



Old and new spaces of the automotive industry: towards a new balance?

22nd Gerpisa International Colloquium
Kyoto: 4th of June – 6th of June 2014

Submission of proposals online (<http://gerpisa.org/node/2297>) from the 5th of November 2013. **Deadline the 20th of December 2013.**

Having put the emphasis on Europe during our two last colloquiums, this year's colloquium in Kyoto will shed light on the overall tendencies in the Asian automobile industry. Asia appears as the main “driver of change”, in terms of sales and production volumes, and from the point of view of firm strategies, local policies, industrial policies, innovation (technologies, products, organizations), etc. Besides, **the main ambition of the 22nd international colloquium of GERPISA is a deepening of our understanding of the restructuring/structuring processes, and their relationships with one another (codeterminations and mutual influences).** The reshaping of the international automotive industry since the mid-2000s can not be fully grasped without taking into account these factors, at firm, supra national, national, and regional levels. For instance, it is important to understand that industrial policies in emerging markets can greatly influence local, domestic and international profit strategies of global carmakers and suppliers. It also appears that these trends have a deep impact on the reconfiguration of national automotive industries' structures and organizations. To that extent, the role of newcomers in the overall restructuring of the industry has to be analyzed from the viewpoint of balance of power. Furthermore, this role not only reconfigures the power relationships within the industry, but also the productive organization and the patterns of transactions at several levels of the industry. **From this perspective, the colloquium has for its second main target, from a more theoretical standpoint, the grasping of the interactions between institutions, markets and organizations, and how they relate to the formulation of local and global equilibriums.**

We group these three main dimensions – Asia as the main driver of change; restructuring/structuring processes and their determinations; and the evolutions of the balance of power as a result of such a process –, into the 6 main themes below, and we call for communications accordingly. We also draw your attention to the special issue of the international journal IJATM that will be based on a selection of the best papers presented during the colloquium, including the winner of the young author's prize (*vii*).

- i) **Automobilisation of societies, new and used car markets, and business opportunities in the industry**
- ii) **New powertrains and new forms of mobilities: global tendencies, politics and markets**
- iii) **Carmakers at a crossroads: new product architectures and new productive organizations?**
- iv) **Supply chains under pressure: internationalization and division of labour**
- v) **Industrial policies as a lever of change? American, Asian, and European industries in perspective**
- vi) **Employment relationships: competencies in transition?**
- vii) **IJATM special issue (GERPISA colloquium) and the young author's prize**

i) Automobilitation of societies, new and used car markets, and business opportunities in the industry

Bernard Jullien, Bruce Belzowski, Mario Salerno

We call “automobilitation of societies” the ways consumers/societies access and then develop their use of cars as a (and often as the main) tool to organise individual mobility. Seen from the business side, these ‘automobilisations’ are too often linked to the markets of new cars, which is only the visible part of the market. Such a vision tends then to ignore two main elements that are often more important for households and businesses: used car markets and car services.

By considering this “invisible part” of the automobilisations’ stories and trajectories, our program could develop a better understanding of structuring and restructuring processes. Indeed, in developed countries, it usually appears that used car markets become more and more important over time, and that large majorities of households never buy new cars. Their car expenses are strongly dominated by users’ costs, and business opportunities are then largely localised in used car markets and aftersales service markets, where carmakers and carmakers’ networks are most of the time in a dominated position. In some emerging markets, similarly, households’ motorization is mainly due to their ability to buy used cars and especially imported ones. Then it is not associated to business opportunities for carmakers whose brands play in these contexts a marginal role in households’ relationships to cars. These configurations, central in Mexico and in CEECs, raise very crucial questions for deepening our understanding of the structuring processes. They imply a greater attention to a wide range of actors as used car dealers (and importers), spare parts dealers, and repairers. They raise questions about the carmakers and policy makers’ ability to adapt their policies to these specific contexts. Is there a room for new cars in a short and/or in a medium term perspective? What strategies and/or product policies are able to change these structures to enlarge progressively this room? What tax policies and/or environmental or car safety policies are (and/or could be) developed to rebalance the respective shares of new and used car markets? In other contexts, like in China, used car imports are very limited and the number of cars in use are then narrowly linked to the past sales of new cars. As in the past (in US during the 20s and in Europe during the 60s e.g.), used car markets become however progressively more and more important as an alternative access to the automobility for non equipped households on one hand, and as a way to replace their cars for motorized households on the other hand. Following these trends, automobilitation also opens fields of research dealing with the macro-linkages of demand and strategies/policies. Whereas the question of macro linkages is often presented as a capacity to grasp the needs of consumers and the structures of demand, which is of great importance, it also entails deeper and less-explored dynamics such as the linkages between wages and demand. Which cars for what kind of needs and consumers? Is the ongoing dominant antifordist dynamic linked to increasing inequalities sustainable? What can we learn about the future of markets and industries from the macroeconomic politics and measures taken in old and emerging countries?

