

CIRANO Centre interuniversitaire de recherche en analyse des organisations

Série Scientifique Scientific Series

98s-27

The Moderating Effect of Job Characteristics on Managers' Reactions to Career Plateau

Michel Tremblay, Alain Roger

Montréal Août 1998

CIRANO

Le CIRANO est une corporation privée à but non lucratif constituée en vertu de la Loi des compagnies du Québec. Le financement de son infrastructure et de ses activités de recherche provient des cotisations de ses organisations-membres, d'une subvention d'infrastructure du ministère de l'Industrie, du Commerce, de la Science et de la Technologie, de même que des subventions et mandats obtenus par ses équipes de recherche. La *Série Scientifique* est la réalisation d'une des missions que s'est données le CIRANO, soit de développer l'analyse scientifique des organisations et des comportements stratégiques.

CIRANO is a private non-profit organization incorporated under the Québec Companies Act. Its infrastructure and research activities are funded through fees paid by member organizations, an infrastructure grant from the Ministère de l'Industrie, du Commerce, de la Science et de la Technologie, and grants and research mandates obtained by its research teams. The Scientific Series fulfils one of the missions of CIRANO: to develop the scientific analysis of organizations and strategic behaviour.

Les organisations-partenaires / The Partner Organizations

- •École des Hautes Études Commerciales
- •École Polytechnique
- •McGill University
- Université de Montréal
- Université du Québec à Montréal
- •Université Laval
- •MEQ
- MICST
- •Banque Nationale du Canada
- Bell Québec
- Fédération des caisses populaires Desjardins de Montréal et de l'Ouest-du-Québec
- •Hydro-Québec
- •Industrie Canada
- Microcell Labs inc.
- •Raymond, Chabot, Grant, Thornton
- Scetauroute
- Société d'électrolyse et de chimie Alcan Ltée
- Téléglobe Canada
- Ville de Montréal

Ce document est publié dans l'intention de rendre accessibles les résultats préliminaires de la recherche effectuée au CIRANO, afin de susciter des échanges et des suggestions. Les idées et les opinions émises sont sous l'unique responsabilité des auteurs, et ne représentent pas nécessairement les positions du CIRANO ou de ses partenaires.

This paper presents preliminary research carried out at CIRANO and aims to encourage discussion and comment. The observations and viewpoints expressed are the sole responsibility of the authors. They do not necessarily represent positions of CIRANO or its partners.

ISSN 1198-8177

The Moderating Effect of Job Characteristics on Managers' Reactions to Career Plateau^{*}

Michel Tremblay[†], Alain Roger[‡]

Résumé / Abstract

Cette recherche analyse l'impact du plateau de carrière et des caractéristiques de l'emploi sur les attitudes et les comportements, mais aussi élargie les recherches traditionnelles sur le plateau de carrière en prenant en compte l'influence des facteurs liés aux caractéristiques des emplois sur la relation entre le plateau de carrière et les attitudes reliées au travail. Nos résultats montrent que le plateau subjectif, le potentiel d'enrichissement du travail, l'ambiguité de rôle et la participation à la prise de décisions sont reliés aux diverses attitudes et comportements. L'impact du plateau de carrière sur ces attitudes est modéré par le potentiel d'enrichissement de l'emploi, la participation à la prise de décision et l'ambiguité de rôle. Quoi que les effets directs et modérateurs sont significatifs pour seulement quelques facettes de la satisfaction au travail, il apparaît que ces caractéristiques de l'emploi peuvent contribuer à limiter les conséquences négatives associées au plateau de carrière.

This study analyzes the impact of career plateau and job characteristics on people's attitudes or behaviors, but it also extends the traditional field of research on career plateau by taking into account the influence of factors linked to job characteristics on the relationship between career plateau and workrelated attitudes. Our results show that subjective career plateau, job enrichment potential, role ambiguity and participation in decision making are related to various individual attitudes and behaviors. The impact of career plateau on these variables varies according to job enrichment potential, participation in decision making and role ambiguity. Although these direct and moderating effects are only significant for some of the facets of job satisfaction and behavior, it appears that these job characteristics can contribute to limit the negative consequences associated with career plateau.

^{*} Corresponding Author: Michel Tremblay, CIRANO, 2020 University Street, 25th floor, Montréal, Qc, Canada H3A 2A5 Tel: (514) 985-4000 Fax: (514) 985-4039 e-mail: tremblam@cirano.umontreal.ca The authors wish to thank FCAR and SSHRC for their financial support.

École des Hautes Études Commerciales and CIRANO

[‡] Institut d'Administration des Entreprises, Aix-en-Provence

Mots Clés :	Plateau de carrière, ambiguïté de rôle, enrichissement de l'emploi,
	participation à la prise de décision, satisfaction de l'emploi

Keywords : Career plateau, role ambiguity, job enrichment, participation in decision making, job satisfaction

Introduction

For several years now, businesses have paid an increasing amount of attention to the phenomenon of career plateau. Many firms, under the pressure of economic conditions, national and international competition, had to put a strong emphasis on productivity and efficiency and to undergo major reorganization: some have flattened their structures and reduced the number of hierarchical levels, others have opted for strategies that demanded fusion, acquisition or disinvestment. At the same time, the arrival of an increasing number of some categories of the workforce, such as "baby boomers", women and minorities, has consequently created a surplus of talent in various managerial jobs. These changes mean that career progress for many people has been put on a temporary hold, slowed down or even completely blocked. Already in 1986 Hall was predicting that, henceforth, many more individuals would reach a plateau in their careers much earlier, much younger and at lower levels than before. Several studies confirm that career plateau is far from being a phenomenon of secondary importance. A survey conducted among personnel managers (Rosen and Jerdee, 1988) revealed that 48% of the participants considered career plateau to be a significant problem in their companies. Near's study (1984) of American managers, showed that more than half the managers interviewed considered that their careers had reached a plateau. A study of a group of British managers discloses that more than 50% of the participants questioned indicated that they were "stuck" in their careers (Nicholson and West, 1990). Another study, by Tremblay and Roger (1993), of a population of French Canadian managers, revealed that more than 42% of the participants felt that they had reached a plateau in their careers. In the view of several analysts, when this type of career progression occurs, there is the risk that employees will become dissatisfied and that problems related to productivity and loyalty will arise (Nicholson, 1993). Hence there is need to further document the effects of career plateau and to identify possible solutions that would improve companies' performance and favor individual development.

Based on previous research, Ilgen and Hollenbeck (1992), Miller and Monge (1988) or Rousseau (1978) show that various job characteristics are related to job satisfaction and behavior: some of them concern the task, the physical or technical requirements of a job (variety, autonomy, use of skills); others concern the employee's role in the organisation (role ambiguity, participation in decision making). Beyond their direct impact on attitudes and behavior, job characteristics are also expected to moderate the reactions of managers to career plateau (Hall, 1985, Gerpott and Domsch, 1987): they can be viewed as

a way of avoiding some of the negative consequences of career plateau in organizations.

After rewiewing the literature on career plateau and the consequences of job characteristics, our study analyzes both the direct and the moderating effects of these job characteristics on job satisfaction and related behaviors of plateaued and non-plateaued employees.

Career plateau : definition and consequences

The career plateau concept

Career plateau is usually defined as being a prolonged halt or the feeling that an individual has of being blocked off from promotion. We describe such an individual as having reached his/her plateau or as being "plateaued". For most researchers, the notion of career plateau goes back to the linear concept of a career, meaning a progressive climb up the hierarchical pyramid. A second category has opted to define career plateau in a broader sense by including both vertical and horizontal movements (Veiga, 1981; Gerpott and Domsch, 1987). Some also adopt a still wider view by associating career plateau with the inability to assume more demanding mandates and greater responsibilities (Feldman and Weitz, 1988). Other researchers have tried to define and measure the different forms of plateau: Chao (1990) as well as Tremblay et al. (1993, 1995) have brought out the relevance of recognizing at least two dimensions of career plateau: an objective dimension (observable), associated with excessive length of time at the same level, and a subjective dimension (felt), associated with the perception of limited possibilities of advancement. Recently, Nicholson (1993) suggested that normative age relative to hierarchical status (agegrade) could represent a better construct for career plateau than the previous measures.

The documentation on this aspect of career propounds the basic premise that career plateau is something fundamentally negative. Some recent empirical research has focused on assessing the consequences of career plateau on work attitudes and behaviors.

Consequences of career plateau

Several studies have demonstrated that, when an individual's career slows down or reaches the end of its progression, he/she can show negative reactions and his/her efficiency — and therefore the company's — can deteriorate, but there is far from unanimous agreement on what influence career plateauing exerts. For example, neither Near (1984), nor Evans and Gilbert (1984) found any significant difference in terms of general satisfaction between respondents already at a career plateau and those not yet there. Orpen's (1983) and Veiga's (1981) results on work satisfaction are no more conclusive. With respect to satisfaction with the immediate superior or the supervision practiced, the results are also very ambiguous: some research concludes that non-plateaued subjects react more positively to supervision (Orpen,1983), whereas other research either concludes the opposite (Slocum et al., 1985), or finds no significant difference in this respect (Veiga, 1981). Nicholson's recent study (1993) has not detected any significant difference between plateaued and nonplateaued subjects with respect to satisfaction with internal career, satisfaction with external career, future anticipated satisfaction or career aspirations.

