New Worlds of Work

Varieties of Work in Car Factories in the BRIC Countries

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Introduction

1.1 RESEARCH QUESTIONS AND PROBLEMATIC

Industrial work is often viewed as obsolescent in the industrialized countries. Worldwide, however, the industrial sector continues to grow. In particular, new centres of industry are emerging in the so-called BRIC countries (Brazil, Russia, India, and China), where recent years have seen the opening of large numbers of plants and the creation of many industrial jobs. This process has been prompted by several factors. The BRICs’ own domestic markets have grown, in some instances very dramatically, and multinational companies want to share in this growth while also taking advantage of the low-cost environment for their international operations.

The voluminous research literature on these factors and processes, and the transformations they have set in train in these countries, plays an important role within the wider discussion of globalization. However, despite this academic attention, little is known about the work and lives of employees in these new factories. Much of the interest in developing country industrialization has tended to focus on the poor working conditions that characterize some export-oriented sectors in emerging economies, most notoriously in the garment industry. This study addresses a different phenomenon. Our concern is with the modern facilities run by multinational or local manufacturers that reflect aspirations for a process of industrial upgrading that might point to a contrasting future for these countries. The assembly plants belonging to the multinational and national car manufacturers included in our research produce for BRICs’ domestic markets and do not serve solely as ‘low cost’ export platforms. Not only do these plants typically not compete head-on with those in the older industrialized countries; in certain respects, at least this was our initial supposition, they might even constitute prospective models for the formers’ production systems and approaches to personnel management. In this sense, this study not only aims to explore instances of factory life in regions deemed remote from, and peripheral to, the traditional industrial heartlands of Western Europe, North America, or Japan but also to establish whether and how these new operations might feed back into and transform industrial work in the ‘core’. Our main research interest in studying these plants is not to benchmark their operations and practices in terms of operational efficiency. Rather, it focuses on the encounter between multinational companies and the traditional manufacturing methods and patterns of behaviour that have prevailed in the BRICs and the responses and changes prompted by the multinationals’ production and HRM systems, both directly in their own plants but also in related policy areas and institutions.
The centrepiece of this study is an exploration of the worlds of work at workplaces in the BRIC countries. As the concept of the ‘world of work’ might suggest, we decided to cast the net very widely in terms of the scope of the research: that is, the study is based on the assumption that industrial relations, employment systems, and personnel and human resource (HRM) approaches within companies cannot be understood in isolation from their cultural, institutional, and regulatory contexts. At the same time, given its breadth, this concept also suggests that we would expect to find considerable differences between the case-study companies in the BRICs: indeed, this was one of the major motivations for undertaking this research. In this sense, we expected, like Dore in his legendary comparative study British Factory—Japanese Factory, to be confronted with the riddle of ‘how there should be built around two all but identical [products], two such very different ways of ordering the social relations . . . between the people involved’ (Dore 1973: 10).

In contrast to much of the current literature, our starting point is not the perspectives and strategies of firms’ headquarters and their efforts to transfer management approaches from their home countries to the BRICs (on this see, for example, Abo 1994; Almond and Ferner 2006; Elger and Smith 2005; Kristensen and Zeitlin 2005). Rather, we focus on the specific perspectives of the actors at the BRIC operations. Our approach was exploratory, in some respects drawing on the methods charted by Grounded Theory (Charmaz 2006; Corbin and Strauss 2008). The research was also guided by an interest in conducting comparative research across three dimensions in terms of their impact and influence on HRM practices: firstly, the influence of nationally specific features and differences; secondly, that of company-specific features and differences; and thirdly, differences between multinational and local manufacturers. We return to the research field and our methodology in more detail in section 1.5 below.

Our aim is to provide an analysis of work, its local environment, and the situation of employees in plants in the BRICs in the context of globalization, focusing on three main questions:

1. What differences and common features characterize countries and firms in the fields of workplace HR management and production systems? More specifically, is the worldwide diffusion of lean production leading to a convergence between companies’ HR and employment strategies or might the existence of distinctive national features thwart the realization of such a model?

2. How are operational standards, determined at corporate level, implemented in local contexts? Do these displace local—and viable—approaches to resolving problems that might be more effective than company-wide standards; or, alternatively, can local standards make a positive contribution to how these firms manage their BRIC operations?