We call in this theme for communications giving attention to the social and political construction of the second hand and new car markets, whether entering in the scope of the balance between old car markets and new car markets, of the linkages between the greening of the economy and the structures of car markets and fleets, or of the macroeconomic dynamics. We especially welcome papers focusing on Asia, without excluding communications based on other territories.

ii) New powertrains and new forms of mobilities: global tendencies, politics and markets

Julia Hildermeier, Giuseppe Calabrese, Yveline Lecler

The global car industry faces multiple challenges in terms of structure and organization, since the debate on alternative fuels and powertrains. Questions range from rethinking the industrial value chain to changing demand, and/or support measures from politics and urban planning.

The two main aspects we are thinking about in our international network (since sustainable transport and new forms of mobility has become an integral part of GERPISA's research agenda), deal with the newcomers in the industry and their impacts on the "traditional" business models on the one hand, and the blurring of the boundaries between public transport and private transport on the other hand. If new mobility patterns entail regime change, we need to describe how and why it is linked to the current relocation dynamics in the global automotive industry, how politics are linked to the recent economic crisis and existing patterns in Japan, Europe, the US, and emerging markets. In that respect, and as a part of our research agenda, we are about to theoretically and empirically examine the transformations of the existing automobile system. To which degree do new powertrains – and their use through new "sustainable" mobility services – transform the sector's structure and institutions, new markets and business practices? How do OEMs react to this challenge, which patterns of collaboration and innovation emerge? Based on which concepts can we grasp the scope of technological, societal and political transition we are facing? How to evaluate the rise of national and regional support schemes, how do they operate, what explains success or failure? What is the role and impact of public (environmental or transport) politics in shaping the integration of new and old technology? Directly linked with this dimension, there is also a need to reassess the construction of mobility policies. Traditionally, the conception of mobility led to a clear-cut boundary between public and private transport. Following the increase of intermodality, this boundary is weakened from several viewpoints. This entails fundamental research questions in terms of the structures of both industries (private and public transport) and their interconnections. How do carmakers and suppliers deal with this reorientation, from technological and business models viewpoints? What are the levers and the constraints to this development? What about the urban planning configurations in emerging and traditional countries?

This year's conference is going to look deeper into these issues in a global comparative perspective, and we invite papers that reflect and describe these new developments in the existing automobile system. Possible trajectories of transformation can emerge locally all over the world, and we need more comparative case studies. While in 2013 this thematic section looked at the European side focusing on how to intelligently combine existing instruments and/or new products, this year's conference at Kyoto specifically invites contributions focusing on markets outside of Europe and North America. Examples are experimental projects that combine electric or low carbon cars in local transport systems, responding to mobility needs and behavior. We invite research analyzing OEMs' strategies, the involvement of new players from different sectors. Innovations range from services, data transfer, and charging infrastructure to light material and design. They include firm practices such fleet management, terms of decision making processes and management, but also new ways of user integration and innovation: what is new sustainable urban vehicle, and where? How will it be used? Which consequences for the sector? Case studies on different global regions addressing these issues are welcome.

iii) Carmakers at a crossroads: new product architectures and new productive organizations?

Tommaso Pardi, Bruce Belzowski, Holger Bungsche, Hua Wang

Carmakers are still “at the top of the automotive industry”. However, their perimeters of responsibility (R&D, powertrain & stamping, assembly and distribution) and of influences (raw material, components and dealer networks) evolved recently, greatly determining the structuring/restructuring processes of the industry. Taking these shifts into account, the main objective here is to grasp the nature and the degree of these evolutions for the main carmakers and their localizations. We especially highlight three main parameters that will require our attention.