Furthermore, Slocum and Cron (1985) as well as Hall (1985) observed that plateaued subjects tended to be more deeply involved in their jobs than those not at plateau, while Near (1985) discovered no significant difference when she measured the time plateaued and non-plateaued people spent at work. The link between career plateau and the salaried employee's commitment to the company is far from having been clearly established: Slocum and Cron (1985), Nicholson (1993) as well as Tremblay et al. (1995) have found that non-plateaued people showed a stronger desire to leave their employers than the people already at plateau. Yet, Orpen (1983) investigating the same aspect, observed a totally different result, and Veiga (1981), for his part, found no significant difference between the people already at plateau and those not yet there.

Most research concludes however that career plateauing can reduce, for example, effort, the number of hours devoted to work, the desire for advancement, extrinsic and intrinsic satisfaction and commitment to the organization. It diminishes the perception of the value (usefulness) of performance/promotion instrumentality and may increase the rate of absenteeism (Near, 1984, Stout et al., 1988; Tremblay et al. 1995, Milliman, 1992; Gerpott and Domsch, 1987; Gattiker and Larwood, 1986; Chao, 1990). Rousseau (1978) finds time in job to be positively related to job satisfaction and job characteristics (autonomy, variety, feedback), and negatively related to role ambiguity, absences and propensity to leave. Moreover, Chao(1990) and Milliman (1992) reveal that several presumed consequences of career plateauing, though loosely associated with job stability (objective plateau), are

on the contrary, very closely linked with the perception of plateauing (subjective plateau).

Our first hypothesis will therefore be:

Hypothesis 1. Career plateau is negatively related to job satisfaction, work intensity, and positively related to intent to quit the organization.

Some authors (Ference et al., 1977; Slocum et al., 1985; Veiga, 1981; Tremblay et al., 1995, Chao, 1990; Milliman, 1992; Nicholson, 1993) explain these contradictory results by proposing the hypothesis that career plateauing is not a fundamentally negative phenomenon: the reactions to reaching career plateau can change with time and can be more or less pronounced according to the characteristics of the jobs concerned and to the organizational context. Present-day literature on career plateau is primarily concentrated on describing the different responses linked to the absence of mobility and does not really explain the process by which career plateauing acts on attitudes and behaviors. We do not really know why individuals react in different ways when they are on a career plateau, but we can expect that some factors can limit a fair number of the negative consequences associated with reaching career plateau.

The study of the variables that moderate an individual's reactions to reaching career plateau represents a step forward in explaining these divergencies and in searching for solutions to assist companies in managing their human resources in a more efficient way. Among many moderating variables that various authors (Chao, 1990; Gerpott and Domsch, 1987; Milliman, 1992; Hall,1985) have suggested are: job seniority, the direct supervisor's interest and support, the charactistics and aspirations associated with the job and career path. For example, Chao (1990) found that job seniority could modify the relationship between the perception of career plateau, the intrinsic and extrinsic job satisfaction and identification with the company. Milliman (1992), for his part, studied the moderating effect of an individual's career aspirations and the interest that his/her supervisor showed in the subordinate's progress. Milliman's results indicate that if the career plateau remains constant, the interest the supervisor shows can influence the subordinate's involvement in the company, his/her satisfaction with his/her salary and his/her chances of advancement. Moreover, results from Gerpott and Domsch (1987) showed that the immediate superior's support and the job

characteristics can play a moderating role between objective career plateau and the attitudes and behaviors at work.

The aim of our research is to follow up these works with a more specific study into the influence of three variables related to the characteristics of the employee's job, namely: job characteristics related to the task, which are expected to enrich the job and make it more interesting, the "job enrichment potential", and job characteristics related to the person's role in the organization, role ambiguity and participation in decision making.

The consequences of job characteristics

Job enrichment potential

According to Hackman and Oldham (1976), the variety of skills required, the possibility of identifying the work with a tangible result, the scope of the work, autonomy and feedback are among the many characteristics of the task that can influence the attitudes of individuals towards their work because they give them the feeling of doing a worthwhile job and of being responsible for the results of their own work. Hackman and Oldham (1976) qualify these feelings as being critical psychological states because of their influence on work attitudes and behaviors. Thus, these variables would have an effect on motivation, satisfaction, performance, absenteeism, rate of leaving and quality of work. For Hackman and Oldham (1980), the degree of autonomy granted to an employee affects the feeling of responsibility for the results of the work accomplished. Hence, the more autonomy an individual is given — that is to say, the more freedom and discretion he/she has to organize his/her work (schedule, procedures) — the more he/she feels responsible for the successes and failures that result from his/her work.

Several researchers have tried to demonstrate the existence of a probable relationship between these enhancing factors — that we will call "job enrichment potential" — and the responses from employees. Two metaanalysis research works (Loher et al., 1985; Fried and Ferris, 1987) reveal that the individual components of a job are related to the measure of attitudes and behaviors such as satisfaction, performance and absenteeism. One research using a multivariate procedure has shown that job characteristics were associated with affective responses and that certain job characteristics had more influence than others when there was control for the set of variables and characteristics of the model (Champoux, 1991). Spector and Jex (1991) found that high Job variety or complexity improved job satisfaction and reduced intent to quit. Spector and colleagues (1988) also observed that the most productive individuals had more autonomy than others.

Other empirical research has also found that jobs with high job enrichment potential generated more job satisfaction, better work performance, greater effort, more involvement in work, a lower level of absenteeism and far less inclination to quit jobs (Hackman and Lawler, 1971; Hall and Schneider, 1972; Stone, 1986; Glick et al., 1986; Campion, 1988; Glisson and Durick, 1988; Cummings et al., 1989; Griffin, 1991).

Several studies also suggest that companies often assign plateaued employees to jobs which offer less potential for enrichment (Veiga, 1981; Near, 1985; Orpen, 1986). Orpen's study (1986) reveals that people who have not attained career plateau describe their jobs as having more autonomy, feedback, variety and tend to be more satisfied with their jobs. He shows, too, that each of the dimensions of the "motivational index" based on these task characteristics have a significantly stronger relationship to satisfaction for non-plateaued people than for those who have reached a plateau. However, his study does not take into account the effect of individual variables such as age, level of education and seniority. This confirms Katz's results (1978a, 1978b) which showed that, for individuals with more than three years of seniority in a job, the correlations between these job characteristics and satisfaction tend to progressively decline. The author observed that people with more than 10 years seniority (people objectively plateaued) no longer responded to the motivational characteristics of the job. Consequently, it is reasonable to think that, among plateaued people, those who are fortunate enough to be stimulated in their present job develop much more positive attitudes than those who think that their job has little job enrichment potential.

Hall's (1985) study concludes that certain job characteristics act as an antidote to the negative consequences of career plateauing. His research reveals that plateaued people find more recognition, challenge, psychological success and involvement in their work in a structure based on project management, with more intrinsic job rewards and recognition, than in other career paths. It shows that job variety and complexity can modify the effects of attaining career plateau. During his 1985 research, Hall also observed that people in their fifties appeared to be more aware of their situation of being plateaued, and that they tried to derive satisfaction from means other than promotion, notably from job enrichment. The research done by Bailyn and Lynch (1983) reveals in particular that individuals promoted as managers during the course of eight and a half years had increased their involvement, whereas those in the same job over that same period had reduced their involvement. However, among the latter, those whose responsibilities had changed, (more responsibility, coordination and supervision), had maintained the same level of involvement.

Some researchers such as Lorence and Mortimer (1985), Rabinowitz and Hall (1981) and Rhodes (1983) have suggested that the job characteristics could be an important source of work involvement, particularly in the beginning stages of a career. Others, on the contrary, are of the opinion that job enrichment can prove to be particularly useful at the time when the career plateau is reached (Plimpton, 1984), because it offers recognition for individual skills. Once the career plateau is reached, job enrichment potential would therefore become a determining variable to explain involvement and work attitudes. In this study, we will therefore test the following hypotheses:

Hypothesis 2a. Job enrichment potential is positively related to job satisfaction and work intensity, and negatively related to intent to quit the organization.

Hypothesis 2b. Job enrichment potential is a moderator in the relationship between career plateau and job satisfaction, work intensity, and intent to quit the organization.

Role ambiguity

The meta-analyses that Fischer and Gitelson (1983) and Jackson and Schuler (1985), conducted on the conceptual and empirical consequences of role ambiguity in different types of jobs, underscore this variable's psychological and behavioral impact. Role ambiguity has been defined as "the extent to which a worker understands the requirements of his or her job" (Rousseau, 1978), or "lack of clarity with respect to expected performance, to the methods to be used to do the work, and to the consequences of the performance" (Graen, 1976). Authors such as Harris (1991), Jackson and Schuler (1985) and Erera (1989) define sub-dimensions of role ambiguity among which are: ambiguity related to instruction, ambiguity related to results and ambiguity related to promotion.

Several studies found that role ambiguity reduced job satisfaction (Rousseau, 1978; Lysonsky et al., 1985; Cummings et al., 1989). The meta-analyses of Jackson and Schuler (1985) and Fischer and Gitelson (1983) bring out, for example, a negative relationship between role ambiguity and general satisfaction, satisfaction with the immediate superior, satisfaction with work

itself, satisfaction with colleagues, satisfaction with salary; and satisfaction with opportunities for advancement.

There also seems to be a close relationship between ambiguity and various facets of commitment. Although the recent work of Netemeyer and his colleagues (1990) found no relationship between role ambiguity and intent to quit, evidence of this relationship was found by earlier authors such as Brief and Aldag (1976), Jackson and Schuler (1985), Rousseau (1978), Fisher and Gitelson (1983) and Good et al., (1988): if ambiguity is too great, then employees tend to examine other possible solutions to reduce their discomfort and they contemplate leaving the organization.

