
Editorial

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Biographical notes: Bernard Jullien is a Senior Lecturer of Industrial Economics at Université Montesquieu, Bordeaux IV, and the Director of the Groupement d'Etude et de Recherche sur la Production Industrielle et les Salariés de l'Automobile (GERPISA), international research network on the automotive industry, which is based in the Université d'Evry. His primary research field concerns car distribution and, more broadly, automobile usage. With a political scientist, Andy Smith, he developed an institutionalist framework for the analysis of industrial dynamics in economic and political terms. This framework is presented and applied in the book *Industries and Globalization: The Political Causality of Difference*, co-edited by Jullien and Smith and published by Palgrave in 2008.

For its 15th international meeting, GERPISA chose to reflect on the key learnings of its community of researchers, who participated in the three major international research programmes that were undertaken over the past decade and a half. To what extent are the findings from the late 1990s still relevant ten years later? Have the issues of debate that were highlighted in previous studies been resolved and, if so, how or are similar questions still posed today? These were the questions that were posed in the call for papers to solicit GERPISA members to pause and reflect on the passage of time and its impact on the key international and interdisciplinary research questions for the automobile industry. Such historical analysis is particularly pertinent at a point in which the network is launching a new international research programme that focuses on the questions of compatibility between the growing demands that are related to sustainable development and the more traditional concerns related to overall company strategies. More specifically, GERPISA will look at how the expansion of sustainable development issues will impact on the continued development of certain national or regional automobile systems.

A broad review of the performance over the past ten to 15 years of the major industry operators will be edited by Michel Freyssenet and published by Palgrave. In the meantime, this special edition of the IJATM revisits a number of cross-disciplinary questions which have generated heated debate in the automobile sector over the time period in question.

The key question over the last decade has been the role of Original Equipment Manufacturers (OEMs) in the automobile system. This question is at the heart of the papers that compose this special edition, just as it has been the key to the many debates that GERPISA researchers have generated over the years with their empirical work. The

fact that this debate is able to solicit such a level of sustained interest from both researchers and practitioners is evidence of its importance at an analytical level, as well as at an operational level.

The objective of GERPISA's first research programme was to define different productive models through comparison and the key criteria that emerged for discriminating between models was the level of integration of OEMs and their relative ability to offload certain tasks and costs on suppliers. Similarly, in the second programme, which sought to define the different strategies and forms of internationalisation that are adopted by OEMs, a determining factor in distinguishing between firms was their capacity to find local suppliers for their international production operations or incite their existing suppliers to follow them. The third research programme addressed the question of how competencies and knowledge were developed and shared in automobile systems and, once again, the relative position of OEMs and suppliers in the process of conception, production and service delivery emerged as the key to understanding the new productive landscape of the industry. GERPISA's last research programme broadened its vision to look more generally at how the automobile industry is situated in terms of broader questions on the varieties of capitalism. In sectors other than that of automobiles, it was found to be important to include more than just the firms that are situated downstream in the value chain in order to understand the true overall impact of the varieties of capitalism on the sector.

This special issue bears witness to the quality, variety and continuity of the research that the GERPISA network has been able to sustain in relation to the questions of productive organisation. Faced with a succession of media and managerial trends, GERPISA has persisted in posing a certain number of fundamental questions and the group's longevity bears witness to their importance in the academic and the business community.

The research of Salerno *et al.* revisits the symbolic question of modularity and shows the extent to which this issue became key in the second half of the 1990s and how it was dealt with in Brazil and elsewhere. They review what was written on the subject over ten years ago and, despite noting that the newness of the practices were overestimated, they conclude that there are novelties. In particular, modularity facilitated the development of an original service relationship that changed the respective roles of different partners and offered suppliers the opportunity to improve their position in the value chain. They nonetheless insist that the analysis of the early initiatives clearly overestimated the extent of the transfer of industrial and economic power.

Carillo and Contreras refer more indirectly to the debate on modularity in their historical comparison of the Delphi and Ford plants in Mexico. Both have provided an opportunity to the Mexican automobile industry and the regions that have benefited the most from the redeployment of the North American actors' production and engineering capacity to develop economic arguments beyond those of low salaries and flexibility. The authors explain how the dynamism that was created by Delphi's transfer of its technical centre for research from Anderson in Indiana to Juarez, where it was located close to the production units of six of the seven Delphi divisions, generated a significant concentration of engineering in the new site to ensure that Mexico became of strategic importance to Delphi. Thus, we see how the interests of a firm and those of a region can converge. The example of Ford in Hermosillo is more nuanced. The production unit grew considerably in importance over a 20-year period to the point where it benefited from the largest single investment in the North American car industry in the past five years. It

faced problems, however, with salary negotiations and ongoing conflict constrained its ability to introduce a Japanese Production System. In addition, local suppliers were mainly limited to supplying secondary services as Ford focused on convincing large sub-suppliers to set up operations within close proximity of its plant. The authors highlight the role that public policy-makers and institutional actors need to play in order to guarantee concrete development strategies based on the significant investments made in their territories.

