

# Projectification: Midler's Footprint in the Project Management Field

Monique Aubry – UQUAM

Sylvain Lenfle – Université de Cergy-Pontoise & CRG – Ecole Polytechnique

Published in 2012 in the *International Journal of Managing Projects in Business* 5(4): pp. 680-694

## Abstract

**Purpose** –The purpose of this paper is to revisit Christophe Midler's contribution through *L'auto qui n'existait pas* (The car that did not exist), first published in 1993: The Renault Case. It summarizes and examines the main themes of the book based on current knowledge and ends with suggestions for future research opportunities.

**Design/methodology/approach** – The paper is grounded in an in-depth analysis of Midler's book and a one-hour interview with him.

**Findings** – Midler argues that projectification is not a temporary managerial fashion; quite the contrary. At Renault, he witnessed a profound industrial transformation founded on collective learning. Central to this transformation was the establishment of project management as an engine of renewal within the permanent organisation.

**Practical implications** – Revisiting Midler's work on projectification generates new insights into understanding the current situation confronting organisations in every industries as they evolve in their approach to creativity and innovation.

**Originality/value** –Two original facets of Midler's seminal work still influence the field of project management. First, he provided a global understanding of the creative organisation. He described, analysed and explained how an organisation reinvents itself not only in terms of project management, but more globally, from a permanent organisation perspective. Recent research developments focus on project-oriented organisations, program and portfolio management, organisational project management, and others. Midler's work should be more widely known and referenced for its capacity to conceptualise what simultaneously happens in multiple, concurrent, organisational terms as a project is carried out (e.g., financial, commercial, technological and career development). Second, Midler conducted a study from within an organisation for four years. In this respect, he could be seen as a precursor of recent project management research practices.

**Keywords** – projectification, project function, convergence, practice turn, knowledge management

**Paper type** Conceptual paper

## Introduction

Project management classics provide a solid foundation for current trends and inspiration for reinventing the future. The seminal work by Christophe Midler on *projectification* fits within this category (Midler, 1993, 1995). This paper proposes an exploration of the book *L'auto qui n'existait pas* (The car that did not exist) (Midler, 1993, 2004). It focuses on some of the book's major concepts, which remain almost a well-kept secret within the international project management research community, primarily because it was published in French and never translated into English. Although a condensed version was published two years later (Midler, 1995), it did not cover all of the insights presented in the book. Midler's work had a significant influence on the French-speaking and, more broadly, the European community (specifically regarding innovation). Nearly 20 years after its publication, his work is still pertinent, and Midler's classic contribution deserves wider recognition.

The term "classic" in this context has two meanings: first as a work (and its author) of enduring excellence and an authoritative source and secondly, as a typical or perfect example (Merriam-Webster, 2007). In this paper, Midler will be studied at from these two perspectives. Midler is an authoritative source in the sense that his seminal work influenced modern project management, but also holds the potential for future inspiration and is therefore a good starting point for future research.

As the title of the book suggests, its subject concerns the development of a car. At the beginning of the book, the car did not exist apart from a few relics of previously unsuccessful attempts. Slowly, step by step, the reader watches the Twingo car take shape. The book tells the story of its creation from the standpoint of a researcher directly involved in the project team, observing the overall organisation from multiple perspectives.

However, *L'auto qui n'existait pas* also addresses the critical competitive challenges facing all organisations in the Western economy at that time (Hayes *et al.*, 1988, Womack *et al.*, 1990). The period in question coincided with the arrival of weighty new players on the global economic stage, such as Japan. Production moved from mass-marketing to more flexible, customer-oriented products. Competitive games changed dramatically, with an emphasis on fast delivery, high standards of quality and reasonable prices. Commercial strategies moved away from the "one size fits all" mentality to target niche positions instead. Innovation came into play a central role in these changes at the global economic level. This shift to innovation-based competition placed a great deal of emphasis on design performance and, therefore, on project management. Organizations confronted an unprecedented need to deliver a growing number of projects quickly. The automotive industry provides an excellent example to learn from, and that can be generalised to other industrial sectors.

Projectification is more than a formalisation of project management. It refers to a major organisational transformation that organisations still struggle with at the project and organisational levels. The body of knowledge on project management is now extensively documented through formalised associations (e.g., Office of Government Commerce,

2005; Project Management Institute, 2008), with increasing dissemination among organisations in many countries and industries (Bredillet et al., 2010). But at the same time, several questions persist concerning the critical role that projects play in enabling business strategy (Artto et al., 2008; Morris and Geraldi, 2011), project structuring (Hobday, 2000), project teams as innovative, dynamic and pluralist entities facing uncertainty (Aubry et al., 2011; Hällgren and Wilson, 2011), and the project management profession (Huemann, 2010).

While Midler may not have answered all of these questions in *L'auto qui n'existait*, his account is highly inspirational and contains relevant insights that could enrich current debates within the project management research community.

### **Midler: from robotic automation to projectification**

Christophe Midler's initial interest in research centred on industrial production, particularly on new forms of organization involving robotic automation. His first partnership with Renault in the early eighties related to precisely this field. At the time, Renault was well known as a French car maker, and, more particularly for the small car R-5, the most popular compact car in Europe (Midler, 1988, 1989, 1991).