Ambiguity also seems to be linked in a negative way to people's involvement and performance (Lysonski, 1985). According to Rizzo et al. (1970), when employees do not know the limits of their decision making authority to decide what they must accomplish and how they will be evaluated, they hesitate to make decisions and are therefore less efficient. Furthermore, Beehr et al., (1980) suggest that ambiguity decreases the motivation to make an effort because it leads employees to believe that the effort they put in has little chance of producing the desired performance, and that this performance will not lead to the desired results.

The study of Granrose and Portwood (1987) has shown that, by making organizational plans and individual opportunities clear, it is possible to reduce employees' anxiety and frustration and thereby induce more positive work attitudes. An individual's satisfaction with the organization and with other aspects of the work can increase when uncertainty about his/her career status in the organization is reduced (Van Maanen, 1978; Granrose and Portwood, 1987). Role ambiguity therefore seems to impact on the attitudes of personnel. For salaried workers who have reached a career plateau, this element is even more important when other factors of satisfaction or performance linked to a perspective of career development are absent. Feldman (1989) suggests that the solution to career plateau is to improve performance evaluation systems and provide better feedback: a more realistic or less ambiguous overview can influence both work satisfaction and performance. Carnazza and his colleagues (1981) conclude that, in this matter, an organization can hope to positively influence its managers who have reached a plateau in their careers if it has an efficient programme fixing clear objectives, ensuring that performance feedback is properly perceived and removing ambiguity about performance. Their research reveals that the factor with the strongest correlation to the performance of plateaued employees is communication

about performance. The more an individual believes that he/she has clear objectives, the more feedback he/she receives on his/her specific tasks and on the whole of his/her performance, the clearer is his/her idea of the responsibilities and duties that he/she has to assume, then the better is his/her performance.

The preceding research therefore allows us to formulate the following hypotheses:

Hypothesis 3a. Role ambiguity is negatively related to job satisfaction and work intensity, and positively related to intent to quit the organization.

Hypothesis 3b. Role ambiguity is a moderator in the relationship between career plateau and job satisfaction, work intensity, and intent to quit the organization.

Participation in decision making

Gershenfeld (1987) defines participation in decision making as an approach based on systematic employee involvement in the decision making process affecting their work and work environment, with the aim of reducing production costs, improving product quality, facilitating communication, enhancing morale and reducing conflict. In their meta-analytical research Miller and Monge (1988) conclude that participation in decision making affects work satisfaction and productivity. In the same perspective, the research done by Schewiger and Leana (1986) brings to the forefront the existence of a strong convergence between laboratory research and field research and concludes that participation in decision making has a positive influence on subordinates. In a study aimed at comparing the influence of the different forms of participation, Cotton et al. (1988) conclude that formal and informal participation in decision making positively influences performance and work satisfaction.

The results of a longitudinal study by Macy, Peterson and Norton (1989) among three groups of employees (direct, indirect participants and non-participating) divided between two sites, one of which has a more participative management style, follow the same direction: the changes in the employees' attitudes and behaviors are more pronounced on the site where management favors participation than on the other where it is does not.

In a recent study of officials from 476 big American companies, Lawler, Mohrman and Ledford (1992) report that 66% of them feel that implementing participative-management practices has had a positive effect on personnel satisfaction, 22% feel that it has had a positive effect on the rate of quitting and 23% feel that it has had a positive effect on absenteeism. Two thirds of the companies also noted an increase in employees' confidence in management.

Sharing managerial responsibilities is often considered to be not only possible, but also a necessary solution to the effect of reaching career plateau (Bardwick, 1986). Driver (1985) feels that "when a greater number of middleand lower-level managers share the major political and strategic functions, some frustrations linked with career plateau disappear". According to Wolf (1983), one way of increasing the job quality of the people who have to stay in their present positions would be to involve them more in the decisions which concern them, and even in those that touch on organizational aspects.

Several specialists on the topic (Hall and Rabinowitz, 1988; Ference et al., 1977; Stoner et al., 1980) have raised the possibility that employees who are productive but plateaued ("solid citizens"), reduce their level of performance and become "dead wood" if they find no challenge or stimulation in their job. According to these authors, the possibility of participating in decision making, and the fact of holding down a job that presents a certain level of variety and complexity, are important ingredients in job involvement. Moreover, a greater power to make decisions can substantially increase the feeling of success in the hierarchy without offering any promotion (Gattiker and Larwood, 1986.). Hence our fourth set of hypotheses:

Hypothesis 4a. Participation in decision making is positively related to job satisfaction and work intensity, and negatively related to intent to quit the organization.

Hypothesis 4b. Participation in decision making is a moderator in the relationship between career plateau and job satisfaction, work intensity, and intent to quit the organization.

The studies mentionned above illustrate well that all employees do not react in the same way to career plateau. Their satisfaction and commitment in the organization is more or less affected by this step in their career according to their age, seniority, gender, level in the hierarchy or level of education. Various factors linked to the job characteristics are expected to influence satisfaction and commitment, but also to moderate the consequences of reaching career plateau: job enrichment potential, which is more centered on the task, role ambiguity, and participation in decision making, which are more centered on the employee's role in the organization. We will measure this influence by showing to what degree each of these variables reinforces the relationship after accounting for the effect of the individual variables considered as control variables. Although we have no specific hypothesis on double interactions, we will also test the cumulative effect of our three variables related to job characteristics.

Methodology

Population and method

The data included in this research were collected through a questionnaire in three large sectors of the economy in Quebec, Canada: the pulp and paper industry, the consumer services sector - in this case the food services - and the public and parapublic sector. The questionnaire was distributed to managers at all levels, from supervisors (first line supervisor, foreman) to top executives (president, executive director, vice-president). Given the cultural and linguistic duality of the population consulted, two versions were designed, one in French and the other in English, and the two versions were submitted to bilingual experts in order to ensure that the questions had the same meaning in both languages. The questionnaires were generally sent out by internal mail and took less than an hour to complete at the work sites. The questionnaire was usually accompanied by a letter from a top executive of the respective company inviting employees to participate in the inquiry, a letter from the authors of the research presenting the objectives of the project and the measures taken to ensure the confidentiality of the results, together with a stamped addressed envelope for return to the university.

Our sample encompasses 3067 managers spread through 41 establishments (factories and head offices) and managers' associations. The response rate varied between 23% and 42%. The respondents are for the most part males (87%), French speaking (89%), with an average age of 43.4 years and have more than 22 years of work experience. Our respondents have been in the same job for an average of 6.9 years, and, in addition, 90% of them indicate that they have direct responsibilities for supervision and that about 14 subordinates report to them.

Measuring instruments

Career plateau measurements: Two types of career plateau were studied, objective plateau (objective career) and subjective plateau (subjective career). The *objective* career plateau was measured by the number of years in the job. In order to avoid classing subjects who are beginning their management careers as mobile and non-plateaued, we decided to exclude from our sample all respondents who had less than five years seniority in their present company. Because of this restriction, more than 884 subjects were eliminated from our analyses, representing 28.8% of total number of participants.

The *subjective* career plateau was measured by answers to two questions: "Do you think that you have stayed at your level far too long ?", and "I have a dead-end position". The subjects had to reply either positively, negatively or by a question mark to each of the two questions. Those who replied "No" (code 1) to both questions were considered as non-plateaued; those who replied "Yes" (code 3) to both questions were considered as plateaued; and the ones who answered "Yes" to one and "No" to the other of the two questions were considered as being uncertain (code 2). The resulting coefficient of reliability is alpha = 0.62.

The consequences studied: Global satisfaction in the job is an adaptation of Quinn and Shepard's index (1974, alpha = .74). The measures of satisfaction with regards to the company, the immediate superior, the work itself and with colleagues were obtained by means of Warr and Routledge's Managerial scale (1969). The alpha coefficients of reliability that we obtained compare very well with those observed by these researchers (the work itself .82 against .81 for Warr and Routledge; immediate superior .81 against .86). The dimension related to advancement opportunities in this scale overlapped with our measure of career plateau. Therefore, career satisfaction was measured by another instrument comprised of five items on a four-point Likert-type scale from "absolutely true" to "absolutely false" (e.g. "The training programmes provided by the company give me better future prospects." "This company offers me numerous possibilities for advancement."). The alpha coefficient of reliability of this instrument centered on the career opportunities offered by the company is 0.81. The correlation of this measurement with that of subjective plateau is only 0.35, which shows that these two concepts are relatively distinct.

The *intent to quit* the organization was measured by a question with a 4 point scale varying from "absolutely true" to "absolutely false" ("I am ready to change companies to get better opportunities for promotion."). Although this

one-item measure may have a lower reliability, it is a useful complement to the previous scales as it goes beyond attitudes to measure intended behavior.

Work intensity was measured by the number of hours people spent at work in a typical week. This measure using reported behavior is a little more objective and is usually considered as being more reliable than other self-report items.

The moderating variables: The *job enrichment potential* was measured by an indicator composed of four items. Although it is sometimes called job complexity, it covers more than this sole dimension as it includes variety of work, organizational consequences, autonomy, adequacy of skills and work requirements The internal coherence of this measure is alpha =0.70. Hackman and Oldham's model (1976) suggests that these job dimensions can be combined into a single index that reflects the potential of the whole job to influence work attitudes and behaviors. Several studies, such as that by Fried and Ferris (1987), have demonstrated the advantage of grouping the job characteristics is more strongly related to the psychological and behavioral results than are each of the dimensions when taken individually. Their study reveals, in addition, that there is a convergence between perceptual and objective characteristics, all of which justifies our use of a composite measure.