First, in terms of product policy, there is a need to assess not only the new products (car segmentation, kinds of innovation according to the localizations, etc.), but also the new product architectures, which means the way these products are designed, manufactured and sold. How are the standards of innovation set? Is there an overall tendency in the auto industry which leads to more open standards set at the industry level, and no longer locked into the carmakers’ divisions? And how does this translate into the way components are designed and built in different national industries? Do we observe for instance a general trend towards more standardised modular components? Such questions will help us think about the perimeters of carmakers’ responsibilities and influences, but will also help us in understanding the way these evolutions transform the geography of production and innovation. The choices made between integration and externalization, domestic and foreign production, vary greatly according to the prices of components and raw materials on the one hand, and to the interest rates on the other. However, we might also think about the nature of the incentives and burdens due to national specificities in traditional and emerging industries. How the structuring and restructuring processes is transforming the geography of production? Do “bottom up” strategies and innovations such as Logan create new markets and/or transform old ones? How these processes affect and/or are affected by the way carmakers build their mid-term and long-term strategies in terms of product, innovation and localization policies? Do we observe phenomena such as re-localization of production? Is there a risk of building new over-capacity in some emerging countries such as China? What are the implications in terms of volumes, production costs and localization strategies, of the general trend towards “over-quality” in the design of products? How do cars meet their markets? Often overlooked, but directly linked with these two first dimensions, the structure of corporate control of carmakers also requires our attention. Is the control of companies changing? Who controls companies today? And how does it matter? How do traditional carmakers change their structures of governance, and how do newcomers build them? Are there any new forms and tools of governance that fundamentally reshape the traditional modes? Which is the role of the so-called external experts in this process? How do we characterize them? Which interests do they represent and how do they affect the internal governance of each strategic domain (design, marketing, strategy, human resources, value chain, etc.)?

Taking into account these three main dimensions – product architectures and perimeters of influences and responsibilities of carmakers; structuring and restructuring processes, and their impact on the geography of production and innovation; corporate governance and control patterns –, we call for communications that give us a better understanding of the trajectories of carmakers in a rapidly evolving industry. Whether based on monographs, international and/or national comparisons, historical comparisons, the communications are expected to focus on the way the carmakers trajectories shape and/or are shaped by the structuring/restructuring processes of the overall industry.

iv) Supply chains under pressure: internationalization and division of labour

Stéphane Heim, Jorge Carrillo, Vincent Frigant, Mario Salerno

Supplier industries play a fundamental role in structuring and restructuring the automotive industry. At the same time, a deep restructuring of the automotive industry has significantly impacted the organization and performance of automotive suppliers. The rise of emerging countries, the authorities' local contents requirements and emissions regulations, the reallocation and repatriation of production and innovation capabilities, the new engine technologies, and modularization, lead to very contrasted organizations and structures of supply chains at national, subnational and regional (free trade areas, for instance) levels. In some countries like Mexico, auto parts are the main driver of automotive development, in other countries with large markets such as Brazil, India and China, they are an integral part of automotive development, while in others like Japan, a transfer to other parts of Asia is under way, which greatly contrasts with the Russian case where we observe (due to a lack of historical integration) a weak international and national supply base. Taking into account this set of questions and situations, we emphasize this year three main overall topics.

First, the search for alliances between traditional actors and new partners has to be analysed, especially the way it affects the geography and the organization of the industry. Demands for sustainable development in the automobile industry have led to technological innovations (new powertrain systems as well as reduction of emissions linked to traditional internal combustion engines). It seems that the race for newer and better powertrains leads to a reconcentration of RD&E (research, development and engineering) activities. Is there a trend towards recentralization of RD&E? Will this impact local production chains? Furthermore, new actors are emerging alongside the traditional manufacturers, suppliers and dealerships. There is a need for analysis linking the race for greener cars and the supply base. Second, the restructuring and the configuration of the geography of production is directly linked with the type and degree of internationalization. While large global suppliers have accelerated their internationalisation trajectories, another movement can also be observed, involving the acquisition of European or American supplier companies by Indian or Chinese investors. How are crucial decisions taken – at the company level – regarding off-shoring, near-shoring and re-shoring? How does it impact the transactions within supply chains? As for the SMEs, the question is to know under what kind of conditions they are able to maintain their activities on traditional territories, and to develop on emergent territories. The research agenda has to explore the capacity of suppliers (who, how and with whom?) to build and/or to sustain global value chains, having a role of bridge between several territories. Third, following these two main features, there are new challenges (and also opportunities) faced by suppliers, even greater than those of carmakers in terms of competitiveness. Directly linked with this question, a typology of suppliers according to several parameters, but especially along their products (body parts, transmission, etc.), should be built to understand the current development of global value chains and their mutual influences in the structuring and restructuring in both markets, and the formation of new automobile spaces.