Very early in his research career, Midler worked in two fields: technical innovation with robotic automation, and social innovation with the organisation of work in semi-autonomous teams on automotive assembly lines. His approach to research was typical of his formal training in engineering.

Considering the research focus in *L'auto qui n'existait pas*, something about Midler's research interests clearly changed. How did he make the transition from production to project? His doctoral thesis (Midler, 1980) provided the impetus. Indeed, Midler observed that workshop performance measurement took account of and measured *pure* productivity alone. Quality, absenteeism, etc. were never considered. Moreover, discussions of the organisation of work within semi-autonomous teams were viewed as a social occurrence, not as *real* work. Midler showed in his thesis that, not only should *unknown factors* be considered as part of *real* work, but that new, more flexible forms of organisations were more effective in coping with the *vagaries* of a project. Overall, these new forms of organisation were producing better engineering, but also scored higher marks for quality and absenteeism rates. Moreover, his research on plant productivity led him to realize that many problems derived from product design and processes, not from manufacturing *per se*. This was the starting point for his work on project management.

Midler's research was the outcome of two key factors: opportunity and the profound curiosity of a researcher. Opportunity came his way with a project manager's telephone call in 1989 and Midler's decision to accept an offer to participate freely in the project team. He was given full access to all information and was able to attend all committee meetings except executive board meetings.

Embarking on this research project led to one of the richest case studies on the project management process ever, while transforming an entire organisation. Throughout the

research project, the end results remained unknown. The project management confronted the same uncertainty as the product itself. To draw a parallel with the book's title, it would be no mistake to say "the research project that did not exist."

The research project lasted four years, from 1989 to 1993. The Twingo car made its debut in October 1992 at the "Mondial de l'Automobile" in Paris, a major European car show, and was put on the market in April 1993. The book *L'auto qui n'existait pas* was first published at the same time, and benefited greatly from the car's tremendous commercial success (some people called it *Twingomania*), with its exceptionally long run of almost 14 years (twice that of a "standard" model).

**Figure 1: the Twingo**



### **The research and the book**

It is impossible to fully do justice to this book here. This paper summarizes key points, but omits items that could possibly be of great importance in certain contexts.

The book is divided into three parts. The first part tells the story of the project; in other words, it describes the case study. It positions the project as it takes place, from multiple and concurrent perspectives: project profitability, market positioning, commercial considerations, engineering, quality and team dynamics. The case study is presented according to a timeline and follows the project life cycle: difficult project start-up, project identity, stabilisation, execution and commercial delivery. Throughout these phases, the book discusses the diverse viewpoints and strong debates that surrounded the four-year project. Another important discussion centres on social aspects of the organization's internal existence, as well as external factors, such as working conditions in France at the time.

The second part looks at the theories arising from the case study. It focuses on the project as an actor and its influential role. Inspired by Schumpeter's definition of innovation, Midler highlights the *combination* of multiple creative sources of input as

key element for creativity and innovation. Innovation is seen not only (and not predominantly) as a technical object, but also the result of combinations. Some sources of innovation are internal to the team. These emerge as contributions from various experts (e.g., marketing, design, engineering and production). Each team member contributes a particular expertise, values and preferences. External sources of diversity can also be traced back to suppliers and customers. However, all of these sources do not necessarily converge in the same direction, quite the contrary. A project like this one shows how debate and compromise ultimately rallied engineers, product managers and executive board members in the same direction. Once the project was over, it seemed almost a miracle that this new car had emerged from such a multitude of partial and varied contributions. Negotiation, influence and debate are all inherent and essential parts of the project. Midler used the phrase “art of influence” to characterize the project manager’s mission.

Midler came to focus on the concept of concurrent engineering, which would become central to his theories. Concurrent engineering refers to the need to overlap the stages of a project in order to constantly encourage an exploration of new combinations, and to discuss and recombine them in the search for an optimal solution. Following this approach, communication becomes crucially important and is managed in a complex environment. Lines of communication cross the usual boundaries between the set functions of a project team and the product function. Communication also involves the production team throughout the project’s life cycle from its very first stages. Midler therefore demonstrates that concurrent engineering demands a complete redefinition of the design process: a strong project manager coordinates a project team, and the different participants contribute the project’s lifecycle (e.g., plants are involved very early in the process to anticipate production problems).

Today, even more than in 1993, the capacity of a firm to deliver new products at a fast pace drives international competition. Midler, following Womack, Jones and Roos (1990) and Clark & Fujimoto (1991), situated the change in completion rules in the eighties with Japan’s new-found clout in the car industry. The speed at which Japanese car makers were producing new models drove other manufacturers to speed up the pace of their own innovation. Project management therefore became a means of delivering new products faster, relying in particular on the concurrent engineering approach. In this respect, the convergence of multiple contributors toward a common decision becomes significant when considered on a timeline. Opportunities for new combinations dwindle as time goes by and as more and more information on the project becomes available. If a problem is detected later in the process, the cost of making changes will be high. In the early stages of the project, the ideal approach is to leave decisions to a later stage in the process to allow room for change as new information becomes available. But, as the project advances, decisions must be made quickly. New information has limited impact on the cost of changes.

The third part addressed new perspectives and difficulties associated with the integrated conception phase of an innovation. The major message from Midler in this book is that creativity is essentially a collective competency. But accomplishing this feat

is not self-evident. As Midler said, the organisational change in project logic at Renault resulted from a revolution in managerial logic. All changes gravitated toward concurrent engineering and the new specific challenges it entailed.