The degree of *role ambiguity* was measured by the instrument developed by Rizzo et al. (1970) and House et al. (1983). The studies on ambiguity reveal that this measuring instrument has good psychometric properties and measures the role structure well (Jackson and Schuler, 1985). On the basis of results from a factor analysis, (varimax rotation) we retained only the seven items which were found in the same factor, and whose coefficient of determination was higher than .30 (e.g. "my responsibilities are clearly defined", "My boss lets me see clearly how he will evaluate my output"). This measure's coefficient of internal coherence is 0.76.

The degree of *participation in decision making* was measured by the sum of eight expressions concerning work-related decision, career planning, evaluation of output or compensation policies. For each of these eight decisions, the respondent had to evaluate — on a scale of five points from (1) "others decide for me" to (5) "I alone decide" — his possibility of participating in the decisions. This measurement's coefficient of internal coherence is 0.77.

Several *control variables* were also used: age and seniority were directly encoded. Education level was measured on a seven point scale going from

primary education (1) to doctorate (7): Hierarchical level was measured on a seven point scale recoded into three main levels: 1 = first line supervisor, 2 = middle-level manager, 3 = president, chief executive officer. Finally sex was encoded as a binary variable: 0 = man, 1 = woman.

Statistical analyses

The hypotheses in this research were tested by means of bivariate and multivariate statistical techniques. We used a Pearson-type correlation to test whether a linear association existed between the types of career plateau and the consequences. Table 1 presents the mean, the standard deviation and the correlation matrix of the variables studied. Examination of the correlations between the variables shows that they rarely go beyond 0.40, thus denoting that there are no serious multicollinearity problems.

(alpha on diagonal)	М	S.D.	.1.	.2.	.3.	.4.	.5.	.6.	.7.	.8.	.9.	.10.	.11.	.12.	.13.	.14.	.15.	.16.
1. Age	43.4	9.0	-															
2. Sex (f)	0.1	0.3	-0.09	-														
3. Education	4.3	2.0	-0.05	0.08	-													
4. Seniority	15.8	8.5	0.61	-0.09	-0.20	-												
5. Job level	2.0	0.8	0.18	-0.11	0.28	0.00	-											
6. Objective plateau	6.9	5.3	0.37	-0.01	-0.18	0.43	-0.06	-										
7. Subjective plateau	1.6	0.7	0.13	0.04	-0.01	0.03	-0.10	0.21	(.62)									
8. Role ambiguity	2.1	0.5	-0.10	0.02	0.12	-0.11	-0.05	-0.09	0.23	(.76)								
9. Job Enrich. Potential	1.8	0.5	0.07	-0.01	0.04	0.03	0.22	0.03	-0.19	-0.31	(.70)							
10. Participation	16.1	4.9	0.08	-0.11	0.09	0.04	0.35	0.05	-0.23	-0.20	0.32	(.77)						
11. General satisfaction	4.3	1.5	-0.07	-0.13	-0.07	-0.02	0.09	-0.01	-0.32	-0.28	0.22	0.19	(.74)					
12. Satisfaction /career	10.7	2.6	0.02	-0.14	-0.17	0.12	0.04	0.08	-0.35	-0.48	0.33	0.27	0.42	(.81)				
13. Satisfaction /work itself	37.1	8.6	0.03	-0.03	-0.09	0.09	0.13	0.07	-0.42	-0.42	0.46	0.31	0.50	0.50	(.82)			
14. Satisfaction /colleagues	24.2	5.7	0.04	-0.04	-0.02	0.08	0.06	0.06	-0.18	-0.20	0.09	0.16	0.18	0.20	0.26	(.74)		
15. Satisfaction /superior	31.9	8.4	0.01	-0.08	-0.07	0.08	0.02	0.00	-0.29	-0.37	0.19	0.22	0.31	0.30	0.39	0.27	(.81)	
16. Intent to quit	2.3	1.0	-0.30	-0.03	0.11	-0.32	0.00	-0.19	0.22	0.20	-0.12	-0.14	-0.13	-0.17	-0.27	-0.14	-0.23	-
17. Work intensity	40.6	6.8	-0.05	-0.19	-0.02	0.06	0.14	-0.02	-0.14	-0.06	0.16	0.17	0.04	0.13	0.14	0.02	0.06	0.03

Table 1 : Intercorrelations among variables (n = 3067)(alpha coefficients of reliability are presented in the diagonal)

(p < .05 for r > .05; p < .01 for r > .08)

M = Mean; S.D. = standard deviation

15

We first ran a simple regression, entering all the variables at once. In order to test the explanatory power of each type of career plateau studied, we then used a hierarchical regression. Although some some variables are nominal or ordinal variables (sex, education,...), they were coded on such a way that they could be considered as interval variables and included in the analysis. Previous research showed that attitudes and behaviors were often influenced by socio-demographic variables, such as age, seniority, level of education, hierarchical level and gender. We controlled the effect of these variables by entering them in a first step into the regression equation. Our second step was to introduce the objective plateau into the model. In a third step, we entered separately our variables related to job characteristics. In a fourth step we followed the recommendations of James and Brett (1984) for testing the moderating effect of a variable: we introduced into the equation the interaction of the objective career plateau with each one of the job characteristics variables, job enrichment potential, role ambiguity, and participation in decision making, and we finally tested each of the three double interactions between these variables. The same process was then followed using subjective instead of objective plateau.

Results

The results of the simple regression for each form of plateau (table 2) confirm that the control variables often play an important role in explaining our dependent variables: more than half of the betas are significant at the .05 level, and more than one third at the .01 level. Objective or subjective plateau, participation in decision making, job enrichment potential and role ambiguity also play an important role in the explanation of job satisfaction and, to a lower degree, of work intensity and intent to quit. The global explanation power of this all set of variables is much higher for satisfaction with career ($R^2 = .34$ for objective plateau and .41 for subjective plateau) and satisfaction with the work itself ($R^2 = .36$ for objective plateau and .45 for subjective plateau) than for the other dependent variables ($R^2 = .06$ to .21). Simple and double interactions are also observed, mainly in the explanation of satisfaction with the work itself.

If we take into account the influence of the control variables in a stepwise regression, the three independent variables measuring job characteristics still have a significant effect on job satisfaction, work intensity and intent to quit. Several interactions also make a significant contribution beyond this main effect: seven interactions explain each more than 1% of the variance between

our dependent and independent variables for subjective plateau, and one more interaction explains more than 1% of the variance for objective plateau (table 3).

Hypothesis 1 stating that career plateau is negatively related to job satisfaction, work intensity, and positively related to intent to quit the organization is verified with subjective plateau and most of our dependent variables: Table 3 shows that subjective plateau is negatively related and explains a significant part of the variance of satisfaction with the work itself ($\Delta R^2 = 11\%$), of satisfaction with career opportunities ($\Delta R^2 = 6\%$), of general satisfaction ($\Delta R^2 = 5\%$), of satisfaction with the superior ($\Delta R^2 = 4\%$) and of satisfaction with colleagues ($\Delta R^2 = 5\%$). Subjective plateau is also positively associated to intent to quit ($\Delta R^2 = 5\%$). However, we found no significant effect of objective plateau on any of the dependent variables in the stepwise regression.

Hypotheses 2a, 3a and 4a, stating that job enrichment potential, role ambiguity and participation would be related to job satisfaction, work intensity and intent to quit the organization, are only partially verified: after taking into account the effect of the control variables and of career plateau, job enrichment potential explains 24% of the variance of satisfaction with the work itself and a smaller part of the variance of satisfaction with career opportunities, work intensity and intent to quit. Participation explains a small part of the variance of all the facets of satisfaction and of work intensity. Role ambiguity explains 27% of the variance of satisfaction with career opportunities (25% in the analysis of objective plateau, when managers with seniority above 5 years are excluded in the analysis of objective plateau), and 13 or 14% of the variance of satisfaction, satisfaction with the work itself and with colleagues, and to intent to quit.

Hypothesis 2b stated that job enrichment potential moderates the relationship between career plateau and job satisfaction, work intensity, and intent to quit the organization. It is verified for general satisfaction, satisfaction with the work itself, and work intensity, but neither for the other facets of satisfaction, nor for intent to quit: general satisfaction and satisfaction with the work itself are less reduced by the feeling of being plateaued and people tend to work longer hours when their job enrichment potential is higher (see figures 4-a, 4-b and 4-c).