3. What evidence is there for either a ‘high road’ or ‘low road’ path of development in the BRICs? Specifically, to what extent do companies aim to take advantage of low wage costs and weak regulation to configure a ‘low road’ model or is their priority one of investing in their workforces and creating socially sustainable structures?

The first of these questions is part of the traditional debate over convergence and divergence in production and personnel systems, and corresponding
company and national models, which has been underway since the 1990s (Lawler and Hundley 2008; Almond and Ferner 2006; Kostova and Roth 2002; Boyer et al. 1998; Elger and Smith 1994). Beginning in the early 1990s, and driven partly by the influence of the ‘Japan debate’ (Oliver and Wilkinson 1988; Jürgens et al. 1993; Kenney and Florida 1993), Western car manufacturers have restructured and standardized their production systems in line with the lean production model. At the same time, differing corporate traditions, and their associated interpretations of how lean production is to be implemented in practice, have persisted. Given these forces for both convergence and the persistence of difference, there is still uncertainty as to whether companies’ employment systems will ultimately move to a single model. One of the core propositions of the case for convergence is that lean production systems necessitate certain HRM approaches (Appelbaum et al. 2000), typically subsumed in the literature under the rubric of ‘high performance work practices’ (HPWP): these include teamwork, worker involvement in improvement processes, extensive training and skill development, performance- or competency-based variable pay elements, and extensive employee-oriented information and communication. In contrast to this, given the embeddedness of HRM systems in national contexts, efforts to standardize HRM practices evidently continue to face many challenges and difficulties.

Our second question deals with the standardization of personnel systems within multinational companies: do the multinational car manufacturers export their HRM systems to the BRIC countries, do they adapt themselves to local circumstances, or are the BRIC countries deliberately used as means for ‘regime flight’ from the models that prevail at their home bases (see Jürgens and Krzywdzinski 2010; Meardi et al. 2013)? Research into multinational companies highlights both their efforts at standardization as well as the need to adapt to host laws, institutions, and cultures (Fayerweather 1978; Bartlett and Goshal 1987). HRM is viewed as a management function that is especially subject to local factors and, as a consequence, one seen as difficult to standardize (Rosenzweig 2007). There is also a third option alongside transferring home-country standards or adapting to host-country standards. In a comparative study of HRM practice in German, Japanese, and US multinationals and their subsidiaries, Pudelko and Harzing (2008) reported the surprising finding that neither the subsidiaries of German companies in Japan nor Japanese subsidiaries in Germany had adopted either German or Japanese approaches: rather, both groups were found to have implemented HRM practices that these authors denoted as a US American HRM model, a circumstance they interpreted as suggesting the existence of a dominant ‘global best practice’ HRM model that influenced processes of standardization within firms and had the potential to lead to global convergence.

Our third question refers to the hopes and fears associated with the rise of the BRICs. The direction in which the BRICs are developing is a contested one. Is their rise based on the exploitation of a precarious and insecure workforce,

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1 In this study we use the term ‘High Performance Work Practices’ (HPWP) as a synonym for ‘High Performance Work Systems’ (HPWS). HPWP is also now seen as a portmanteau term for High Involvement and High Commitment Work Practices (Festing 2012: 41).

2 In this study, we use the terms ‘human resources’ and ‘personnel’ management as synonyms both for the corresponding management function and the organizational unit within companies.
condemned to toil in ‘sweat shops’; or might they increasingly represent locations for the factories of the future? Is industrial work in the BRIC countries moving towards models now customary in the traditional industrialized countries; or might they be the sites for entirely new approaches to industrial work?

The question of ‘high road’ and ‘low road’ has a specific relevance for the car industry. Car manufacturers in Western industrialized countries typically offer high wages and stable employment. Will this also be the case in the BRICs? Because this study was confined to manufacturers’ assembly plants, the final link in the value-added chain, and also due to car industry’s status as, for the most part, a politically privileged branch, it would be reasonable to expect it to tend towards a ‘high road’ path. However, car manufacturers—and in particular the national more than the multinational firms—are also faced with a strategic choice: to what extent should they make use of the cost advantages created by the large reservoirs of labour and, in some instances, weaker regulation or more permissive approach to enforcement in the BRICs?