First challenge we would mention is the organisation of professions (or functions) where several factors have to be taken into account, such as the division of work and dedication to projects, performance evaluation within the functions, etc. The concurrent engineering approach also changes individual competencies and autonomy. Participating in a project team requires participating in debates, reaching compromises and making decisions. The major difficulties concern the absence or silence of internal professions or, ideological conflicts, in other words, the difficulty in reaching a mutual understanding and a common decision.

Second challenge is the adoption of a co-construction approach to procurement solutions. On the one hand, this involves a transformation in the relationship with suppliers from subcontracting to co-contracting. Subcontractors should become part of the project team from the very start and continuously contribute to the project. Under this approach, suppliers could be considered as partners and members of the project's stakeholder network. On the other hand, this transformation created a revolution in the internal purchasing function, which had to redefine its role with regard to projects.

Adopting concurrent engineering principles for projects leads to profound transformations in the organisation. The word *revolution* aptly suits this breakthrough organisational transformation at Renault. Midler identified four major phases in the history of project management at Renault. He pointed out the learning mechanisms involved from one phase to the next so that lessons learned at one stage could be integrated into the next for optimal results.

Concluding this part, Midler challenges two major elements that limit our understanding of organisational change: the fashion effect and the resistance to change paradigm. First, Midler identified the illusions inherent in "prêt à gérer" (ready to manage, referring to the expression "prêt-à-porter", ready to wear). Context specificity is key to the projectification of any firm. Even if a satisfactory organisational solution were possible (which is not the case), it cannot be implemented as is with the expectation of short-term outcomes. This is a breakthrough organisational transformation that should be understood, experimented with and modelled for a unique context. Each step should be considered a learning mechanism helpful in designing the next goal to reach.

Secondly, instead of resistance to change, which by definition suggests a lack of competency on the part of the worker, Midler turned his attention to the collective organisational learning concept. He suggested conditions for success on the road to more creative organisations: the active role of corporate executives, experimentation as a basic element of collective learning, and capitalization on local knowledge.

In the book's conclusion, Midler (1993) returns to the very first objective of this research: "A transformation corresponding to a new mode of rationalization of the company, directed to a purpose of increase of the performances of collective creation"

(p. 195). This quest for greater creativity, as observed at Renault, could be generalized to all other industries. Traditional approaches are not helpful in the current economic situation. Midler calls for a renewal of the development process, recognizing the diversity of situations facing creative organizations, the need for a contingency plan to adapt to these specific situations at multiple levels, and, lastly, their particular dynamics. At the end of the book, the car was there, and the research outcomes were there as well. This research provided an in-depth understanding of projectification of a firm and exemplified the close relationship between practitioners and researchers.

Sets in the nineties, the same story could have happened in today's reality. Although some of the concepts seem firmly integrated into today's industries (e.g., concurrent engineering), many of Midler's theorization components remain highly relevant to organizations dealing with projects. In the following sections, we focus on six themes from *L'auto qui n'existait pas* that, in our opinion, could serve as inspiration to organizations facing today's challenges.

### **Midler and current organisational challenges**

#### An early project-as-practice precursor: the strength of longitudinal field research

Midler's four-year research journey at Renault was grounded in an opportunity: a phone call from the project manager to monitor a new car project and act as "an informed observer, a scrupulous commentator" (Midler, 1993, p. IX). In doing so, Midler gained ready access to participate in any meeting or event with the exception of the biannual meeting when top executives received a report on project status. Indeed, the data came from three sources: 1) direct participation in the project team from 1989 to 1994; 2) documentary analysis, including some pre-project documents; and 3) interviews with the executives conducted during the first half of 1992. These sources provide an invaluable empirical material that illustrates the strength of longitudinal field-research (Berry, 1995; Adler & al., 2004)

Until the nineties, research in the project management field mainly focused on optimization and the search for project success factors (Söderlund, 2010). Overall, the epistemological approach was heavily based on a positivist paradigm that remained dominant until the turn of the millennium (Maylor, 2006). Midler, when he first worked in an industrial plant in the early eighties, realised the void between what he directly observed and the existing theories and bodies of knowledge in project management. He seized the opportunity offered at Renault to shed light on what really was happening and on what, until then, had remained hidden aspects of industrial project management.

Midler changed the global approach to research with his organisational insider position and direct observation of events. In this respect, he can be considered a precursor in the field of project management by adopting a "project management as practice" approach (Blomquist et al., 2010), despite his absence from recent debate on this theme. The social science focus of current practice emphasizes 1) micro-level activities; 2) their links

with the social world, being enabled or constrained by the prevailing practices in the organisation; and 3) their links with the structure and agency (Golsorkhi *et al.*, 2010). These three elements are evident in Midler's work. First, day-to-day project activities were observed, documented and interpreted in order to make sense of and gain a global understanding. Activities at all hierarchical levels of the project (with the exception of the executive board) and relevant events in all of the functional units were included, providing a wide range of input for challenging the perceptions of other informants. Secondly, events and activities all occurred in a social context described in detail, placed in its historical perspective and given strong consideration in the analysis. The financial objective in terms of return on investment probably constitutes the major constraint at the project conception stage. This constraint concerns competition. To meet financial objectives, every field of expertise was necessary, whether commercial or technical, internal or external to the organisation. Thirdly, this was possible because of communication principles that facilitate the flow of information within the project, between the project and the functions, and between different functions.