	Gen	eral	Satisfaction facets					
(Subj.: 3067 managers) (Obj.: 2183 managers	satisfa	action	Ca	reer	Work itself			
with tenure > 5y.)	Obj.	Subj.	Obj.	Subj.	Obj.	Subj.		
. Sex (f)	11 ***	10 ***	12 ***	11 ***	.01	.02		
. Age	.01	04	11 ***	06 *	08 ***	01		
. Seniority	11 ***	03	.04	.02	.08 ***	.05 *		
. Job level	.03	01	.03	.06 *	01	.01		
. Education	09 ***	07 **	09 ***	09 ***	08 ***	07 ***		
. Plateau	22	-1.01 ***	.22	07	-3.11 ***	-2.4 ***		
. Participation	.05	.08	.13 ***	.01	.19 ***	.01		
. Job Enrich. Potential	.29 ***	.15 *	.30 ***	.33 ***	.43 ***	.03 *		
. Ambiguity	22 ***	18 **	36 ***	39 ***	18 ***	21 ***		
. Plat. X participation	.26	.37	24	.14	.72	.79 ***		
. Plat. X J.E.P.	.51	1.03 ***	22	20	3.20 ***	1.92 ***		
. Plat. X ambiguity	47	29	20	.05	-3.01 ***	95 ***		
. Plat. X part. X J.E.P.	51	72 **	.14	04	-1.04 ***	64 **		
. Plat. X part X amb.	36	29	09	06	16	.01		
. Plat. X J.E.P. X amb.	.89	.50	.19	.03	2.30 ***	1.00 ***		
R ²	.15 ***	.19 ***	.34 ***	.41 ***	.36 ***	.45 ***		
F	17.50	20.20	49.50	57.90	52.30	68.30		

Table 2 : Simple regression between dependent and independent variables

 (betas and their significance level for objective and subjective plateau)

* p < .05; ** p < .01; *** p < .001

	Satisfacti	ion facets		Work i	ntensity	Intent to quit		
Collea	agues	Supe	eriors	WORKI	intensity			
Obj.	Subj.	Obj.	Subj.	Obj.	Subj.	Obj.	Subj.	
04	-0.04	07 **	05 *	18	18 ***	08 *	07 **	
04	-0.03	08 **	06 *	.01	02	18 ***	22 ***	
.11 ***	.09 **	.10 ***	.07 **	.04	.02	14 ***	12 ***	
.05	0.05	.04	.05	05	07 *	.07 *	08 **	
02	-0.01	01	01	02	01	.05 *	.05 *	
.64	-0.45	2.25 ***	1.5 ***	.63	.80 *	.01	1.00 **	
.17 ***	0.09	.19 ***	.11	.09 *	.14 *	.08	.02	
.00	-0.04	.04	.02	.13 **	.17 *	10*	.08	
14 ***	15 *	27 ***	22 ***	02	.08	.07	.02	
.70	1.01 ***	.82	.60 *	97 *	38	11	34 ***	
.59	0.19	2.20 ***	1.03 **	68	95 **	.10	55	
03	0.51	-1.40 ***	80 **	21	.50	.00	.05	
77 ***	-0.87 **	-1.04 ***	50	1.06 **	.25	.06	.18	
.10	0.10	06	.08	.07	07	.06	.04	
18	-0.62	1.30 *	.60	.22	70	.06	01	
.06 ***	.08 ***		.21 ***	.09 ***	.10 ***	.13 ***	.17 ***	
5.50	7.70	22.30	22.60	8.90	6.60	15.30	18.50	

Table 2 (cont'd)

		Gen	ieral	Satisfaction facets						
`	Subj.: 3067 managers) (Obj.: 2183 managers	satisfa	action	Car	reer	Work itself				
	with tenure $> 5y$.)	Obj. pl. Subj. pl.		Obj. pl. Subj. pl.		Obj. pl.	Subj. pl.			
1	sex age	(-) .01 ***	(-) .01 ***	(-) .01 *** (-) .01 ***	(-) .01 ***					
	seniority job level education			(-) .01 ***	(-) .01 ***	(-) .01 ***	(-) .01 ***			
2	. Plateau		(-) .05 ***		(-) .06 ***		(-) .11 ***			
3	ParticipationJob Enrich. PotentialAmbiguity	.01 *** .08 *** (-) .03 ***	(-).09 ***	.01 *** .06 *** (-).25 ***	.04 *** (-) .27 ***	.02 *** .24 *** (-) .06 ***	.24 ***			
4	. Plat. X participation . Plat. X J.E.P. . Plat. X ambiguity		.02 ***				.01 *** .01 ***			
5	. Plat. X part. X J.E.P. . Plat. X part X amb. . Plat. X J.E.P. X amb.						.05 ***			
	R² F	.14 *** 39.10	.19 *** 41.50	.34 *** 122.10	.40 *** 118.40	.34 *** 116.30				

Table 3 : Stepwise regression between dependent and independent variablesrelated to objective and subjective plateau (increase in variance : $\triangle R^2$)

 $(\triangle R^2 \text{ are independent}) \quad (\text{only the results with } \triangle R^2 \ge .01 \text{ are presented here})$ (-) indicates a negative β in the regression) *** = p < .001

	Satisfact	ion facets		XX 71- :-		Intent to quit		
Colle	agues	Supe	eriors	Work ii	itensity			
Obj.	Subj.	Obj.	Subj.	Obj.	Subj.	Obj.	Subj.	
.01 ***				(-) .04 ***	(-) .04 ***	(-) .07 *** (-) .01 ***		
	(-) .01 ***		(-) .04 ***				.05 ***	
.01 ***		.02 ***		.01 ***	00 total			
(-) .04 ***	(-) .04 ***	(-) .14 ***	.13 ***	.03 ***	.03 ***	(-) .01 *** .01 ***		
					(-) .01 ***			
			(-) .02 ***			.02 ***		
							.02 ***	
.06 *** 22.70		.18 *** 51.30		.08 *** 39.40	.09 *** 27.01	.13 *** 25.40		

Table 3 (cont'd)

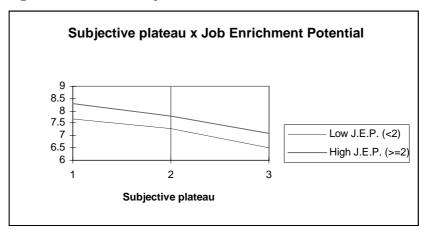
 $(\triangle R^2 \text{ are independent}) \quad (\text{only the results with } \triangle R^2 \ge .01 \text{ are presented here})$ (-) indicates a negative β in the regression) *** = p < .001 *Hypothesis 3b* stating that role ambiguity moderates the relationship between career plateau and job satisfaction, work intensity, and intent to quit the organization, is not verified when we look only at simple interactions: role ambiguity does not seem to have any moderating effect between career plateau and job satisfaction or behavior.

Hypothesis 4b stated that participation in decision making moderates the relationship between career plateau and job satisfaction, work intensity, and intent to quit the organization. It is only verified for one facet of satisfaction: satisfaction with the work itselfis less reduced by subjective plateau when people participate more in decision making (see figure 4-d).

Figure 4 : Main significant interactions between subjective plateau, job characteristics, and dependent variables

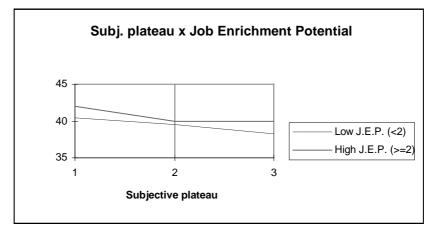
(the graphs do not show categories with n < 10)

Figure 4-a General satisfaction



(1=no plateau; 3=plateau)

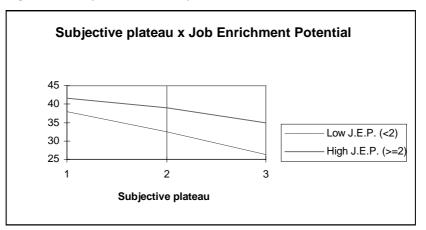
figure 4-b Work intensity



(1=no plateau; 3=plateau)

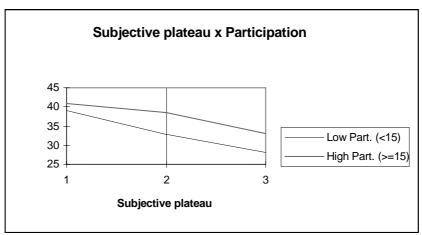
Figure 4 (cont'd)

Figure 4-c Satisfaction/work itself



(1=no plateau; 3=plateau)

Figure 4-d Satisfaction/work itself

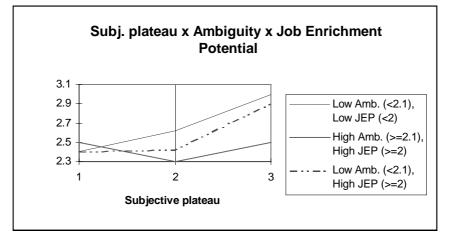


(1=no plateau; 3=plateau)

Finally, if we look at double interactions, we can see in table 3 that the most significant one is the joint effect of subjective plateau, role ambiguity and job enrichment potential on satisfaction with the work itself ($\Delta R^2 = 5\%$): managers who feel plateaued are more satisfied with their work when their job is richer and their role more ambiguous (figure 5-d). These three variables also have a joint effect on intent to quit: managers who feel plateaued are more inclined to quit their organization when their role is less ambiguous and the Enrichment Potential of their job is lower (figure 5-a). We can also observe a joint effect of objective plateau, participation in decision making and job enrichment potential on intent to quit (figure 5-b): managers who experienced an objective plateau (longer time at their level) are more prone to quit the organization when their job enrichment potential is lower and they have fewer opportunities of participating in decision making. The last significant double interaction is the joint effect of subjective plateau, participation in decision making and job enrichment potential on satisfaction with the superior (figure 5-c): managers feeling that their job enrichment potential is lower and that they have fewer opportunities of participating in decision making are less satisfied with their superiors. Giving plateaued managers a more varied and challenging job does not increase their satisfaction with their superior unless they can also participate more in decision making.