We consider that the main theoretical contribution of this study lies in the area of the convergence or divergence of industrial worlds of work as a consequence of globalization. There are three theoretical strands in this area, each of which looks at this issue from a different aspect. The first of these turns on the debate over High Performance Work Systems (HPWP), already referred to above. One aim of this field, which has expanded enormously in recent years, is to identify practices in work organization and HRM that can generate, or explain, organizational ‘high performance’. The debate began in the 1980s when researchers began to explore the reasons for the superiority of Japanese manufacturing companies when compared with their European or North American competitors identified by the originators of the concept of ‘lean production’ at the MIT International Motor Vehicle Program (Womack et al. 1990). Discussion of ‘lean production’ initially focused on the principles underpinning the design of production systems. The aspiration of these authors to formulate a universal ‘best practice’ model triggered an intense debate around the issue of the national and company-level convergence and divergence of production models (see Freyssenet et al. 1998). One important element in this was the idea of complementarity between the principles for designing production systems and those for HRM. Beginning in the early 1990s, a number of authors (Milgrom and Roberts 1992; MacDuffie 1995; Pil and MacDuffie 1996) argued that, rather than being effective in isolation, ‘good’ HR practices worked best when combined into ‘bundles’ that would bolster the effects of lean production on organizational performance. The HPWP discussion has since broadened considerably to embrace a diverse range of practices, with effects largely explained by work psychology models based on the combined effect of job satisfaction, organizational commitment, and performance incentives. We consider this literature in greater detail in Chapter 2. Our starting assumption in this research was that the claimed effects of HPWP practices will have influenced the design of work and employment systems in the BRICs, but that large differences were likely to be found in how these systems would be implemented and operate in view of the varying institutional arrangements, distinctive cultures, and constellations of actors to be found in each of the BRIC countries. As we detail below, in designing this research programme, we decided to focus on those practices for which we expected to find such differentiating influences.
Introduction

One strand of the HPWP debate has engaged with the issue of the extent to which introducing the corresponding practices weakens employees’ desire or willingness to organize or join a trade union. This aspect was taken up at a fairly early stage in the British and North American discussion (see, for example, Fiorito et al. 1987; Ichniowski et al. 1997; Godard and Delaney 2000), and turned on whether HPWP could be seen as a ‘union avoidance’ strategy, an interpretation of HPWP linked with the fact that most analyses do not view unionized forms of employee representation as an integral part of HPWP. This also fits with the argument advanced by Katz and Darbishire (2000), according to which the global convergence of HR practices was enabled by the decline in trade union strength and the erosion of national collective bargaining systems.

As far as the second main theoretical strand is concerned, we draw on Marsden’s Theory of Employment Systems (1999). In contrast to the previous strand, which suggests a process of global convergence based on lean production and HPWP, Marsden’s theory argues for the persistence of differences as a consequence of variations between national employment systems. His starting point is that the inevitable incompleteness of employment contracts offers employees and employers scope for opportunistic behaviour—that is, the exploitation of situational advantages and power to gain a one-sided advantage from the contractual relationship. In order to forestall such behaviour, employment rules have been developed in the traditional industrialized countries, Marsden’s principal concern, which shape actors’ dispositions and ensure that the workplace parties operate within mutually acceptable behavioural frameworks. How is this issue resolved in the BRICs? And to what extent do multinational firms attempt to export home-country standards from their corporate centres and implant them in the BRICs?

The situation in the BRIC countries suggests considerable scope for opportunistic behaviour. Huge labour markets, workforces in the new plants consisting largely of employees lacking industrial experience, traditions of authoritarian leadership, and weak institutions for employee voice and representation all create a wealth of opportunities for employers to recalibrate the ‘terms of trade’ of the employment relationship to their advantage and engage in opportunistic practices. At the same time, multinational companies’ inexperience in the BRICs creates scope for opportunistic behaviour by employees and their representatives.

