Bewegursache”) of actions (according to Kant 1788/1989, motives are intellectual/moral/representational, directed and evoked by reason) for that of *mobile* (“Triebfeder”). According to Kant, mobiles are incentive/impulsive/relational/affective tendencies of feeling: whence our focus on the “mobilization” qualifier. A mobile is a vital movement that actualises itself by carrying the individual towards an “object” (understood in the widest sense), the individual being in a way pushed from the interior by a moving force towards - and pulled (attracted) by - this object. Ryan and Deci (2000, 54) insisted on such a moving, mobilizing force imposing itself on the motivated person: “*To be motivated means to be moved to do something. A person who feels no impetus or inspiration to act is thus characterized as unmotivated, whereas someone who is energized or activated toward an end is considered motivated*”.

Mobilization as motivation in current situation

Thus, through personal norms, and not through particular desires, life is “institution of its own medium, and lays down values not only in its medium but in the organism itself” (Canguilhem, 2007, p155), thereby assuring a sensibility and mobilization of the living being towards the objects vitally relevant to it in spontaneously and concretely lived situations. Mobilization is a force that transports us towards what is important for us. Consequently, mobilization appears as an intrinsic motivation with an achievement goal, as defined by Pelletier et al. (2005): “According to Deci and Ryan (1985, 1991), this type of motivation stresses the search for a unique sentiment of fullness and creation of achievement, through the individual’s interaction with his environment”. It is the instance of achievement and actualisation of the individual’s proper norms. This is essential: although the norms pre-exist they are expressed and actualised in current situation, and so do not have the status of a pre-action mental state: this characterisation breaks with Charlet’s definition (1998), for whom the term "motivation" covers the terms of intention, desire, goal, interest, motive or mobile, determination or will, and choice or preference, to express that the behaviour follows a direction *stamped on it before* it manifests itself. Charlet sees motivation as a *force external to the action that is applied to the action* – it is separable from “the activity” and “the actualisation” since it “triggers” them – with a sort of energetic coefficient of variable intensity that modulates its activity and its perseverance: the *same* action is capable of being performed with *weak* motivation or with a *strong* motivation. This conception of motivation considers it as a motive outside the action, whereas mobilization refers to a moving cause inside the action, to an actualising meaning that is knowledge of the world indissociable from the achievement of a being, and so of its proper norms: a way of existing and acting in a personal world - a world organised in relation to our norms, in which the phenomena are presented straight away as relevant and significant in the experience spontaneously lived in situation.

3. Case study: the actors’ expressed motivation and actual mobilization during a polar ski expedition

In this part we present various materials from a case study. They account - for a polar expedition the members of which were chosen on competence criteria – on the one hand for a shared expressed motivation, and on the other for differences of mobilization. We shall show how the convergences identified for each of the actors manifest a personal sensibility, and how the divergences detected between them are capable of affecting the expedition’s progress.

3.1. The Greenland 2004 Expedition. A motivation: discovering the polar environment

The Greenland 2004 expedition is a preparatory expedition for a more ambitious project. When it took place (15 days in the field) - the project had been on the stocks for about a year. The team consisted of four persons to whom the researcher has to be added. Though three out of the four participants were novices in polar ski expeditions, they all had plenty of experience with various activities in the great outdoors and had all spent more or less time dependent on their own resources at high altitudes, in hot deserts, or in the jungle. The expedition leader recruited the other three members for their complementary skills: competences in communication, organisation, progressing and rescue. In this article we shall focus on two of the expedition members: Gérard and Dominique. The first was recruited for his abilities in terms of making progress: his profession brings him face to face with progressing through ice and/or snow. In the case of the second his profession and commitment to the mountain rescue service made him responsible for safety. Both were experienced mountain skiers and climbers, but were not familiar with the Arctic.

During the preparatory meetings much discussion concerned the equipment, the varied travels of each one, and the projects. Some showed photos; all went into ecstasy over the beauty of the landscapes, were astonished by the surroundings. Once the expedition became the subject the talk was all of the pleasure of the journey, the discovery of the polar environment, trekking with friends. Besides, though it is certainly polar the expedition project is reasonably difficult.

3.2. Observable evidence of mobilization in situation

Participating observation carried out throughout the expedition offers the possibility of examining, within a single team, how each lived through the same events. In this article we have selected three remarkable events in which various observable pieces of evidence seem to us to reveal the mobilization of each of the two expedition members.