We then call for papers in this theme dealing with those three dimensions: the search for alliances between traditional actors and new partners – internationalization and the restructuring of the geography of production and innovation – the new challenges in terms of local and global competitiveness. Clearly, all these are key questions both at an operational level but also in terms of the research perspective that the Gerpisa Colloquium is trying to adopt. We would welcome relevant studies contributing to better understanding, including historical ones.

v) **Industrial policies as a lever of change? American, Asian, and European industries in perspective**
Stéphane Heim, Bruce Belzowski, Boleslaw Domanski, Bruno Jetin, Sigfrido Ramirez

A general agreement assumes that carmakers and tier-one suppliers stimulate and enhance competition between countries and supranational regions, enforcing their industrial policies. However, one might also think about industrial policies as a combination of measures taking into account firm strategies and other parameters. In that perspective, we have to observe more carefully the way these policies are built in America, Asia and Europe (both at regional, national and supra-national levels), their codeterminations and combinations, their recent evolutions and/or their structures.

One important aspect to inquire is the evolution of industrial policies in the context of crisis, since the 2008-2009 crisis and the “second effect of the crisis” in 2012-2013 (especially in Europe) shed light on the measures raised to tackle the crisis. Do we observe any change in the nature of the measures and policies when comparing them with previous crisis? Is there any turn fostering neoliberal policies and competition between countries and firms? Those questions will also lead us towards a more sound analysis of the changes affecting the policy makers, their structures, their organizations, and their connections with each other, with employer and professional organizations, and with firms. Whereas the policy makers are often presented as homogeneous and rules-driven public organizations, a deeper attention to the power relationships, and to the “professional segmentations” in the process of industrial policies’ building, might give further explanations about the contents and tendencies of the policies. These “public policies approaches” will also be of much importance when dealing with the impacts of such policies on the automotive industry (in terms of capacities transferability, technology assimilation, comparison of competitiveness, choices done by carmakers and suppliers about the localisation and/or re-allocation of production and design activities, etc.). How are industrial policies changing the geopolitics of the world automobile industry? How do these politics impact industries, companies, and sectors, and in particular, trade policies? How do these policies play out in the restructuring process (industries, political actors, institutions and finance)?

In order to have a sounder understanding about the *emergence processes and restructuring processes affecting the American, Asian, and European industries*, we call for papers in this theme dealing with those three dimensions: the evolutions of industrial policies in a period of crisis – the policy makers, their structures, organizations, and networks – and the impact of industrial policies on the automotive industry. In addition, following our previous colloquiums, it is also of great importance to collect material about the regional integration processes (commercial, fiscal, labour, market policies) and the “commercial or trade policies at bilateral, regional or multilateral levels” to fully understand the various emergence processes. Thus, questions pertaining to the link between local supply, demand and design – and the forms that they assume depending on the period in question, the country, the political, economic, industrial, commercial and fiscal policy or investors’ origins – should clearly be analysed or at least presented in proposed studies. Studies should be comparative in nature, cover these three sub-themes, and/or rooted in strong empirical observations (whether case studies, international or historical comparisons). Papers based on original theoretical viewpoints and/or research questions at the margins of these three subthemes, that shed light to the emergence processes and restructuring processes in America, Asia, Europe, will also be assessed with much attention.

vi) Employment relationships: competencies in transition?

Tommaso Pardi, Antje Blöcker, Holger Bungsche, Elsie Charron, Martin Krzywdzinski

The employment relations (skill development, work organization, industrial relations and collective bargaining) play a central role in the (re)shaping of “firm government compromises” at the factory, regional, national and supranational levels.