Our third theoretical strand focuses on the role of cultural characteristics as enablers of or obstacles to the implementation of companies’ production and HRM systems. At this juncture, culture-based theories come face-to-face with the largely universalistic aspirations of HPWP approaches. Cultural theories emphasize how commonly-held patterns of thought and behavioural norms might play a role in issues such as team self-organization and the acceptance of hierarchical

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3 Within economic theory, opportunism is denoted as behaviour that is solely directed as maximizing an agents’ interest at the cost of other agents, including the use of deception, cheating, and other forms of prejudicial conduct. Williamson (1996: 6) used the term ‘self-interest seeking with guile’. It is one of the central concepts of agency theory (Lazear 1999) and transaction cost theory (Williamson 1985).
power, the acceptability of individual or collective incentive systems, or individual willingness to take on responsibility (Hofstede 1984; House et al. 2004). These modes of thinking and behaviour also affect leadership styles, team cooperation, and how collective interest representation operates. However, cultural theories are typically located at the level of macro- and national cultures, in some instances assuming that organizational cultures are broadly unchanging; by contrast, our specific concern is with workplace and company cultures.

The following sections introduce, first, the BRIC countries and then the companies in our study. We then describe the plants where we conducted research, and our research procedure and methodology. This introductory chapter concludes with an outline of the main contents and questions addressed in subsequent chapters.

1.2 THE BRICS: BRAZIL, RUSSIA, INDIA, CHINA

The BRICs, a term coined in 2001 by Jim O’Neill, then of Goldman Sachs, constitute a group of countries with very diverse political systems, regulatory environments, and cultures but also sharing three characteristics that differentiate them from other emerging economies (for the debate on the special features of the BRICs, see Io Lo and Hiscock 2014). Firstly, they are amongst the ten most populous countries on earth, with China and India topping this list by a large margin, as Figure 1.1 illustrates. As such, they have at their disposal enormous reservoirs of labour.
Secondly, the BRICs are characterized by rapidly growing domestic markets, in particular for passenger cars. Compared with other populous emerging and developing countries, such as Pakistan, Nigeria, or even Indonesia, the BRICs represent significant car markets and have sufficient levels of income in relevant consumer segments to ensure that these markets will probably grow for some decades to come. Figure 1.2 sets out vehicle sales for the BRICs in 2011 in comparison with the core countries of the Triad, together with KPMG’s forecast for 2026. By 2011, the Chinese market had already overtaken sales in Western Europe and North America. In contrast, in 2011 markets in Brazil, Russia, and India were at the level of medium-sized European countries, although very substantial growth was expected for the medium term.

Thirdly, the BRIC group is notable because of its political significance. Russia and China are both members of the UN Security Council and heavyweights in world politics, and the significance of these countries is likely to grow in the future on issues of industrial standard-setting. With the inclusion of South Africa since 2010, the ‘BRICS’ have formed a group of nations whose heads of government have met regularly for annual consultations since 2009 and which aims to represent a counterweight to the Western industrialized countries (Glosny 2010; Mudunuru 2013). However, South Africa was not included in our study on grounds of the size of its population and fairly limited car market.

In terms of manufacturing productivity and innovation, however, the BRICs still lag behind the advanced industrial countries. According to the Global Competitiveness Report (Schwab 2013), published annually by the World Economic Forum, Brazil, Russia, and India are in mid-table position; only China is well en route to joining the leading group of nations. All four countries have major problems in terms of infrastructure, institutional efficiency, education and training,
and widespread corruption. The *Global Competitiveness Report* distinguishes three stages of economic development: the competitiveness of ‘factor-driven economies’ depends mainly on low-cost labour and natural resources; ‘efficiency-driven economies’ are especially competitive in manufacturing complex industrial products and have effective education and training systems together with efficient markets for goods, labour, and finance. ‘Innovation-driven economies’ represent the highest stage of development: these are able to develop new products and business models. The *Global Competitiveness Report* characterizes Brazil and Russia as countries engaged in the transition from an efficiency-driven economy towards an innovation-driven economy. China is designated as an efficiency-driven economy and India is deemed to be still at the level of a factor-driven economy.

Corruption, pervasive in the BRICs, represents a serious social and economic problem and also plays a major role in workplace employee relations. May and Ledgerwood (2007), for example, highlighted the high incidence of blat in Russian companies—that is, the use of private contacts with influential individuals to circumvent formal rules and procedures and obtain a personal advantage. A similar phenomenon has been discussed in China under the rubric of guanxi (Bian 1997), although this is not seen in an entirely negative light given its positive networking effects (Wong 2010; Wang 2001; Kieler 1998). Informal arrangements and networks can also influence compliance with regulations, how selection and career systems operate, as well as perceptions of the fairness of organizational practices on the part of employees. Table 1.1 sets out the corruption index for the BRIC countries compiled by Transparency International, based on surveys of experience with and the perception of corruption. The situation is especially dramatic in Russia, which ranks as one of the most corrupt countries on earth.