The absence of pack-ice and lack of snow

Here is how we can describe this event as factually as possible. In the spring of this year the coastal pack ice had already broken up and snow was uncommon along the shore: skiing as had been planned along the coast was impossible. So the team hired a boat to reach an access to the ice cap. Once on the coast the team also had to rethink how to get on to the ice cap: with no snow the pulkas could not be loaded and then pulled on ski. So the team members separated into two groups to examine the different possible routes. Gérard and a teammate set off in one direction, Dominique, the other teammate and us in another one. In the evening Gérard proposed a

route following a stony path; in order not to damage the pulkas, using this route meant carrying the equipment instead of pulling it. This absence of pack ice and lack of snow was variously experienced by the team members. For some, such as Gérard, the conditions hindering the expedition's progress meant a loss of time: loss of time in so far as it was not possible to be active, i.e. make progress on skis autonomously in a cold and snowy universe; loss of time in so far as carrying the equipment implied slower more difficult progress and more going back and forth to collect all the equipment.

Others, on the contrary, enjoyed navigating through the broken pack, discovering the glacier's front calving in the sea, the growling of the moving ice... During the day spent finding another route Dominique took many photos. Waiting for the sun set on the first return journey he was taken by surprise: about 3 in the morning the sun started rising again without ever having set.

In this way, Gérard and Dominique each constructed his own environment: the absence of pack ice and snow was a problem and nuisance for Gérard; the broken pack, the colour of the lichens, and the light were magnificent, intriguing, and fascinating for Dominique. The "things", the qualities that exist are not the same: to an outside observer they seem to be involved in the same event; however, each one lives – within the same expedition project - different situations depending on his personal sensibility.

Other participating observation materials can be invoked to define the difference in motivation between these two actors as much in terms of orientation, which we have just emphasised, as in terms of intensity. Home from Greenland, during what the actors called a debriefing, we suggested to each of them to select two episodes about which an exchange was desirable within the group. Gérard chose to go back over the previously discussed event by picking out the carriage of the equipment as an extremely disagreeable moment for him: *"my morale was so-so those two days"*, *"we all carried heavy loads, but I was afraid [of hurting myself]"*. If, in effect, everyone contributed to carrying the equipment, no other member of the expedition picked out this moment among the two asked for. Here we can find an indicator of the intensity of his commitment: physical suffering is not conceivable for Gérard in this context of activity: *"I didn't want to get hurt for that"*.

The tent

In the same way, in the first place we propose as factual a description as possible. During a weekend of preparation in a snowy environment the member with polar experience had borrowed a 5-place tent. The issue of the type of tent to be used on the Greenland expedition had already been raised. As it was not available borrowing the same one again was impossible, and buying all the equipment needed for the expedition was

difficult (only one member out of four had his equipment: skis, pulkas, duvet, clothing...). The experienced team member listed the features essential for a good tent: dome tent, four-season, with two apses³. He had one 2-place tent and Gérard could find a 3 place one. The solution was not ideal, but one everyone could accept. In Greenland, having gone back and forth twice to carry equipment to the ice cap, the team arrived about midnight and began to pitch their first camp. The equipment was collected together; the tents were taken out - Gérard joked: "*So, how does this tent go up, then!*" He unfolded it while two teammates dug in a snowdrift to find a place for the tent. He called the 4th team member, who was putting up the other tent, to ask him for advice with the pitching. They then realised the tent was three-season with two doors but only one apse. Gérard admitted he had not had the time to try putting up the tent a friend had lent him. With the help of a teammate he put the tent up next to its definitive place while another went on digging in the drift, then went to the crest to find the route for the next day, while the others finished pitching camp.

For Gérard the tent did not have the features required at the start, but did have two entrances; the weather was fine and not very cold: that would do, even if another tent would be needed for the more demanding expedition⁴. Having helped put up the tent he let the others pitch camp, dig in the drift, make a snow wall, and get water, while he climbed up the crest so as not to lose time and reconnoitre the next day's route. When interviewed about this event he explained concerning the tent that for that time what he had obtained could do; concerning the pitching of the camp that he had a bad back and for this reason could not dig, and so had gone reconnoitre the route for the following day. For Dominique putting the tent up for the first time in the expedition is important. The camp had to be pitched well: the conditions were not extreme, but it was necessary to be prepared. Gérard had made a mistake about a tent - it only had one apse: solving the problem for this expedition was impossible, but a solution would have to be found. During the day he was careful not to touch the snow to stop getting wet and cold; so it was a pity to let the snow into the tent – a consequence of having no second apse. At the debriefing interview Dominique explained this episode was an accumulation of errors: pitching the tent in a snowdrift exposed to the wind, having a tent without an apse to stop the snow from getting in, not knowing how to get organised collectively to pitch camp (not knowing who is responsible for what)...