In a context of rapid evolution of the automotive industry’s geopolitical balance, the way foreign and national carmakers and suppliers (re)build their industrial relations (especially the balance between several scales of these compromises) appears as a central aspect to be inquired. How do “traditional” companies, trade unions and states deal with the pressure that can appear in traditional countries due to the growth of production facilities in emerging countries? How do the states (regulations) and the companies (strategies) create systems of employment relationships in emerging countries? Do we observe stronger competition (both national and international) between factories of a same firm? Following this first series of questions, there is a second important aspect affecting the evolution of employment relationships, which is the general problem of “inclusivity” (the insertion of employees into the firm strategies’ negotiation). How do trade unions (in traditional and emerging countries) deal with the growth of new technologies that might affect the structure of employment? How do employer organizations reshape the traditional employment systems and how do they develop emerging systems? What are their functions in the construction of labor markets (whether internal or classic)? This year, we will pay special attention on communications focusing on the changes in the Asian automotive industry (single company studies or country studies), and the correlation between the dynamics in Asia and the Rest of World (comparative studies of companies and countries). The stagnation of the Japanese car market and the rapid expansion of Japanese companies in emerging economies put employment relations in Japan under pressure of restructuring. How do the Japanese companies, trade unions and state deal with this challenge? China, by contrast, has experienced a decade of high-speed growth partially based on an overexploitation of the labor force. How do companies, trade unions and the state react in order to establish a more sustainable form of employment relations? In the Korean auto industry, working strikes of workers for higher wages set the agenda for the discussions. How do these conflicts affect the future strategies of Hyundai and which effects do they have on the strategies of e.g. General Motors in Korea? India is just starting to build an automotive industry based on a partially completely inexperienced rural workforce. How do the industry actors deal with these particular conditions? Very little is known about employment relationships in other Asian emerging economies like Indonesia, Thailand or Malaysia. Domestic carmakers and suppliers in Asian countries are of particular interest. Do they develop their own approaches to employment relations or rather try to emulate foreign companies? In order to grasp the particularities of the development of employment relations in Asia, this stream also invites studies comparing Asian companies/countries with companies and countries from other world regions, in particular from other emerging economies and from USA and Europe. Western European carmakers and suppliers rarely use Asian production capacities for low cost oriented export processing. Does this have consequences for the loci of production and innovation? When US or European carmakers build up product innovation activities, how do they integrate these activities in their global innovation networks?

We call for papers in this theme dealing with those three dimensions: the (re)shaping of employment relations – inclusivity, governance compromises, and (re)building of employment systems – dynamics of employment relationships in Asia.

vii) IJATM special issue (GERPISA colloquium) and the young author's prize

The International Journal of Automotive Technology and Management (IJATM) published by Inderscience publishes each year a special issue based on a selection of the most relevant papers presented during the GERPISA yearly colloquium. For the second year, one or two papers from young authors will also be published in this special issue. An evaluation committee, composed of members of the GERPISA's international steering committee, will assess the papers during the colloquium (young authors and others). The criteria of the assessment are based on the relevance of the topic inquired, the presentation and the accuracy of the results, the quality of the methodological work, and the review of the literature. A variety of work in the field of social sciences (history, management, economics, sociology, geography, political science, etc.) dealing with automobile industry is welcome. After the decision of the GERPISA's steering committee, the selected papers will be refereed through a double-blind process, and then published in a special issue of the International Journal of Automotive Technology and Management. We are looking forward to reading your papers and attending your presentations.

The Young Author's Prize of GERPISA, consisting of the publication of the winning paper in a special issue of IJATM and a 1500 € reward, aims at recognizing the work of young researchers on topics related to the automobile industry, encouraging them to develop their enquiries on automobile industry. In 2013, the first prize was attributed to Martin OBAYA, for his paper *"Intra-regional distribution of technological capabilities: a multiple case study research of carmakers operating in the Mercosur"*, the second prize to Marc DIJK, *"A socio-technical perspective on the electrification of the automobile: niche and regime interaction"*.

Requirements to submit a paper proposal for the young author's prize:

1. Master, Ph.D. students, post-doc, etc. (no full-time associate professor, professor or researcher) needs to be less than 37 years old (papers co-authored with a senior researcher will not be assessed);
2. Paper based on the analysis (whether theoretical, methodological, or empirical) of the automobile industry (topics have to cover one of the six themes of the colloquium);
3. Presentation of the paper during the 22nd international colloquium, Kyoto, 4th of June – 6th of June 2014;
4. Submission online (for one of the 6 above-mentioned themes, specifying that the papers are for the prize), and email (name, date of birth, nationality, status, University, topic, abstract) to Giuseppe Calabrese (g.calabrese@ceris.cnr.it), and Stéphane Heim (sheim@ens-cachan.fr) **before the 20th of December 2013.**