Not surprisingly, Midler very naturally concurred with the Scandinavian school of thought that seems a project as a temporary organisation in the beginning, (Lundin and Söderholm, 1995) and project management as a practice approach (Blomquist *et al.*, 2010). He published in *Scandinavian Journal of Management* (Midler, 1995), and, jointly with Rolf Lundin, created *International Research on Organizing by Projects* (IRNOP) in 1994.

The Renault site where this research took place had an influence on the results. The company's open-minded approach to research is a tradition evident in its long-term partnerships with researchers.

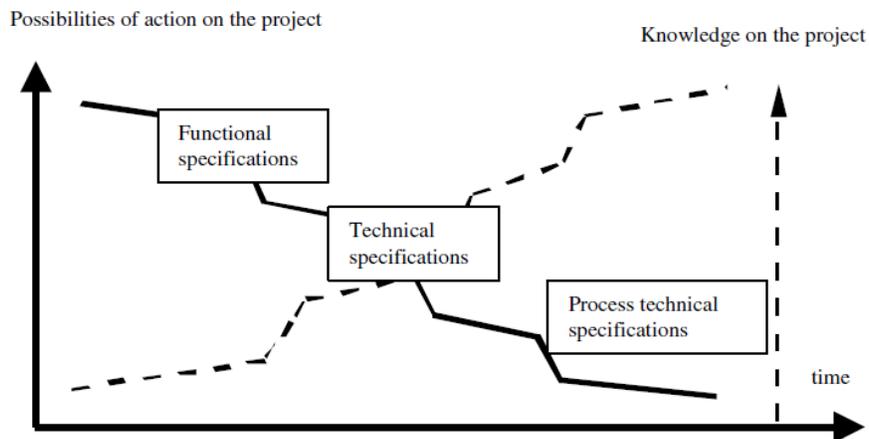
This emphasis on longitudinal, field-based research unquestionably illustrates one specific aspect of Midler's approach to research (and more generally the approach of the Management Research Centre of the École Polytechnique; see Berry, 1995). It gave him access to real-time data and provided him with the opportunity to directly monitor the ongoing project process, thereby avoiding the risks of post-project rationalization. In this respect, Midler's research complements other important work on the auto industry, in particular Clark & Fujimoto, 1991. It provides readers with an exhaustive case study of the project and the transformation of its parent company, whereas Clark & Fujimoto focus on international project performance comparisons. Indeed, whereas Clark & Fujimoto explain the relative performance of projects in different companies, Midler's work provides a comprehensive description of the project's unfolding and its micro-level impact on the firm's organization. In this respect, he demonstrates 1) the hands-on (heavyweight) aspects of project management and 2) the role of project as "engine of renewal" (Bowen & al., 1994).

#### Decision making when faced with uncertainty

One of the most influential contributions by Midler is undoubtedly his formalisation of the relationship between the degree of manoeuvrability within a project on the one hand, and the level of knowledge gained over time on the other. The relationship between project knowledge acquisition, uncertainty and the cost of change has been acknowledged for quite a long time. But Midler took it a step further by showing the temporal progression of the project while the organisation moves closer to irreversible decision making, as information flows in and as the project gradually develops. “Project management has to control these coupled processes from the upstream initiation phase, where virtually anything is possible but where nothing is actually known for sure, to the downstream phase when everything is known but virtually no free choices remain” (Midler, 1995, p. 369).

Project convergence is the heart of this analysis. Midler suggested two sequential phases, from slow convergence in the early phase subject to a high level of uncertainty, and rapid convergence in the control phase where the project is “locked” and prompt decision-making is essential.

**Figure 2: Project convergence (from Midler, 1993)**



Projectification: The organizational impact of project management

*Management revolution* is the term that Midler suggested to describe the transformation at Renault from individual functional or departmental logic to collective project management logic. This occurred in four phases over a period of over 30 years (1960s–1993):

1. Functional organisation and informal project coordination in the 1960s (or Project *Bricolage*)
2. Centralised project coordination from 1970 to 1988
3. Empowerment and autonomy of the project management structure in 1989
4. Transforming the permanent processes of the firm from 1989 and on.

The first three phases can be described using the structural models suggested by Hayes, Wheelwright and Clark (1988), where project structure moves first from within a functional unit to a project coordinator, and then to strong project direction. Midler emphasized in the Renault case study that projectification is not only a structural problem, but a major and profound transformation. This appears more clearly in the fourth phase, where the whole organisation, traditionally seen as very stable and permanent, has now shifted in order to make projects and functions complement one another. This is an original contribution from Midler to the understanding of organisational evolution.

This idea of major organisational changes (e.g., revolution) has been more recently referred to in the rethinking project management movement (Maylor *et al.*, 2006). As anticipated by Midler, project management has evolved from technical matters, tools and methods for individual projects toward more strategic aspects of the organisation (Morris and Jamieson, 2004). Project-based or project-oriented organisations, program and portfolio management, and organisational project management are fields of intense research.