Kamp's article implicitly proposes a form of benchmarking of regional policies and initiatives in favour of the development of regional competitiveness in Europe. The objective of such policies is the opposite of those in developing countries, as they generally seek to maintain activities and renew investments over time rather than generate new investment. This focus is undoubtedly what has led to a multiplication of the initiatives that are directed at the actors in the automotive industry. In search of 'best practices', the author initially highlights how difficult a task this is in the light of the heterogeneity of practices and their objectives and resources, as well as the lack of information available to evaluate them. By concentrating on a number of specific cases for which a comparison is feasible and useful, he argues that the exercise is nonetheless worthwhile and that those who promote such policies need to pose the question of evaluation of the measures that they propose in a systematic manner and very early on in the process of developing such measures.

Miyake's article looks at Corporate Production Systems (CPSs) in auto industry companies in a somewhat similar manner, albeit adapted to firms. Based on a survey of large manufacturers and equipment suppliers, the research shows that practically all of the firms involved developed these types of tools to upgrade and reform their practices. He points out that the ingredients that make up these systems are, on paper, relatively similar (Just in Time (JIT), Total Quality Management (TQM), Six Sigma, *etc.*), with the common objective of achieving competitive performance in key aspects of the production function. Nonetheless, the implementation of these tools is not simple in many respects and the article helps us understand how and why the practices and their effectiveness significantly differ from one firm to another, despite their apparent similarity. He thus distances himself from the eternal quest for the 'one best way' in the industry, lending support to one of the theoretical foundations of the GERPISA group.

The work of Maniak and Midler arrives at similar conclusions and also serves to highlight the capacity of social science research in the automobile sector to adapt to new managerial questions that are linked to emerging practices. They distinguish the partnerships between OEMs and suppliers based on the co-development that emerged from competitive pressures in the 1990s from relationships that facilitate co-innovation. Having formalised these differences in terms of *innovation routes*, they present four case studies that reveal the existence of different approaches to the management of the routes and different subsequent performance profiles. These are examined with a framework that distinguishes four phases: exploration, contextualisation, development and deployment. It is the phase of contextualisation that is found to be crucial in terms of defining the dominant relational mode and its consequences. The case study analysis highlights that the organisational tradeoffs involved will not permit OEMs to generate one optimum outcome. While some choices will increase the possibility of correctly identifying customer value by adopting a project orientation, they will also increase the risk of neglecting the conditions of technical maturity. Adopting a function orientation,

on the other hand, involves a symmetrically opposite series of tradeoffs. As these organisational tradeoffs will be resolved differently from one firm to another, this research also serves as an explanation of the persistence in the diversity of innovation characteristics and performance across firms.

Finally, this special edition finishes with the presentation of the project that GERPISA has chosen to adopt as its international research programme for the period of 2008–2011. The research is moving the international network into new territory, but it should mobilise the competencies that were built up over the past 25 years, a representative sample of which is presented in this special edition. The question of how the automobile industry is integrating the demands of sustainable development is fundamentally tied to the question of how this activity is positioned in societies that produce and/or use automobiles. This is clearly a question to be addressed by all the social sciences that are currently participating in our international research network: history, sociology, political science, management and economics. In particular, the scale on which the position of the automobile is currently being renegotiated in society requires us to return to the questions of politics, states and the importance of regulation and taxation, as these issues are likely to play a major role in determining the outcomes for automobile firms and regions.

While not wishing to overstate the theoretical, ideological and conceptual homogeneity of the research approach of the GERPISA members, this new research programme can call upon a solid methodological foundation that has been built up over the network's previous research programmes. This can be summarised in three major areas:

- 1 The automobile industry presents a level of unity and continuity that reflects a sectoral community made up of competition and imitation. This lends credibility to the sectoral approach to research in order to identify the key trends that concern all of the firms in the sector. Sustainable development has become one of these trends.
- 2 Tradeoffs need to be made and, because firms have specific historical trajectories and are not occupying the same competitive space, they will make different tradeoffs and the members of the community thus co-exist with a large diversity in its practices in relation to production and production policies. There are many reasons to consider that this principle also applies to the forms of interpretation by firms of the requirements of sustainable development.
- 3 The strategies that are adopted by firms need to be interpreted more broadly than in terms of competitive analysis. In addition to the evaluation of their sustainability in terms of performance, we must add the analysis of their capacity to gain a long-term position in an increasingly global social, political and economic landscape. The sustainable development strategies that are being developed in automobile firms today clearly need to be evaluated on this dimension.

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