Thus, certain elements seem to be requirements needing to be satisfied for Dominique: the time and energy spent digging, protecting the tent, and pitching camp is so much activity tending to avert an undesired state of things, to satisfy his well-being. Gérard for his part was preoccupied by making progress; pitching the camp was not

³ The apses are projections of the double roof forming a sort of lock between the exterior and the interior of the tent; a lock where equipment can be stowed protected from bad weather.

⁴ Note it is a preparatory expedition for a more ambitious project.

very important: his attention was directed towards the following day's journey; he spends his energy on and for making progress. Here their acts appear indissociable from the constitution of their personal worlds: each constructs his environment and what there is to do to do it well is an integral part of this environment.

The financial commitment

The last element we wish to evoke: the financial commitment of each of the actors. This expedition had to be wholly sponsored; in the end the sponsors were less solid than expected. So for this preparatory expedition the financing had to be brought forward. The expedition leader assumed the costs of this charge (pulkas, air tickets, clothing, technical equipment...), the experienced expedition member lent as much equipment as possible and each took what he could. The excess air baggage and sea freight increased costs: they were advanced by the expedition leader. On the return the leader had financial difficulties. Several members of the expedition, including Dominique, helped him out by advancing in turn the additional costs of the journey. As the sponsors continued to delay, Dominique then proposes buying from the expedition leader some of the equipment obtained and undertaking to exploit the various pictures of the expedition financially. Another member of the expedition asked to assume the costs of his ticket and undertook to build up a dossier to raise funds for the project. During all these phases Gérard never advanced money, nor proposed other ways of financing the project. To us this point seems an important observable piece of evidence for the intensity of Gérard's commitment to the project. If, as we have previously stressed, he is not ready to suffer physically during and for this project, putting his "good" social life at stake is not acceptable either.

3.3. Approaching what makes sense for the actors in situation

Thanks to observation of the practices in situation, but also to the actors' explicitations of their experiences, we studied the activity of each of the members of the *Greenland 2004* expedition during particular moments. To do this a two-phase investigation was used:

- in situation, the researcher developed a participating observation and carried out various recordings of practice:

(1) The polar expedition member is equipped with an on-board camera that records his *situated subjective* perspective; (2) simultaneously, the progression of his activity is filmed from an external point of view.

- Afterwards - at the earliest after the practice - the researcher mobilizes the record of the *situated subjective* perspective in order to carry out a *subjective re situ* interview with the expedition member (Rix, Biache, 2004).

This interview, inspired by selfconfrontation (Theureau, 1992), consists in presenting the actor with the events as

close as possible to the way in which he apprehended them *in situ* so as to incite and help him to make explicit his experience, what makes sense for him in a particular moment - his personal environment. In this part we propose interview extracts on the one hand with Gérard, with Dominique on the other – concerning a moment of making progress. We shall then describe how we formalise these two moments of practice by considering for each at the same time what makes sense for him and what he has actually done. Having grasped what stands out for the actor it is up to the researcher to reconstruct the practice's progress and rationality.

Gérard at a moment of making progress: extract from an interview in subjective re situ and formalising his practice

Researcher (R): When you say, "We're on the move" ...?

Gérard (G): "We're on the move!" It's a bit to encourage everybody to get going ...

R: And the line of sight? To the right, to the left...

G: On the left there is a kind of point a bit higher up on the crest... There was no snow, you know... the snow's been blown away... So, it's rather the left hand reference for progressing...

R: The reference? That's...

G: The reference in space, the landmark...

R: So I go forward with the mountain on my left hand all the time, that's it?...

G: Yes, but... I knew just about where I wanted to go... so I fix a point on the horizon, and then I try to go to that point...

R: When you say I fix a point on the horizon ...

G: I look at a place, I don't know... When I have the GPS to give me a direction, I tell myself I have to go that way... I look at the angle... I look at a part of the landscape... a stable element...