These shared features of the BRIC countries should not, however, obscure the enormous differences that exist between them as a result of their distinctive patterns of economic development, histories, cultural characteristics, political systems, and industrial relations arrangements. Differences in terms of the pattern and degree of economic development are evident from the figures for per capita GDP. Brazil and Russia, with around some US $12,000 and US $14,000 GDP per head respectively (c.US $12,000 and US $17,000 in 2012 at PPP, which eliminates the effect of differences in price levels), have nominal incomes equivalent to around a third of typical Western European levels and are comparable with

<table>
<thead>
<tr>
<th>Rank</th>
<th>Comparable countries</th>
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<tbody>
<tr>
<td>Brazil</td>
<td>69</td>
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<tr>
<td>China</td>
<td>80</td>
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<tr>
<td>India</td>
<td>94</td>
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<tr>
<td>Russia</td>
<td>133</td>
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* 176 countries were included in the ranking.

Source: Transparency International Corruption Index (2012)

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Central European countries such as Poland or Slovakia. In 2012, per capita GDP in China was some US $6,000 (c. US $9,000 at PPP). By contrast, in the same year per capita GDP in India was just US $1,500 (US $3,900 at PPP). As such, the development gap between India and Brazil or Russia is larger than that between the latter two and typical Western European levels.

In the context of our research, national differences are particularly important in the fields of vocational training, industrial relations, and behavioural differences that reflect cultural features. As far as systems of vocational training are concerned, a distinction is customarily drawn between (a) systems with developed arrangements for vocational training and education (VET) that include a link between theory and workplace practice and (b) systems with purely school-based VET and minimal practical training in real workplaces. Of the BRICs, only Brazil can be said to have an effective vocational training system that operates in line with modern standards (Leite et al. 2009), although China and India are making considerable efforts to reform their training systems (ILO 2003; Barabasch et al. 2009; Yan Hao 2012).

The BRICs can also be assigned to different categories in terms of their industrial relations arrangements. Although Brazil and India recognize freedom of association, and hence the right to form trade unions, unions have very few statutory rights at workplace level and industrial relations are often adversarial (Dombois and Pries 1999; Gupta and Sett 2000). This contrasts with China and Russia, where there is an emphasis on social partnership and where trade unions have extensive workplace rights but are subject to state control, exercised directly in China and indirectly in Russia (Taylor et al. 2003; Clarke and Pringle 2009). Comparing countries in terms of the degree of union pluralism, China has only one national union confederation, in contrast to the inter-union competition by organizations with differing political affiliations seen in Brazil, India, and Russia. The frequently used typology of centralized and decentralized industrial relations arrangements cannot really be applied to the BRICs. With some exceptions, industrial relations in all four countries are largely decentralized, with the workplace the central arena of industrial relations. All four countries have branch-based trade unions, but these only play a major role in Brazil. In the other countries, the dominant form of unionism is the enterprise or workplace union.

Cultural issues play an important role in certain areas of our analysis. All the BRICs rate as more collectivist and more hierarchical (that is, have a higher power distance) than the average, according to the main empirical comparative studies of national cultures (such as Hofstede, 1984; House et al. 2004). Within the BRICs themselves, and based on Hofstede’s data, China is the most collectivist and India the least; China also has the highest acceptance of hierarchy (measured in terms of power distance) and Brazil the lowest. It would be reasonable to expect that high acceptance of hierarchy would lead to a greater acceptance of authoritarian leadership styles and a lack of scope for employee voice when compared with Western countries.

However, it is difficult to establish a bridge between such general characterizations of national cultures and workplace cultures. In the final analysis, workplace cultures are not a direct function of some general ‘national character’ but are also shaped by specific traditions (or the lack of such traditions) of industrial labour and the history of individual firms and plants.
1.3 THE CASE-STUDY COMPANIES

Our workplace case studies encompass the operations of two multinational companies, Volkswagen (VW) and Toyota, together with one local company from each of the BRIC countries: GAZ in Russia, Mahindra & Mahindra in India, and Geely in China. Since there is currently no local manufacturer in Brazil, our research there was confined to the two multinational firms.