### Diversity and debates

Midler emphasised the role of collaboration among multiple project contributors. He observed that diversity in the project team stimulated the creativity needed to invent new components, or, more likely, to search for solutions to solve a problem or a challenge. A very organic approach was taken over the course of the project by bringing in new team members when new competencies were required. Midler pointed out two major issues:

1. *The project approach adopted in the very first stage of the project.* Midler observed that projects take shape in the very first phase. The project emerges (Williams, 2005). A diversity of expertise brought to bear in the early stages of a project contributes to overcoming major technological and financial challenges; otherwise the project would stop. For example, contractors actively participated in the innovative effort to find new ways of doing things and to meet financial constraints. It took almost two years before obtaining final authorisation for production: about mid-way through the entire project.

Midler is very critical of the current standards in project management, where the reality of a project is considered only in the execution phase (Project Management Institute, 2008). Excluding the design phase purportedly ignores a phase when the most important product and process decisions are made.

In the field of innovation, integrated design is now a specific function within the organisation, at the interface of pure R&D and project execution (Le Masson *et al.*, 2006).

2. *Debate as a learning mechanism.* Saying that a project should encourage diversity is one thing; creating such diversity at work is something else. The former is widely acknowledged, a building block of the multi-disciplinary team

(Kerzner, 2006; Project Management Institute, 2008) and the basis for the matrix structure of project-oriented organisations (Hobday, 2000; Larson, 2004). The latter, however, is associated with tension and conflict management, which are often considered undesirable. For Midler, debates between a diversity of broad points of view are an essential ingredient for creativity and innovation. Indeed, divergent opinions are welcome. Arguments must occur so that the entire team understands and decision can be made to accommodate a wide range of possibilities. This creates opportunity for learning about the problem at hand and to obtain information before a decision is made.

In the spirit of Midler, this is done through a *project set (plateau)* where project participants are present in the same physical location. The project set is a place in which the project team can create its own identity.

What Midler suggested regarding diversity may be reflected in the recent collaborative approach in stakeholder theory, moving away from the very instrumental stakeholder management traditionally found in the project management literature.

One could say that the art of debating is a French philosophical trait. However, the current trend in management is to show openness toward pluralism and diversity (e.g., Chen and Miller, 2010). Midler was a visionary and an instigator of this approach in the innovation management field.

### Learning in a projectified organisation

For Midler, creative organisations build on collective learning. This phenomenon is a major challenge for projectified organisations. Indeed, knowledge creation happens intensively as projects unfold. Traditionally, part of a functional unit's mission was to act as the memory and depository of overall knowledge for its specific function. In projectified organisations, functions face fairly dispersed project knowledge. The initial challenge was how to reintegrate project knowledge back into functions. More importantly, knowledge developed through projects breaks with the traditional visionary role of developing new knowledge for projects to be carried out in 10 or 15 years; herein lies the second challenge.

Midler's approach also was disseminated through networking, or more precisely, through what are today called "communities of practice." Communities of practice are "groups of people informally bound together by shared expertise and passion for a joined enterprise" (Wenger and Snyder, 2000, p. 139). Since the publication in the *Harvard Business Review* on the subject (Wenger and Snyder, 2000), communities of practice exist in a variety of contexts, within and across organisations (e.g., pmi.org). The initial idea by Lave and Wenger (1991) was far from the managerial tool implemented in organisations today (Duguid, 2008). Midler addressed the challenge of knowledge in transforming an organisation such as Renault into a creative and

innovative company based on a very close interpretation of Lave and Wenger's (1991) early definition of the concept.

At Renault, there was a belief that "project management is not a package that can be bought from the shelf" (Midler, 1993, p. 114). On the contrary: "knowledge must be collective so a common and coherent project culture can emerge" (Midler, 1993, p.114). Abundant project management training programs existed at that time, but they focused on planning tools and techniques for individuals. While necessary, such tools are not enough to generate collective creation and knowledge sharing. From this point of view, Renault tested new approaches to knowledge management.

Internally, there were two complementary approaches to collective creation and knowledge sharing. First of all, experts were assigned to projects temporarily, for the duration of a project. They would then return to their functional unit. This creates a double loop in the knowledge movement: from the project to the unit, and, conversely, from the unit to the experts. Overall, knowledge circulates within the organisation. Second, clubs were formed (communities of practice in today's vocabulary), bringing together informal groups people involved in different projects and from different levels, units, and fields of expertise, to explore problems, share effective solutions, and formalize shared know-how groups.

Based upon these mechanisms, learning can be collective.

#### Midler's school and the Club de Montréal

The book surely plays a role in Midler's influence within the French-speaking and European project management community. But his other channels of communication also deserve mention. Indeed, Midler's work has had a major impact in research on project management, most notably in France (strangely *L'auto qui n'existait pas* is translated into Spanish, Portuguese and Polish... but not into English). Although we have deliberately emphasized Midler's research work, he is also an active professor. To date, he has directed 17 doctoral students, 11 of whom have a professorship at universities, and, in turn, who continue to work in connection with Midler's work. This led him to explore new themes connected to this first study, in particular:

1. To deepen an understanding of the automotive industry's evolution. Here, we can cite Garel's research (Garel & Midler, 2001) on co-development and the functioning of the project platform (1994); Kessler (1998) and Fourcade (2004), on the evolution of automotive supplier's strategy; and Neffa, on globalization through projects (Midler & al., 2002);
2. To study the spread of project management and its consequences in other sectors, such as the chemical industry (Charue, 1997; Gastaldi & Midler, 2005), construction (Ben Mahmoud-Jouini, 1998) and steel industry (Lenfle, 2001).
3. To analyse, beyond project development, innovative processes in different settings, including, as always, the automotive industry (Lenfle and Midler, 2009);