R: And here a stable element – at this moment – is what?

G: Well, it's the differences in the colours of the snow... because there's nothing else... finally; there are patches of ice and snow... between blue and white... A small piece of snow reflecting more light than the rest... so that it is lighter... so it's a small white spot... So I go to this white spot... That stops you from getting lost, not to... You know that point there where you want to go... Afterwards, you can go there by the right or left... but so long as you go through that point you are in the right direction...

R: So there it was I take a landmark on the horizon and I go there... and here it is colours?

G: Yes, it's a difference in colours... it's a point you can pick out... it's a point you don't take your eyes off... you don't take your eyes off it... that you can see easily...

SILENCE

R: *And there you stay on it...*

G: Yes, well yes... I keep looking at it pretty well... sometimes I look to the right, to the left... but...

SILENCE

R: *You come back there on skis?...*

G: Yes... yes... watching yourself walk... yes, and then it's diverting too because it's monotonous always walking facing the horizon... So seeing your advance, it's...

The pause is over: it is already 4 o' clock and the group only has one hour left to make progress in. It is time to get moving. Gérard encourages his teammates to get ahead and sets off. To take the right direction and keep his bearing, he fixes a point on the horizon. In this white and monotonous universe, he orients himself by means of the variations in the colour of the snow. He aims at a lighter point in the distance. It is his landmark; he does not take his eyes off it. All the time he advances he concentrates on this objective. Progress on this snowy completely flat surface stretching out of sight is a bit monotonous. From time to time he looks right or left, but quickly returns to his mark. He focuses on it to guide the group's progress. For the sake of variety he looks at his skis: it is like a mirror he sees himself advance in.

What makes sense for Gérard (his environment) is oriented towards making progress. Everything he perceives is related to the possibility and fact of advancing: the colours of the snow and/or ice, the relief, his skis. We must make clear that throughout one hour's recording in *situated subjective* perspective at no time did we see Gérard's teammates who were behind him: he was turned forward; he never turned back; for him what is behind is irrelevant.

Dominique in a moment of making progress: extract from an interview in subjective re situ and formalising his practice

Dominique (D): Packing quickly...

Researcher (R): *OK, after when it's finished... it's quickly, quickly, quickly...*

D: Ah yes, yes... You'll see... Look here... I'm not dawdling... it's... I pack, I put the camera away safely... I was caught out there...

R: *When you say: "I was caught out"?*

D: Just now... Yes in relation to my snow principle... to touch the snow as little as possible...

R: *OK, there I want to do it fast... and...*

D: Yes in the stuff... and then I had arrived... as I was at the snow-ice edge there wasn't much snow...

My sticks got stuck... So there you are... In a colder situation it is a fault...

But you can see, look... Poof [he points at the group in the distance]

R: Yes poof, it's...

D: Poof, they're far away.... There, they... me... You see they're not waiting for me...

R: You, you think...

D: Well, there, it's... I must be moving... I must be going... You'll see... that'll be the same thing... i.e.

I'm going to have... You can see, look [he shows the gap between him and the group]

R: OK, we're off... Tchh, tchk, tchk...

D: Yes with the rhythm for... and practically always in the same line of sight...

[...]

D: Anyway, that day on the ice-cap, that was that... that was... really a succession of accelerations...

While making progress Dominique leaves the tracks left by Gérard, and accelerates to take advantage of the fine light to take some photos of the team en route. He tries sticking in his sticks that fall over in the snow, takes out his camera, and kneels down to get the right angle. He takes a few photos; then as quickly as possible he gets up; puts away his camera; puts his over-gloves back on, and takes his sticks up again. He has to protect himself and the photographic equipment from the snow, but in order not to be left too far behind in his hurry he touches the snow... He is preoccupied by falling too far behind and the need to catch up with the group: he must hurry up, he cannot take advantage of the opportunity fully.

Dominique was frustrated: he did not have the time to take photos in the way he wanted, he did not have the time to take the precautions needed not to damage his camera and not get cold; he always had to hurry in order not to be left behind. In a phrase: the group's organisation on the move spoilt his hike – he could not take advantage of the beauty of the light on the ice, of being immersed in this pristine setting.