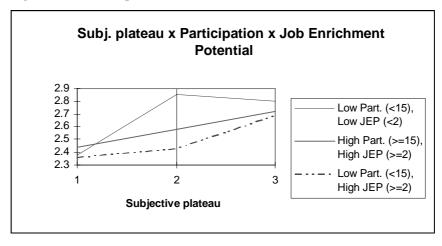
To summarize, subjective career plateau, job enrichment potential, role ambiguity and participation in decision making are related to various individual attitudes and behaviors. The impact of career plateau on these variables varies according to job enrichment potential and participation in decision making. However, these direct and moderating effects are only significant for some of the facets of job satisfaction and not always for work intensity and intent to quit. Figure 5 : Main significant double interactions between subjective plateau, job characteristics, and dependent variables (the graphs do not show categories with n < 10)

Figure 5-a Intent to quit



(1=no plateau; 3=plateau)

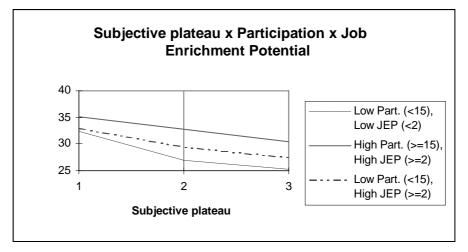
Figure 5-b Intent to quit



(1 = 0/5 years; 2 = 5/10 y.; 3 = >10 y.)

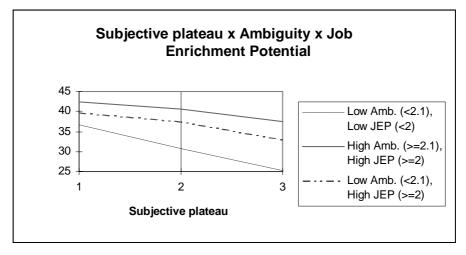
Figure 5 (cont'd)

Figure 5-c Satisfaction/superior



(1=no plateau; 3=plateau)

Figure 5-d Satisfaction/work itself



⁽¹⁼no plateau; 3=plateau)

Discussion

This study allowed us to confirm and analyze more precisely the impact of career plateau and job characteristics on people's attitudes or behaviors, but it also extends the traditional field of research on career plateau by taking into account the influence of factors linked to job characteristics on the relationship between career plateau and work-related attitudes, as Hall (1985), Gerpott and Domsch (1987), Milliman (1992) or Nicholson (1993) have suggested. Our results show that job characteristics, such as the degree of role ambiguity, job enrichment potential and participation in decision making can contribute to limit the negative consequences associated with career plateau.

Job enrichment potential does not affect all the facets of satisfaction on the same way : it is highly related to satisfaction with the work itself and with career opportunities, but not to satisfaction with colleagues or with the superior. This result does not confirm Hackman and Lawler's (1971) results showing significant relationships between job characteristics (variety, autonomy, task identity) and nearly all the satisfaction facets, except pay. It shows the limits of job enrichment experiences when applied to such a population of managers.

Our results confirm those of Hall (1985), of Domsch and Gerpott (1987) which showed that job characteristics could serve as immunization against the negative consequences of career plateau. Some authors suggest that avoiding job-content plateau is the key which prevents plateaued salary-earners from becoming dissatisfied and demotivated. (Slocum, Cron and Yows, 1987; Bardwick, 1986; Leibowitz et al., 1990). Feldman and Weitz (1988) maintain that, when the plateau effect is due to a lack of intrinsic motivation, task enrichment can be an appropriate solution. In particular, for high performing plateaued managers ("solid citizens") modification of job content can be a significant mark of confidence (Bardwick, 1986) and an efficient strategy for keeping personnel (Wright, 1990).

In practical terms, these results suggest that career plateau can be less detrimental in organizations that combat stagnation notably by developing project management, ad-hoc work committees or horizontal mobility. Despite the fact that authors are almost unanimous on the relevance of a job design policy as a solution to plateau, the inquiry conducted by Rosen and Jerdee (1990) discloses that only 20% of the employers who participated in that research would implement a policy to transform jobs; yet, nearly 74% of them

confirm that such a programme is necessary. Our research confirms that such a policy is fully justified.

As expected, *role ambiguity* exerts a strong influence on general satisfaction; and on the various facets of job satisfaction: managers have more favorable attitudes towards their work when they perceive their role as being unambiguous. Telling an employee exactly what is expected of him, giving him regular performance feedback, telling him what chances he has for advancement can reduce his perception of the ambiguity in his role. In practical terms, we thus confirm the relevance of Feldman's (1989) proposition to improve the performance evaluation systems and the feedback of results, or that of Granrose and Portwood (1987) insisting on the importance of reducing the uncertainties surrounding the status of employees' careers. Yet, this variable does not affect the relationship between career plateau and attitudes once the main effect has been removed: ambiguity has negative consequences on the attitudes of plateaued as well as non-plateaued managers.

Our results also show that *participation in decision making* significantly increases all the facets of job satisfaction, thus confirming Macy et al's (1989) or Lawler et al.'s (1992) results. Yet, as opposed to our hypothesis, if people feel plateaued, then participation in decision making does no longer improve their job satisfaction, except for one dimension, satisfaction with the work itself; it does not push them to work harder and does not reduce their intent to quit their organization. These results show that participation may not be the most efficient way of fighting the negative consequences of subjective career plateau. Yet, some people may have stayed at their level for many years and be considered as objectively plateaued, without thinking that they have stayed at their level far too long and that they are in a dead-end position. Participation in decision making appears to be a good way of reducing the negative relation between objective career plateau and satisfaction or work intensity. This confirms Driver's (1985) hypothesis which suggests that sharing managerial responsibilities could be a worthwhile solution to career plateauing and the words of Feldman and Weitz (1988) who said that increased reponsibilities can limit the negative effects of career blockage.

Although we had no specific hypothesis on double interactions, our results suggest that some of the double interactions allow a better understanding of the link between career plateau, satisfaction and behavior. The necessity of taking into account the joint effect of several variables illustrates the complexity of the phenomenon of career plateau. The only significant interaction with objective plateau is its double interaction with participation and job enrichment potential on intent to quit. Double interactions mainly occur when subjective plateau is considered: the most significant one is the interaction of subjective plateau with job enrichment potential and ambiguity on satisfaction with the work itself. The positive effect of role ambiguity in this specific case goes against the general results summarized for example by Jackson and Schuler (1985). It can be explained by the fact that the person holding a rich and complex job needs to have a wide freedom of action and few formal rules. Managing uncertainty in that type of job may be contradictory with precise norms and performance criteria.

Intent to quit is not always an indicator of bad human resource management, particularly in many companies experiencing slow growth or downsizing nowadays. Yet, among plateaued managers, companies may need some of their good performing "solid citizens" and be afraid to see them leave the organization without transmitting their knowledge to their colleagues. Only low-performing "deadwood" employees are usually seen as welcome departures. Ornstein and Isabella (1993) point out that "inherent in the traditional concept of plateauing is that plateauing is negative", but their review of recent research shows that it is not necessarily the case. Ettington (1992) find on a sample of 373 American and European middle managers from a large company that, although career plateau generally has a negative effect on individuals, it can be "successful" and lead to positive attitudes and good performance: "those managers who perceive that promotions are possible despite objective evidence that they are losing the "tournament" are seen as better performers".

We want to make it clear that, though we have made a hypothesis of causality by considering satisfaction, work intensity and intent to quit as consequences of career plateau, we could also conceive that these three variables partly determine the plateau: an employee who is dissatisfied, may refuse to commit himself to his/her work, he/she is more likely to intent to quit his/her organization, he/she has probably fewer chances of seeing himself promoted and is more likely to see himself blocked in his/her career. The study of this causal relationship would be an interesting track for future research.

Future research should also explore the impact of other moderating variables. Particular attention should be paid to the needs for actualization; the stages of life (Feldman and Weitz,1988); alternative roles (e.g. mentorship); training opportunities (Elsaas and Ralston, 1989); career aspirations (Milliman, 1992); suggested career paths (Hall, 1985) and even to job satisfaction (Nicholson,

1993). Although several empirical studies show the positive influence of participation on attitudes and behaviors, we cannot neglect the moderating role of the contextual and individual variables on the participation / performance relationship: no approach can be used with the same effectiveness for all employees in different organizational contexts (Schweiger and Leana, 1986).

Our study covered a specific population of Canadian managers, but many of the results obtained confirm other studies conducted with other categories of employees in different countries, although most of the literature on the subject is based on American samples. In other cultural contexts, different values (related for instance to tolerance for ambiguity or relationships with colleagues and superiors) could lead to quite different results.

Many firms now engaging in new ways of organizing work are revising their procedures towards enriching jobs, allowing more individual participation in decision making, and reducing ambiguity by promoting more precise definitions of tasks and relationships between the various internal and external actors of the firm. At a time when career plateau is generalizing, this approach can avoid, or at least reduce, the negative consequences they might have. Managers who are blocked in their advancement can then find the necessary satisfaction and involvement leading to self-realization and company development.