Volkswagen and Toyota, with General Motors, are the three largest car manufacturers in the world. While Toyota continues to have the largest volume, Volkswagen is currently challenging this position—a situation that would have surprised branch specialists a few years ago. One factor contributing to the rise of Volkswagen has been its presence in the BRIC countries, and in particular in China.

Given the high level of public exposure of the two multinational companies, a detailed introduction seems superfluous. Toyota is an icon of the branch and its production system represents a model whose influence radiates out across the entire industry. It has generated a vast literature. While the first wave of research into the Toyota system focused on technical and organizational aspects (such as the classic studies by Shingo 1981; Monden 1993; and Ohno 1988), a second wave, which began in the early 2000s and was prompted by the introduction of the ‘Toyota Way’ in 2001 and the experience of Toyota’s North American transplants, paid much greater attention to aspects of Toyota’s personnel systems (see in particular Liker 2004; Liker and Meier 2007; Liker and Hoseus 2008). In contrast to the mainstream literature on the Toyota model, there is a smaller body of critical work that reflects the experiences of Toyota employees and highlights negative aspects of the Toyota Production System (Kamata 1983; Kato and Steven 1995; Ihara 2007).

VW has also generated a considerable research literature, often directed at the company’s unique governance arrangements and the structures and mechanisms for cooperation and reconciling interests between capital and labour that have grown up on the basis of these (see Baum-Ceisig and Osterloh 2011; Clark 2006; Haipeter 2000; Jürgens 1998). However, despite the company’s successes, VW’s ‘productive model’ has not enjoyed anything like the degree of international attention lavished on Toyota. In terms of our research field, these two companies exhibit both common features as well as marked differences. We focus on four here, beginning with their production systems.

Toyota is the origin and continuing paragon of the much-imitated Toyota Production System (TPS). The two main pillars of the ‘TPS house’, which underpin the design of all processes, are the just-in-time system (JIT), which seeks to eliminate buffers, and a commitment to ‘zero defects’ (Jidoka). Each of these principles embraces a large number of elements, such as flow production and the pull system in the case of JIT, and automatic equipment stopping and the Andon

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5 See Boyer and Freyssenet (2002) on this model; for a comparison with other production models, see also Freyssenet (1998); Boyer and Freyssenet note for the period 1974 to 1994: ‘(The) three firms Toyota, Honda, and Volkswagen were in fact the only ones to have a “break even point” that was constantly and significantly above their value added, whereas all other carmakers had experienced periods of non-profitability’ (Boyer and Freyssenet 2002: 389).
system in the case of zero defects. Since the TPS has been dealt with in considerable detail in the literature, we do not propose to go into any further depth here.

Since the early 2000s, Volkswagen has expressly modelled its production system, the Volkswagen Production System (VPS), on the TPS (Institut für Angewandte Arbeitswissenschaft, 2000), also introducing this into its operations outside Germany. New plants have been designed and planned around the system’s requirements. According to the former VW management board member responsible for production and logistics, Hubert Waltl, the VPS has an 80 per cent overlap with the TPS (Waltl and Wildemann 2014: 66). The ‘VPS house’ is based on four principles: 

1. **Takt**, flow, pull, and perfection, with the latter including the ‘zero defects’ principle. The VPS was introduced as a standardized ‘integrated production system’ across the group in 2008. However, the fact that VW has drawn heavily on the TPS has not erased all differences between the production systems of the two companies. In particular, work organization at VW continues to be influenced by the company’s traditions, such as a particular understanding of teamwork that, in line with the socio-technical systems approach, stresses the scope for self-organization. In the area of improvement activities, the preferred approach has been to make use of cross-functional workshops, drawing on shop floor actors and experts from supporting areas. In addition, Volkswagen places particular emphasis on its platform and module strategy (see Waltl and Wildemann 2014), which we do not propose to deal with in any greater detail here.

The second area is that of personnel systems, where it is the differences which predominate. Although both multinationals share a commitment to long-term and secure employment relationships, each has been shaped by differing cultural, regulatory and institutional contexts, industrial relations systems, and numerous other historically contingent influences as well as the distinctive strategies pursued, partly in response to these, by organizational actors. One upshot is the emergence of different patterns of regulation in their personnel systems, as the sections of this study dealing with employee development and pay differentiation will highlight (see Chapters 5 and 6).