3.4. The impact of the differences in sensibility on the expedition's progress

The various materials presented allow us to highlight recurrences in terms of mobilization for both Gérard and Dominique. We have attempted to formalise their sensibility, their proper norms in the field of activity of polar ski expeditions. These materials permit the demonstration of a proper coherence to each of them

and specify their environments and what organises them. It is notable that what matters to Gérard is advancing, making progress, and going as far as possible. He reaches forwards and is unconcerned by what is going on behind him. Any time in which the group is not advancing on skis is time wasted. What seems to organise Gérard's practices relates to the sensibility we have named "the sporting exploit in the wild" (Lièvre, Récopé, Rix, 2003). As for Dominique, his sensibility could be called rather "exploration and discovery" (Ibid): time spent in a polar setting is time for contemplation. Being immersed in this extraordinary environment, travelling autonomously, gazing in wonder: that was what matters. Whatever the events, each will construct his own environment according to his personal norms: here, Gérard's is divergent from Dominique's - even though they take part in the same expedition project and express the same motivation.

Going beyond the above, let us go through the consequences on the progress of the project. The first concerns problems of organisation: for example, though the way the group's progress is organised satisfies one of them, it is frustrating for the other, or again, though the way the camp is pitched fully satisfies the one, it leaves the other indifferent. How, then, are the "right" procedures for this expedition to be defined? A second consequence is the difficulty of collectively facing unexpected events capable of endangering the proper progress of the project. For example, the absence of snow and pack ice led the team to rethink not the route but how to make progress: arriving by open sea, walking and carrying were frustrating and repugnant for a few. In other words, the way the project was transformed was not equally acceptable and satisfactory for all the expedition's members. Besides, other unexpected events might be seen as dangerous or problematic, and requiring the project to be adapted for some, while for others not. Lastly, our interpretations call into question the way the team was formed. For the sake of the project's success the expedition leader had brought complementary skills together: a discriminating factor not taken into account appears to have been what mobilizes each expedition member, his personal norms, and the convergence of the worlds of each.

4. Conclusion

The first contribution of our work is to corroborate the results of the studies (Baron 1993; Garel 2003; Picq 2005) suggesting an individual's performance in a project depends more on his actual commitment than his skills. By looking at commitment from under the angle of mobilization we have shown the question is not only of intensity, but also of meaning as orientation towards inseparable from significance. Case study leads to the demonstration that what matters for an actor, the needs he tends to satisfy, are "motors": an affective moving force pushing towards his "good" life's fulfilment. We could then deepen the proposition of previous authors by

pointing out that commitment comes first in so far as it is a condition for the possibility of mobilizing particular skills. In other words, I can only put my skills, knowledge, and energy to the service of the project if it crystallises what I am tending towards. There is no “procedural neutrality”: the individual is not a store of skills he can apply, implement, and use at any time and in any conditions. Mobilizing them is indissociable from a personal sensibility.

The second resides in the distinction made between expressed motivation and actual mobilization. For example, the motivation expressed by Gérard does not coincide with his mobilization. Thus, what he says he adheres to in project terms differs from what implicitly matters to him in situation. Consequently, if mobilization is a discriminating factor for constituting a collective around a project, it is not directly perceptible in the discourse, but is actualised in concrete actions in a particular field of activity. The project leader’s problem is as follows: how to recruit his teammates so as to ensure the project progresses correctly? A very experienced polar expedition member has in any case found a way to overcome this difficulty empirically. To choose his teammates he proposes a skiing weekend to those interested in the project, and at the end of the weekend he picks his team. Following our perspective, he appraises very intuitively what matters for the various actors in situation and how they may fit in to his organisational framework in terms of converging sensibilities and effective skills.

The third and last contribution is more specific to the field of extreme situation management and can be extended to all management situations within a knowledge economy framework (Foray, 2004). What characterises extreme situation management such as polar expeditions – is the high probability that unexpected undesired events will occur and endanger the project’s progress (Lièvre, Gauthier, 2009). The materials and perspective we propose highlight the importance of the convergence and/or compatibility of the various team members’ personal sensibilities, especially when faced with unforeseen events. To adapt the procedures collectively, to decide how to reorient the project... it is important the different members of the team can appraise what is going on in a way that is at least partly shared. Now, persons with very different sensibilities build environments that are separated from one another – which make any adaption a problem.

Going beyond polar expeditions and extreme situation management, these conclusions lead to a re-evaluation of the issues of recruiting right inside project teams by underlining, on the one hand, the importance of commitment conceived not only in intensity, but above all of meaning, both an orientation towards and a signification, and on the other, the difficulty of recruiting based on this criterion in so far as it may differ from the expressed motivation.