Maniak and Midler, 2008). This shift from project to innovation management led Midler to create the Innovation Management Chair at the École Polytechnique in 2005 and the associated teaching program (Master's degree in Project, Innovation and Design), which allows him to explore innovation management in a variety of contexts (Midler & al, 2012) Thus, Midler is now involved in numerous studies on innovation in the automotive industry, most notably:

- a. an international research comparison on advanced engineering and innovative practices (Beaume *et al.*, 2009, Midler & al. forthcoming 2012)
- b. the analysis on the development of electric vehicle (Beaume and Midler, 2010;).
- c. an in-depth, Twingo-style, analysis of a typical, and very successful, disruptive innovation developed by Renault : the low-cost Logan vehicle (Jullien & al, forthcoming).

These activities led Midler to publish several research books on project management (Giard and Midler, 1993, Lundin and Midler, 1998, Garel *et al.*, 2004), which demonstrates his impact on the field.

In each case, Midler followed his preferred methodological approach: working with firms on practical industrial problems. This led to his very active involvement in the creation of the famous *Club de Montréal* (with Canadian colleague, C. Navarre). The club's name seems related to the fact it gathered together experts from North America and Europe, and the most convenient place to meet seemed to be in Montreal. It comprised a network of about 20 people, including managers of major projects and researchers. All together they represented several industrial sectors: automobile, aviation, construction, information systems and industrial equipment, to name but a few. They were able to share their experiences, learn from each other and devise a common understanding of the fundamental components of project management. Their method was to learn from real case studies that focused on success factors and to analyse what did not work.

Le *Club de Montréal* is not active anymore. But its remnants remain to be developed. The current trend toward a practical research approach is based precisely on close the proximity of researchers and the business actors.

### **Limitations and avenues for future research**

In 1993, Midler coined the term "projectification," an amalgam of project and organisational transformation. For Midler, projectification has been leverage for innovation management. Quite recently, the concept of projectification resurfaced in the Rethinking Project Management Network (Maylor, 2006). Otherwise, it has been absent from any major theoretical foundation in the fields of project management or management in general. Other than the fact that it was written in French, one reason for this might be that projectification deals with organisational transformation, not

exclusively structures or project management processes. This raises three issues. The first concerns the multiple dimensions of projectification and the potential difficulties of building on it when exploring one aspect at the time. Maylor et al. (2006) have identified 12 issues for projectification. The second issue refers to capturing the essence of such organisational change, considered not as the outcome of a specific project, but rather as an intrinsic change in the way projects are implemented. Most research undertaken at the organisational level (such as governance, programme, portfolio, project management office, etc.) rarely addresses organisational change in implementing such project management processes. Thirdly, important methodological questions arise when investigating organisational transformations. The research process requires in-depth longitudinal field research which is always a long and uncertain process, an infrequent occurrence in the PM research community.

These limitations open the door to future research. Midler clearly situated the economic and competitive context in which the automotive industry existed in 1989. Today's challenges seem to be exacerbated by a period of crisis. The story continues to develop. The first opportunity for research should involve understanding the global organisation of project management and organisational transformation. Since 1994, project management research has shifted its focus from project management alone to include the whole project organisation. With the major challenges facing organisations in terms of programme and portfolio management, project management offices, etc., it is understandable that researchers focus on these specific subjects. However, a need exists to reunify the organisation, and avoid possible fragmentation in the project management research field (Söderlund, 2010). This could be accomplished by following Maylor et al. (2006) who suggested programmification as a complementary concept to projectification.

With *L'auto qui n'existait pas*, Midler told a story. Very early on, he embarked on a journey of project management study. A practice-based approach is by definition contextual (Golsorkhi et al., 2010). Generalisation of the results is not at stake. Practitioners are likely to be reflexive and make sense within their own context. This practical trend seems firmly anchored in today's project management field (Cicmil et al., 2009; Hällgren and Maaninen-Olsson, 2009). This must be intensively pursued in addition to more theorisation from these studies.

In conclusion, this paper follows a trend launched in 2011 by the European Management Review (Gambardella and Zollo, 2011) to give access to knowledge produced in local languages. However, more than a question of language, it also concerns diversity and innovation in management knowledge (Van de Ven, 2011). In this paper we have offered a contribution to this trend that we expect could enrich the current debates in project management field.