Although we emphasize the underlying differences between the companies in the field of HRM, it is also important to acknowledge that each company’s personnel systems have themselves been subject to considerable changes. For example, the Toyota HR system was comprehensively reformed in the 1990s in a context in which employment in industrial firms was not seen as an attractive proposition by school leavers and graduates. The reforms included abolishing the traditional pay system, introduced by Ohno, with its tight link to ‘hard’ productivity-based indicators (Shimizu 1994 and 1999), and the introduction of career paths based on competency appraisals with further training closely related to each stage of employee development as well as other measures.

At Volkswagen, the period from the mid 2000s saw an intensive phase of reforms to the company’s HR system. Under the overall rubric of ‘High Performance HR’ (Spitzenpersonalarbeit), this involved the development of a wide spectrum of new approaches aimed at improving working conditions and raising motivation to boost performance. This went hand-in-hand with extensive standardization of these new instruments that also extended to the company’s operations abroad. These included creating structured career paths within a new arrangement known as ‘professional families’ (Berufsfamilien), the introduction of appraisals for all employees, special selection processes for supervisors and...
managers using assessment centres and further training offered in step with the individual employee’s career development, provision for individual variable performance bonuses, and—not least—a strengthening of the decentralized presence and supportive role of the HR department in manufacturing and office areas. At the time of our research, most of the new measures had been rolled out in Germany but their introduction at the company’s foreign operations was still being finalized. As a consequence, for the BRIC operations in our study this was an imminent prospect and one anticipated in some cases by locally developed instruments.

Concerning our third area of comparison, the differences between the Toyota Way and the Volkswagen Way, the TPS was complemented by the adoption of ‘Toyota Way 2001’, which specified a set of fundamental values and behaviours in which the TPS is embedded. The initiative for developing such a philosophy, and the further elaboration of the Toyota Way, was taken by Toyota’s management in North America, and, as a consequence, is itself a product of the company’s internationalization.6

The document stating the principles of the Toyota Way portrays it as a house, with a roof supported by two ‘core pillars’: ‘Continuous Improvement’ and ‘Respect for People’. The importance of these principles for operations in the Toyota group worldwide and the essence of the Toyota Way were outlined in 2006 in an interview with the then president of the group, Hiroyuki Watanabe:

The Toyota Way has been and will continue to be the standard for everyone who works for Toyota all over the world. . . . To me, it’s like the air that we breathe. The Toyota Way has two pillars: continuous improvement and respect for people. Respect is necessary to work with people. By ‘people’ we mean employees, supply partners and customers. . . . We don’t mean just the end customer; on the assembly line the person at the next workstation is also your customer. That leads to teamwork. If you adopt that principle, you’ll also keep analysing what you do in order to see if you’re doing things perfectly, so you’re not troubling your customer. That nurtures your ability to identify problems, and if you closely observe things, it will lead to kaizen: continuous improvement. The root of the Toyota Way is to be dissatisfied with the status quo; you ask constantly, ‘Why are we doing this?’ People can apply these concepts throughout the world, not just in Japan. The question is how long it takes to train people to develop the Toyota mind-set. (Stewart and Raman 2008: 14)

Watanabe’s reflective comments at the end of his portrayal of the system represent an important point of connection with our study, highlighting the aspiration to embed the principles of the Toyota Way as a corporate culture.

VW has also developed its own ‘Way’. This denotes a comprehensive process of organizational development that was negotiated with the works council and enshrined in a set of company agreements on teamwork, continuous improvement, goal-setting—which embraces all levels of the company down to individual teams—as well as a framework agreement on the ‘Volkswagen Way’ as a whole. This stipulates that ‘employees will not suffer any detriment through their participation in the Volkswagen Way, also in relation to their pay’. Any

6 Developing the underlying document for this was a protracted and difficult process that took ten years. Even after this, there was not unanimity and, as Liker and Hoseus note (2008: 14), one participant stated ‘we finally agreed to call it the Toyota Way 2001 to acknowledge there is not 100 percent agreement on what the Toyota Way is and it is always changing’.
local efficiencies achieved through applying the Volkswagen Way will ‘primarily be invested in structural improvements to the working environment, measures to develop competencies and other forward-looking steps’ (Volkswagen, Supplementary Agreement to Workplace Agreement No. 6/06, translated for this study).