- Adams, J.S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (p. 267-299). New York: Academic Press, vol. 2.
- Atkinson, J.W. (1957). Motivational determinants of risk-taking behavior. *Psychological Review*, vol.64, n°6, p.359-372.
- Aristotle (*De Anima*, III, 10)
- Bandura, A. (1991). Self-Regulation of motivation through anticipatory and selfreactive mechanisms ». In R.A. Dienstbier (Ed.), *Perspectives on Motivation: Nebraska symposium on motivation 1990*, vol.38 (p. 69-164). Lincoln: University of Nebraska Press,
- Barbaras, R. (1999). *Le désir et la distance. Introduction à une phénoménologie de la perception*. Paris : Vrin.
- Barbaras, R. (2003). *Vie et intentionnalité. Recherches phénoménologiques*. Paris : Vrin.
- Barbaras, R. (2008). *Introduction à une phénoménologie de la vie*. Paris : Vrin.
- Baron, X. (1993). Les enjeux de gestion des salariés travaillant dans des structures par projet. *Revue Gestion 2000*, vol. IX, n°2.
- Berthoz, A., Petit, J.-L. (2006). *Phénoménologie et physiologie de l'action*. Paris : Odile Jacob.
- Canguilhem, G. (2003). *La connaissance de la vie*. Paris : Vrin (Première édition 1952).
- Canguilhem, G. (2007). *Le normal et le pathologique*. Paris : PUF (Première édition 1966).
- Carré, P., & Fenouillet, F. (2009), *Traité de psychologie de la motivation*, Dunod, 2009.
- Carver, C.S., & Scheier, M.F. (1981), *Attention and self-regulation: a Control Theory approach of human behavior*, New York, Springer-Verlag.
- Charlet, G. (1998), L'engagement intentionnel en formation de publics de "bas niveau de qualification". *Education permanente*, 136(3), 111-117.
- Coquery, J.-M. (1991). Motivation. In H. Bloch, R. Chemama & H. Gallo (Eds.), *Grand dictionnaire de la psychologie* (p. 480-482). Paris : Larousse.
- Dalmas, M. (2007). Les méta modèles de la motivation au travail : constructions théoriques et propositions de recherche. *Les notes du LIRHE*, n° 446.
- Damasio, A. (2003). *Spinoza avait raison*. Paris : Odile Jacob.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York : Plenum Press.
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18, 105-115.
- De Saint Aubert, E. (2006). *Vers une ontologie indirecte*. Paris : Vrin.
- Dweck, C. S. (1986). Motivational processes affecting learning. *American psychologist*, vol.41, pp.1040-1048.
- Foray, D. (2004). *The economics of knowledge*. Cambridge : MIT Press.
- Garel, G. (2003). Pour une histoire de la gestion de projet. *Gérer et Comprendre*, n° 74, 77-89.