References

- BAILYN, L.; LYNCH, J.T. «Engineering as a Life Long Career, its Meaning, its Satisfactions, its Difficulties» in *Journal of Occupational Behavior*, vol. 4, 1983, p. 263-283.
- BARDWICK, J.M.. The Plateauing Trap, Amacom, 1986, 209 p.
- BEEHR, T.A.; TABER, T.D.; WALSH, J.T. «Perceived Mobility Channels Criteria for Intraorganizational Job Mobility» in Organizational Behavior and Human Performance, vol. 26, 1980, p. 254-264.
- BRIEF, A.P.; ALDAG, R.J. «Correlates of Role Indices» in *Journal of Applied Psychology*, vol. 61, 1976, p. 468-472.
- CAMPION, M.A. «Interdisciplinary Approaches to Job Design: A Constructive Replication With Extensions» in *Journal of Applied Psychology*, vol. 73, no. 3, 1988, p. 467-481.
- CARNAZZA, J.; KORMAN. A.; FERENCE. T.; STONER, J. «Plateaued and Non Plateaued Managers: Factors in Job Performance», *Journal of management*, vol.7, no.2, 1981, p. 7-25.
- CHAMPOUX, J.E. «A Multivariate Test of the Job Characteristics Theory of Work Motivation» in *Journal of Organizational Behavior*, vol. 12, 1991, p. 431-446.
- CHAO, G.T. «Exploration of the conceptualization and Measurement of Career Plateau : A Comparative Analysis», *Journal of management*, vol.16, no.1, 1990, p. 181-193.
- COTTON, J.L.; VOLLRATH, D.A.; FROGGATT, K.L.; LENGNICK-HALL, M.L.; JENNINGS, K.R. «Employee Participation: Diverse Forms and Different Outcomes» in *Academy of Management Review*, vol. 13, no. 1, 1988, p. 8-22.
- CUMMINGS, W.T.; JACKSON, D.W. Jr.; OSTROM, L.L. «Examining Product Managers' Job Satisfaction and Performance Using Selected Organizational Behavior Variables» in *Journal of the Academy of Marketing Science*, vol. 17, no. 2, printemps 1989, p. 147-156.
- DRIVER, M. «Demographic and Societal Factors Affecting the Linear Career Crisis» *Revue Canadienne des Sciences de L'Administration*, décembre, 1985, p. 245-263.

- ELSAAS, P.M.; RALSTON, D.A. «Individual Response to the Stress of Career Plateauing» in *Journal of Management*, 1989, vol. 15, no. 1, p. 35-47.
- ERERA, I.P. «Role Ambiguity in Public Organizations» in Administration in Social Work, vol. 13, no. 2, 1989, p. 67-82.
- ETTINGTON, D.R. «Coping with Career Plateauing : "face the facts" vs. "hope springs eternal"» presented at Careers Division, 1992, *National Academy* of Management Meetings, Las Vegas, NV.
- EVANS, M.; GILBERT, E. «Plateaued Managers : Their Need Gratifications and Their Effort-Performance Expectations» in *Journal of Management Studies*, vol. 21, no. 1, 1984, p. 99-108.
- FELDMAN, D.C.; WEITZ, B.A. «Career Plateaus Reconsidered» in *Journal of Management*, vol. 14, 1988, p. 69-80.
- FELDMAN, D.C. «Careers in Organizations: Recent Trends and Future Directions», *Journal of Management*, 1989, vol. 15, no. 2, p. 135-156.
- FERENCE, T.P.; STONER, J.A.; WARREN, E.K. «Managing the Career Plateau» in *Academy of Management Review*, oct. 1977, p. 602-612.
- FISHER, C.D.; GITELSON. R. «A Meta-Analysis of the Correlates of Role Conflict and Ambiguity» in *Journal of Applied Psychology*, vol. 68, no. 2, 1983, p. 320-330.
- FRIED, Y.; FERRIS, G.R. «The Validity of the Job Characteristics Model: A Review and Meta-Analysis» in *Personnel Psychology*, vol. 40, 1987, p. 287-322.
- GATTIKER, U.E.; LARWOOD, L. «Subjective Career Success: A Study of Managers and Career Personnel» in *Journal of Business and Psychology*, vol. 1, 1986, p. 78-94.
- GERPOTT, T.; DOMSCH, M. «R and D Professionnal Reaction to Career Plateau: An Exploration of Mediating Role of Supervisory Behaviors and Job Characteristics» in *R and D Management*, vol. 17, 1987, p. 103-118.
- GERSHENFELD, W.T., «Employee Participation in Firm Decisions», in *Human Resources and Performance of the Firm* (eds M. Kleiner, R. Block, M. Roomkin, S. Salsburg), 1987, p.123-158. Industrial Relations Research Association Series.
- GLICK, W.H.; JENKINS, G.D. JR.; GUPTA, N. «Method Versus Substance: How Strong are Underlying Relationships Between Job Characteristics

and Attitudinal Outcomes?» in Academy of Management Journal, vol. 29, no. 3, 1986, p. 441-464.

- GLISSON, C.; DURICK, M. «Predictors of Job Satisfaction and Organizational Commitment in Human Service Organizations» in Administrative Quartely, vol. 33, 1988, p. 61-81.
- GOOD, L.K.; SISLER, G.F.; GENTRY, J.W. «Antecedents of Turnover Intentions Among Retail Management Personnel» in *Journal of Retailing*, vol. 64, no. 3, 1988, p. 295-314
- GRAEN, G. «Role-making Processes Within Complex Organizations» in M. Dunnette (dir.) *Handbook of Industrial and Organizational Psychology*, Chicago: Rand McNally & Co., 1976, p. 1201-1245.
- GRANROSE, C.; PORTWOOD, J.D. «Matching Individual Career Plans and Organizational Career Management» in Academy of Management Journal, vol. 30, no. 4, 1987, p. 699-720.
- GRIFFIN, R.W. «Effects of Work Redesign on Employee Perceptions, Attitudes, and Behaviors: A Long-term Investigation» in Academy of Management Journal, vol. 34, no. 2, 1991, p. 425-435.
- HACKMAN, J.R.; OLDHAM, G.R. Work Redesign, Addison-Wesley, 1980, 317 p.
- HACKMAN, J.R.; OLDHAM, G.R. «Motivation Through the Design of Work: Test of a Theory» in *Organizational Behavior and Human Performance*, vol. 16, 1976, p. 250-279.
- HACKMAN, J.R. AND LAWLER, E.E. III «Employee reactions to job characteristics» in *Journal of Applied Psychology Monograph*, Vol. 55, n° 3, june 1971, p. 259-286.
- HALL, D.T «Project Work as a Antidote to Career Plateauing in the Declining Engineering organization», *Human Ressource Management*, Fall 1985, vol.24, no.3, p. 271-292.
- HALL, D.T. and Associates *Career Development in Organizations*, San Francisco: Jossey-Bass, 1986.
- HALL, D.T.; SCHNEIDER, B. «Correlates of Organizational Identification as a Function of Career Pattern and Organizational Type» in *Administrative Quartely*, vol. 17, 1972, p. 340-350.

- HALL, D.T. RABINOWITZ, S. «Maintening Employee Involvement in a Plateaued Career», in *Career Growth and Human Resource Strategies*, M. London and E. Mine (eds), QUORUM Books 1988, p.67-80.
- HARRIS, M. «Role conflict and role ambiguity as substance versus artifact: A confirmatory factor analysis of House, Schuler and Levanoniis (1983) scales». *Journal of Applied Psychology*, 1991, 76, p. 122-126.
- HOUSE, R.J.; SCHULER, R.S.; LEVANONI, E. «Role Conflict and Ambiguity Scales: Reality or Artifacts?» in *Journal of Applied Psychology*, vol. 68, no. 2, 1983, p. 334-337.
- ILGEN, D.R. and HOLLENBECK, J.R. «The Structure of Work: Job Design and Roles» in Dunette, M. and Hough, L. (eds.), *Handbook of Industrial* and Organizational Psychology, (2nd ed.), Consulting Psychologists Press, 1992.
- JACKSON, S.E.; SCHULER, R.A. «A Meta-Analysis and Conceptual Critique of Research on Role Ambiguity and Role Conflict in Work Settings» in *Journal of Organizational Behavior and Human Decision Processes*, vol. 36, 1985, p. 16-85.
- JAMES, L.R.; BRETT, J.M. «Mediators, Moderators, and Tests of a Theory» in *Journal of Applied Psychology*, vol. 69. 1984, p. 307-321.
- KATZ, R. «The Influence of Longevity on Employee Reactions to Task Characteristics» in *Human Relations*, vol. 31, 1978a, p. 703-725.
- KATZ, R. «Job longetivity as a situational factor in job satisfaction». *Administrative Science Quarterly*, vol. 23, June 1978b, p. 204-223.
- LAWLER, E.; MOHRMAN, S.; LEDFORD, G. «Employee Involvement and Total Quality Management: Practices and Results in Fortune 1000 companies». San Francisco, Jossey-Bass, 1992.
- LEIBOWITZ; KAYE; FARREN «Career Gridlock» in *Training and Development Journal*, avril 1990, p. 86-90.
- LOHER, B.T.; NOE, R.A.; MOELLER, N.L.; FITZGERALD, M.P. «A Meta-Analysis of the Relation of Job Characteristics to Job Satisfaction» in *Journal of Applied Psychology*, vol. 70, no. 2, 1985, p. 280-289.
- LORENCE, J.; MORTIMER, L.T. «Job Involvement Through the Life Course: A Panel Study of Three Age Groups» in *American Sociological Review*, vol. 50, 1985, p. 618-638.