## References

- Adler, N., Shani, A. B. R. and Styhre, A. (Eds.) (2004), *Collaborative Research in Organizations: Foundations for Learning, Change and Theoretical Development*, Sage Publications, Thousand Oaks.
- Artto, K., Kujala, J., Dietrich, P. and Martinsuo, M. (2008), "What is project strategy?", *International Journal of Project Management*, Vol. 26 No. 1, pp. 4-12.
- Aubry, M., Richer, M.-C., Lavoie-Tremblay, M. and Cyr, G. (2011), "Pluralism in PMO performance: The case of a PMO dedicated to a major organizational transformation", *Project Management Journal*, Vol. 42 No. 6, pp. 60-77.
- Beaume, R., Maniak, R. and Midler, C. (2009), "Crossing innovation and product projects management: A comparative analysis in the automotive industry", *International Journal of Project Management*, Vol. 27 No. 2, pp. 166-174.
- Beaume, R. and Midler, C. (2010), "Project-based Learning Patterns for Dominant Design Renewal: The Case of Electric Vehicle", *International Journal of Project Management*, Vol. 28.
- Ben Mahmoud-Jouini, S. (1998), "Stratégies d'offres innovantes et dynamiques des processus de conception : Le cas des entreprises générales de bâtiment françaises", *Thèse de sciences de gestion*. Université Paris IX - Dauphine.
- Berry, M. (1995), "Research and the Practice of Management: A French View", *Organization Science*, Vol. 6 No. 1, pp. 104-116.
- Blomquist, T., Hällgren, M., Nilsson, A. and Söderholm, A. (2010), "Project-as-practice: In search of project management research that matters", *Project Management Journal*, Vol. 41 No. 1, pp. 5-16.
- Bowen, K., Clark, K. B., Holloway, C. and Wheelwright, S. C. (1994), *The perpetual enterprise machine: seven keys to corporate renewal through successful product and process development*, Oxford University Press, Oxford, UK.
- Bredillet, C., Yatim, F. and Ruiz, P. (2010), "Project management deployment: The role of cultural factors", *International Journal of Project Management*, Vol. 28 No. 2, pp. 183-193.
- Charue-Duboc, F. (1997), "Maîtrise d'oeuvre, maîtrise d'ouvrage et direction de projet : pour comprendre l'évolution des projets chez Rhône-Poulenc", *Gérer et comprendre*, No. Septembre.
- Chen, M.-J. and Miller, D. (2010), "West Meets East: Toward an Ambicultural Approach to Management", *Academy of Management Perspectives*, Vol. 24 No. 4, pp. 17-24.

- Cicmil, S., Cooke-Davies, T. J., Crawford, L. and Richardson, K. (2009), *Exploring the Complexity of Projects: Implications of Complexity Theory for Project Management Practice*, Project Management Institute, Newtown Square, PA.
- Clark, K. B. and Fujimoto, T. (1991), *Product development performance strategy, organization, and management in the world auto industry*, Harvard Business School Press, Boston, Mass.
- Duguid, P. (2008), "Prologue: Community of Practice Then and Now", in Amin, A. and Roberts, J. (Eds.), *Community, Economic Creativity, and Organization*, Oxford University Press, Oxford, pp. 1-10.
- Fourcade, F. (2004), "Les stratégies modulaires des équipementiers automobiles : définition, enjeux, méthodologies de conception et modèles financiers", *CRG, spé. Gestion*. École Polytechnique, Paris.
- Gambardella, A. and Zollo, M. (2011), "English Reprints of European "Management Classics" in Native Language", *European Management Review*, Vol. 8 No. 4, pp. 187-187.
- Garel, G., Giard, V. and Midler, C. (2004), *Faire de la recherche en management de projet*, Vuibert, Paris.
- Garel, G. and Midler, C. (2001), "Front-Loading Problem-Solving in Co-Development: Managing the Contractual, Organizational and Cognitive Dimensions", *Journal of Automotive Technology and Management*, Vol. 3.
- Gastaldi, L. and Midler, C. (2005), "Exploration concurrente et pilotage de la recherche Une entreprise de spécialités chimiques. (French)", *Current exploration and driving of the research. The case of an enterprise specialised chemical products. (English)*, No. 155, pp. 173-189.
- Giard, V. and Midler, C. (Eds.) (1993), *Pilotages de projet et entreprises: diversités et convergences*, Economica, Paris.
- Golsorkhi, D., Rouleau, L., Seidl, D. and Vaara, E. (2010), "Introduction: What is Strategy as Practice?", in Golsorkhi, D., Rouleau, L., Seidl, D. and Vaara, E. (Eds.), *Strategy as practice*, Cambridge University Press, Cambridge, UK, pp. 1-20.
- Hällgren, M. and Maaninen-Olsson, E. (2009), "Deviations and the breakdown of project management principles", *International Journal of Managing Projects in Business*, Vol. 2 No. 1, pp. 53-69.
- Hällgren, M. and Wilson, T. L. (2011), "Opportunities for learning from crises in projects", *International Journal of Managing Projects in Business*, Vol. 4 No. 2, pp. 196.
- Hayes, R. H., Wheelwright, S. C. and Clark, K. B. (1988), *Dynamic manufacturing creating the learning organization*, The Free Press, New York.