- Garel, G., Giard V., & Midler C. (2003). Management de projet et gestion des ressources humaines. In Allouche José (Ed.) *L'encyclopédie de la gestion des ressources humaines* (p. 818-843). Paris : Vuibert.
- Greenberg, J. (1990). Organizational Justice: Yesterday, today and tomorrow. *Journal of Management*, vol.16, n°2, 399-432.
- Hackman, J.R., & Oldham, G.R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The motivation to work*. New York: John Wiley.
- Kanfer, R. (1990). Motivation theory and industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.). *Handbook of industrial and organizational psychology* (p.75-170). Palo Alto: CA, Consulting Psychologists Press, vol.1.
- Kant, E. (1989). *Critique de la raison pratique*. Paris : PUF (Première édition 1788).
- Kuhl, J., & Atkinson, J.W. (1984). Perspectives in human motivational psychology: a new experimental paradigm. In V. Sarris, & A. Parducci (Eds.), *Perspectives in psychological experimentation: toward the year 2000* (p.235-252). Hillsdale: NJ, Erlbaum.
- Lazarus, R. S. (2001). Relational meaning and discrete emotions. In K.R. Scherer, A. Schorr, T. & Jonhstone (Eds.), *Appraisal Processes in Emotion: Theory, Methods, Research* (p. 37-67). Oxford/New York: Oxford University Press.
- Lazarus, R. S. & Smith, G. A. (1988). Knowledge and appraisal in the cognition-emotion relationship. *Cognition and Emotion*, 2(4), 281-300.
- Lièvre, P., Récopé, M., & Rix, G. (2003). Finalités des expéditeurs et principes d'organisation. In P. Lièvre (Ed.), *La Logistique des expéditions polaires à ski* (p. 85-101). Paris : GNGL Productions.
- Lièvre P., & Gautier A (2009). Logistique des situations extrêmes : des expéditions polaires au service secours incendie ». *Management et Avenir*, 24, 196-216.
- Locke, E. A. (1968). Toward a theory of task motivation and incentives. *Organizational Behavior and Human Performance*, vol.3(2), 157-189.
- Macherey, P. (1998a). *Actualité de Georges Canguilhem – Le normal et le pathologique*. Paris : Institut Synthélabo pour le progrès de la connaissance, Les empêcheurs de penser en rond, p.71-84.
- Macherey, P. (1998b). Introduction à l'*Ethique* de Spinoza. La troisième partie : la vie affective. Paris : PUF.
- Maslow, A. (1943). A theory of human motivation. *Psychological Review*, vol.50, n°4, 370-396.
- Merleau-Ponty, M. (1942). *La structure du comportement*. Paris : PUF.
- Merleau-Ponty, M. (1945/1995). *Phénoménologie de la perception*. Paris : Gallimard.
- Nicholls, J.G. (1984). Achievement motivation conceptions of ability: subjective experience, task choice, and performance. *Psychological Review*, 91, 328-346.
- Nuttin, J. (1985). *Théorie de la motivation humaine*. PUF.
- Pelletier, L.G, Fortier M.S., Vallerand R.J, Tuson K.M., Brière N.M., & Blais M.R. (1995). Toward a New Measure of Intrinsic Motivation, Extrinsic Motivation, and Amotivation in Sports: The sport Motivation Scale (SMS). *Journal of sport & exercise psychology*, 17, 35-53.
- Picq T. (2005). La gestion des ressources humaines face au défi de la diversité, in Ouvrage collectif MBA : L'essentiel du management (p.343-366). Paris : Editions d'Organisation.

- Récopé, M. (2008). Sensibilité. In B. Andrieu et G. Boëtsch (Eds.), *Le Dictionnaire du Corps* (p. 300-302). Paris : CNRS Éditions,
- Récopé, M., Rix, G., Fache, & H., Lièvre, P. (2006). Sensibilité et mobilisation : perspectives d'investigation du sens à l'œuvre en situation de pratique. *Revue eJRIEPS*, 9, 51-66.
- Ribot, T. (1896). *La psychologie des sentiments*. Paris : Alcan.
- Roussel, P. (2000). La motivation au travail - concept et théories », *Note de recherche du Lirhe*, n°326.
- Rix, G., & Biache, M.-J. (2004). Enregistrement en perspective subjective située et entretien en re situ subjectif : une méthodologie de constitution de l'expérience. *Intellectica*, 38, 363-396.
- Ryan, R. M. & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25, 54–67.
- Scherer, K. R., (2001). Appraisal considered as a process of multilevel sequential checking. In K.R. Scherer, A. Schorr & T. Jonhstone (Eds.), *Appraisal Processes in Emotion: Theory, Methods, Research* (p. 92-120). Oxford/New-York: Oxford University Press,
- Scherer, K.R. & Sangsue, J. (2004). Le système mental en tant que composant de l'émotion. In G. Kirouac (Ed.), *Cognition et Émotions*, (p. 11-36). Québec : PUL.
- Spinoza (1675). *L'Ethique*, Paris : Gallimard (Edition de 2001).
- Theureau, J. (1992). *Le cours d'action, analyse sémiologique: essais d'une anthropologie cognitive située*, Berne: Peter Lang.
- Vallerand, R. J., Blanchard, C. M., Mageau, G. A., Koestner, R., Ratelle, C., Léonard, M., Gagné, M. & Marsolais, J. (2003). Les Passions de l'âme: On Obsessive and Harmonious Passion. *Journal of Personality and Social Psychology*, 85(4), 756–767.
- Vallerand, R. J. & Thill, E. (1993). *Introduction à la psychologie de la motivation*, Paris : Vigot.
- Vroom, V.H. (1964). *Work and motivation*. New York: Wiley.