- LYSONSKI, S. «Boundary Theory Investigation of the Product Manager's Role» in *Journal of Marketing*, vol. 49, no. 1, 1985, p. 26-40.
- MACY, B.A.; PETERSON, M.F.; NORTON, L.W. «A Test of Participation Theory in a Work Re-design Field Setting: Degree of Participation and Comparison Site Contrasts» in *Human Relations*, vol. 42, no. 12, 1989, p. 1095-1165.
- MILLER, K.I.; MONGE, P.R. «Participation, Satisfaction, and Productivity: A Meta-Analytic Review» in Academy of Management Journal, vol. 28, no. 4, 1988, p. 727-753.
- MILLIMAN, J. «Consequences and Moderators of Career Plateauing: An Empirical Investigation. Paper Presented at the National Meeting of the Academy of Management. Las Vegas, August 1992.
- NEAR, J. «Reactions to the Career Plateau» in *Business Horizons*, July-August, 1984, p. 75-79.
- NEAR, J. «A Discriminant Analysis of Plateaued versus Non Plateaued Managers» in *Journal of Vocational Behavior*, vol. 26, 1985, p. 177-188.
- NETEMEYER, R.; JOHNSTON, M.; BURTON, S. «Analysis of Role Conflict and Role Ambiguity in a Structural Equations Framework» in *Journal of Applied Psychology*, vol. 75, 1990, p. 148-157.
- NICHOLSON, N.; WEST, M.A. *Managerial Job Change: Men and Women in Transition*, Cambridge University Press, Cambridge, 1988.
- NICHOLSON, N. «Purgatory or Place of Safety? The Managerial Plateau and Organizational Age Grading». *Human Relations*, vol. 46, no. 12, 1993, p. 1369-1389.
- ORPEN, C. «The Career Patterns and Work Attitudes of Plateaued and Nonplateaued Managers», *International Journal of Manpower*, vol. 4, 1983, p. 32-37.
- ORPEN, C. «The Relationship Between Perceived Task Attributes and Job Satisfaction and Performance among Plateaued and Non Plateaued Managers» in *Human System Management*, vol. 6, no. 1, 1986, p. 15-20.
- ORSTEIN, S. and ISABELLA, L.A. «Making Sense of Careers: A Review 1989-1992», *Journal of Management*, vol. 19, n° 2, 1993, p. 243-267.
- PLIMPTON, B.M. «Senior Careerists: Strategies for Using Their Skills» in *Public Administration Review*, Sept/Oct., 1984, p. 448-452.

- QUINN, R.; SHEPARD, L.D. The 1972-1973 Quality of Employment Survey: Source Book Descriptive Statistics with Comparison Data from the 1969-1970 Survey of Working Conditions, Ann Arbor: University of Michigan, Institute of Social Research, 1974.
- RABINOWITZ, S.; HALL, D.T. «Changing Correlates of Job Involvement in Three Career Stages» in *Journal of Vocational Behavior*, vol. 18, 1981, p. 138-144.
- RHODES, S. «Age-related Differences in Work Attitudes and Behavior: A Review and Conceptual Analysis» in *Psychological Bulletin*, vol. 93, 1983, p. 328-367.
- RIZZO, J.R.; HOUSE, R.J.; LIRTZMAN, S.I. «Role Conflict and Ambiguity in Complex Organizations» in *Administrative Science Quartely*, vol. 15, no. 2, 1970, p. 150-163.
- ROSEN, B.; JERDEE, T.H. «Managing Older Workers' Career» in *Research in Personnel and Human Resources Management*, vol. 6, 1988, p. 37-74.
- ROSEN, B.; JERDEE, T.H. «Middle and Late Career Problems: Causes, Consequences, and Research Needs», *Human Resource Planning*, vol.13, no. 1, 1990, p.59-70.
- ROUSSEAU, D.M. «Characteristics of Department, Positions and Individuals: Contexts for Attitudes and Behavior», *Administrative Science Quaterly*, vol. 23, dec. 1978, p.521-540.
- SCHWEIGER, D.M.; LEANA, C.R. «Participation in Decision Making» in E. Locke (dir.), Generalizing from Laboratory to Field Settings: Findings from Research in Industrial/Organizational Psychology, Organizational Behavior and Human Resources Management, Lexington, 1986, p. 147-166.
- SLOCUM, J.W.; CRON, W.L.; Hanson, R.: Rawlings, S. «Business Strategy and the Management of Plateaued Employees» Academy of Management Journal, vol. 28, 1985, p. 133-154.
- SLOCUM, J.W.; CRON, W.L.; YOWS, L.C. «Whose Career is Likely to Plateau?» in *Business Horizons*, 1987, p. 31-38.
- SPECTOR, P.E.; JEX, S.M. «Relations of Job Characteristics From Multiple Data Sources With Employee Affect, Absence, Turnover Intentions, and Health» in *Journal of Applied Psychology*, vol. 76, no. 1, 1991, p. 46-53.

- SPECTOR, P.E.; DWYER, D.J.; JEX, S.M. «Relation of Job Stressers to Affective, Health, and Performance Outcomes: A Comparison of Multiple Data Sources» in *Journal of Applied Psychology*, vol. 73, 1988, p. 11-19.
- STONE, E.F. «Job Scope-job Satisfaction and Job Scope-job Performance Relationships» in Locke E.A. (dir.), *Generalizing from Laboratory to Field Settings*, Lexington Books, 1986, p. 189-206.
- STONER, J.A.; FERENCE, T.P.; WARREN, E.K. Managerial Career Plateaus, Pub. Center for Research in Career Development, Columbia University, New-York, 1980, 162 p.
- STOUT, S.K.; SLOCUM, J.W.; CRON, W.L. «Dynamics of the Career Plateauing Process», *Journal of Vocational Behavior*, 1988, 32, p. 74-91.
- TREMBLAY, M.; ROGER, A.; TOULOUSE, J.-M. «Career Plateau and Work Attitudes: An Empirical Study of Managers». *Human Relations*, 1995, vol. 48, no.3, p.221-237.
- TREMBLAY, M; ROGER, A. «Individual, Familial, and Organizational Determinants of Career Plateau», *Group & Organization Management*, 1993, vol.18. no.4, p.411-435..
- VAN MAANEN, J. «People Processing: Strategies of Organizational Socialization» in Organizational Dynamics, vol. 7, 1978, p. 18-36.
- VEIGA, J.F. «Plateaued versus Non-Plateaued Managers Career Patterns, Attitudes and Path Potential» in *Academy of Management Journal*, 1981, vol. 24, no. 3, p. 566-578.
- WARR, P.B.; ROUTLEDGE, T. «An Opinion Scale for Study of Managers' Job Satisfaction» in Occupational Psychology, 1969, vol. 43, p. 95-109.
- WOLF, J.F. «Career Plateauing in the Public Service: Baby Boum and Employment Burst» in *Public Administration Review*, March/April 1983, p. 160-166.
- WRIGHT, P.L. «Teller Job Satisfaction and Organization Commitment as They Relate to Career Orientations». *Human Relations*, vol. 43, no. 4, 1990, p. 369-381.

Liste des publications au CIRANO *

Cahiers CIRANO / CIRANO Papers (ISSN 1198-8169)

- 96c-1 Peut-on créer des emplois en réglementant le temps de travail ? / Robert Lacroix
- 95c-2 Anomalies de marché et sélection des titres au Canada / Richard Guay, Jean-François L'Her et Jean-Marc Suret
- 95c-1 La réglementation incitative / Marcel Boyer
- 94c-3 L'importance relative des gouvernements : causes, conséquences et organisations alternative / Claude Montmarquette
- 94c-2 Commercial Bankruptcy and Financial Reorganization in Canada / Jocelyn Martel
- 94c-1 Faire ou faire faire : La perspective de l'économie des organisations / Michel Patry

Série Scientifique / Scientific Series (ISSN 1198-8177)

- 98s-27 The Moderating Effect of Job Characteristics on Managers' Reactions to Career Plateau / Michel Tremblay et Alain Roger
- 98s-26 Une étude internationale sur la contingence de l'efficacité perçue des politiques de rémunération / Michel Tremblay, Bruno Sire et Denis Chênevert
- 98s-25 Resources Dynamics and Endogenous Property Rights Regimes / Ngo Van Long et Huilan Tian
- 98s-24 Plafonnement objectif et subjectif de carrière, satisfaction et stress au travail / Alain Roger et Michel Tremblay
- 98s-23 The Role of Organizational Justice in Pay and Employee Benefit Satisfaction, and Its Effects on Work Attitudes / Michel Tremblay, Bruno Sire et David Balkin
- 98s-22 What Data Should Be Used to Price Options? / Mikhail Chernov et Eric Ghysels
- 98s-21 Using a Financial Training Criterion Rather than a Prediction Criterion / Yoshua Bengio
- 98s-20 Inférence fondée sur les statistiques des rendements à long terme / Cosme Vodounou
- 98s-19 Structural Change Tests for Simulated Method of Moments / Eric Ghysels et Alain Guay
- 98s-18 Managing the Risk of IT Outsourcing / Benoit A. Aubert, Sylvie Dussault, Michel Patry et Suzanne Rivard
- 98s-17 Learning Conditions in the Context of R&D and Development Projects: Empirical Evidence from a Research Centre / Mario Bourgault et Hélène Sicotte
- 98s-16 Assessing the Risk of IT Outsourcing / Benoit A. Aubert, Michel Patry et Suzanne Rivard
- 98s-15 Determinants of Desired Career Paths among Canadian Engineers / Michel Tremblay, Thierry Wils et Caroline Proulx
- 98s-14 Why Is the Bid Price Greater than the Ask? Price Discovery during the Nasdaq Pre-Opening / Charles Cao, Eric Ghysels et Frank Hatheway
- 98s-13 "Informal Thinkering": How Is It Important? / Pierre J. Tremblay
- 98s-12 Organize to Generate Innovation: Tools to Measure Technical Change, Productivity and Change-Generating Efforts / Pierre J. Tremblay

^{*} Vous pouvez consulter la liste complète des publications du CIRANO et les publications elles-mêmes sur notre site World Wide Web à l'adresse suivante : http://www.cirano.umontreal.ca/publication/page1.html