- Hobday, M. (2000), "The Project-Based Organisation: An Ideal Form for Managing Complex Products and Systems?", *Research Policy*, Vol. 29 No. 7-8, pp. 871-893.
- Huemann, M. (2010), "Considering Human Resource Management when developing a project-oriented company: Case study of a telecommunication company", *International Journal of Project Management*, Vol. 28 No. 4, pp. 361-369.
- Jullien, B., Yannick, L. and Midler, C. (Forthcoming), *L'épopée Logan*, Dunod, Paris.
- Kerzner, H. (2006), *Project Management: A System Approach to Planning, Scheduling, and Controlling*, John Wiley & Sons, Hoboken, NJ.
- Kessler, A. (1998), *The creative supplier*, École polytechnique, Paris.
- Larson, E. (2004), "Project Management Structures", in Morris, P. W. G. and Pinto, J. K. (Eds.), *The Wiley Guide to Managing Projects*, John Wiley & Sons, Inc., Hoboken, New Jersey, pp. 48-66.
- Lave, J. and Wenger, E. (1991), *Situated learning: Legitimate peripheral participation*, Cambridge University Press, New York.
- Le Masson, P., Weil, B. and Hatchuel, A. (2006), *Les processus d'innovation: conception innovante et croissance des entreprises*, Lavoisier, Paris.
- Lenfle, S. (2001), "Compétition par l'innovation et organisation de la conception dans les industries amont : le cas d'Usinor". Université de Marne-la-Vallée.
- Lenfle, S. and Midler, C. (2009), "The Launch of Innovative Product-Related Services: Lessons from automotive telematics", *Research Policy*, Vol. 38 No. 1, pp. 156-169.
- Lundin, R. A. and Midler, C. (1998), *Projects as Arenas for Renewal and Learning Processes*, Kluwer Academic Publishers, Boston.
- Lundin, R. A. and Söderholm, A. (1995), "A theory of the temporary organization", *Scandinavian Journal of Management*, Vol. 11 No. 4, pp. 437-455.
- Maniak, R. and Midler, C. (2008), "Shifting from co-development process to co-innovation", *International journal of automotive and technology management*, Vol. 8 No. 4, pp. 449-468.
- Maylor, H. (2006), "Special Issue on rethinking project management (EPSRC network 2004-2006)", *International Journal of Project Management*, Vol. 24 No. 8, pp. 635-637.
- Maylor, H., Brady, T., Cooke-Davies, T. and Hodgson, D. (2006), "From projectification to programmification", *International Journal of Project Management*, Vol. 24 No. 8, pp. 663-674.
- Merriam-Webster, I. (2007), *Merriam-Webster's Collegiate Dictionary*, Merriam-Webster, Springfield (MA).

- Midler, C. (1988), "De l'automatisation à la modernisation. Les transformations dans l'industrie automobile : une expérience novatrice chez Renault.", *Gérer et comprendre*, Vol. 13 No. Décembre, pp. 4-16.
- Midler, C. (1989), "De l'automatisation à la modernisation: vers de nouvelles pratiques de gestion des projets industriels dans l'automobile", *Gérer et comprendre*, Vol. 14 No. Mars.
- Midler, C. (1991), " L'apprentissage de la gestion par projet dans l'industrie automobile", *Les Annales des Mines, série Réalités Industrielles*, No. n° Spécial sur l'Industrie Automobile.
- Midler, C. (1980), "L'organisation du travail et ses déterminants ; enjeux économiques et organisationnels des réformes de restructuration des tâches dans le montage automobile", *Thèse de Gestion*. Université Paris I Panthéon Sorbonne.
- Midler, C. (1993), *L'auto qui n'existait pas*, InterÉditions, Paris.
- Midler, C. (1995), ""Projectification" of the Firm: The Renault Case", *Scandinavian Journal of Management*, Vol. 11 No. 4, pp. 363-375.
- Midler, C. (2004), *L'auto qui n'existait pas : Management des projets et transformation de l'entreprise*, Dunod, Paris.
- Midler, C., Ben Mahmoud-Jouini, S. and Maniak, R. (2012), *Manager l'Innovation de rupture, nouveaux enjeux et nouvelles pratiques*, Éditions de l'École polytechnique, Palaiseau.
- Midler, C., Maniak, R. and Beaume, R. (2012), *Réenchanter l'industrie par l'innovation; Stratégie et management de l'innovation dans les entreprises automobiles*, Dunod, Paris.
- Midler, C., Monnet, J. and Neffa, P. (2002), "Globalizing the firm through projects: The Case of Renault", *International journal of automotive and technology management*, Vol. 2 No. 1, pp. 24-45.
- Morris, P. W. G. and Geraldi, J. (2011), "Managing the institutional context for projects", *Project Management Journal*, Vol. 42 No. 6, pp. 20-32.
- Morris, P. W. G. and Jamieson, A. (2004), *Translating Corporate Strategy into Project Strategy*, Project Management Institute, Newtown Square, PA.
- Office of Government Commerce (2005), *Managing Successful Projects with PRINCE2*, The Stationary Office [TSO], London, UK.
- Project Management Institute (2008), *A guide to the Project Management Body of Knowledge*, Project Management Institute, Newtown Square, PA.
- Söderlund, J. (2010), "Pluralism in Project Management: Navigating the Crossroads of Specialization and Fragmentation", *International Journal of Management Reviews*, pp. no-no.

Van De Ven, A. H. (2011), "Building a European Community of Engaged Scholars", *European Management Review*, Vol. 8 No. 4, pp. 189-195.

Wenger, E. and Snyder, W. M. (2000), "Community of Practice: The Organizational Frontier", *Harvard Business Review*, Vol. 78 No. 1, pp. 139-145.

Williams, T. (2005), "Assessing and Moving on From the Dominant Project Management Discourse in the Light of Project Overruns", *IEEE Transactions on Engineering Management*, Vol. 52 No. 4, pp. 497-508.

Womack, J. P., Jones, D. T. and Roos, D. (1990), *The Machine that Changes the World*, Rawson Associates, New York.