VW and Toyota are evidently each pursuing quite different objectives with their respective ‘Ways’. While it is characteristic of Volkswagen that its ‘Way’ will be negotiated with the works council, this arrangement also means that this regulatory approach is confined to the company’s German operations.

In contrast to Toyota, Volkswagen does not have a documented set of fundamental values and behaviours that underpin the aspiration for a distinctive corporate culture. An attempt to develop a global company culture for the entire group, which was begun in 2001 and was intended to ‘place the outlook of more than 300,000 employees worldwide on a common platform of values’ (cited in Hofmann 2010: 99), to use the formulation of the then chair of the management board, was regarded by 2007 as having failed.

Although there is no overarching statement of corporate culture, there are a number of widely shared basic views and beliefs. These include the recognition that capital and labour have legitimately different interests within the company and that the everyday practice of codetermination represents an approach that allows these differences to be acknowledged while creating a foundation for cooperation on the basis of mutual trust. For management, this approach ensures that enduring solutions can be found, even to contentious issues, as the fact that the works council will have assented to them means they will also be widely accepted by the workforce. For employees, the system of codetermination generates confidence that these solutions are fair and that their interests will have been taken into account.

One further element in the VW culture is the concept of ‘Fachlichkeit’. This term denotes knowledge and skills that go beyond the requirements of the worker’s immediate job and are related to the demands of the processes and technologies within the ‘professional family’ that groups together the roles in the employee’s functional area. A professional family includes a number of occupations that, combined, have overall responsibility for an area of work. It is distinguished from other families by the specific requirements to which it is subject and the technologies used. In some respects, professional families correspond with traditional functional divisions (such as HR or marketing) or specific production areas (such as toolmaking). As such they constitute the framework for career development paths and workplace relationships in which managers also serve as teachers (‘community of teachers and learners’). The recognition of employees that grows out of Fachlichkeit relates to wider traditions of the notion of occupation (in the sense of the German term ‘Beruf’) and is not limited to the internal world of the company. It does not, therefore, create a unique tie to the company; in fact, acquisition of these skills raise the prospects of finding a job at another firm.

A comparison of the two companies suggests that while Toyota aspires to establish a closed system that aims to socialize the ‘whole’ person, such an approach would be inconceivable at VW. Volkswagen’s company culture brings together a looser coupling of elements, including the promotion of Fachlichkeit in employees’ areas of activity.
Fourthly, on the issue of the relationship between the company and trade unions, the two firms have very different approaches. In Japan, Toyota has an enterprise union with which the company works closely. According to Liker and Hoseus (2008: 384), the company’s approach in other countries depends on how trade unions conduct themselves:

As long as the union operates within the Toyota Way, with mutual trust and respect and facilitates continuous improvement for the company’s long-term prosperity, then it will be a positive situation for all the stakeholders. Problems will arise if the union interferes with the relationship of mutual trust between team members and management or if they put restrictions on flexible polices and practices that help the company adapt to business needs.

Although Toyota does not pursue a policy of union avoidance, it sees the role of the HR function as being ‘the “police” of fairness, reducing the need for another third party to represent the interests of labor’ (Liker and Hoseus 2008:387).

In Germany, Volkswagen has built up close relationships with the union-dominated works council on the basis of the statutory system of codetermination and views these institutions as a strength for the company that it seeks to export to its foreign operations (Baum-Ceisig and Osterloh 2013; Haipeter 2000).

Given Volkswagen’s embeddedness in German institutions, the company’s operations abroad are confronted with the issue of the extent to which its HR and production systems, and the underlying company culture, can be implemented in environments in which comparable institutions are absent. Edwards (2004) argues that it is precisely such embeddedness in a dense network of institutions that can seriously impede transferring practices. In this respect, Toyota’s approach would appear more straightforward. However, a great deal of time is also required for the gradual and step-by-step socialization of employees into the Toyota culture that is such a notable feature of the company.

Given that the following chapters will provide a more detailed presentation of the two company’s practices, this short overview will suffice as an introduction. In addition to the two multinational companies, our study also included indigenous manufacturers in Russia, India, and China, about which much less is known. These short portraits outline the background of these manufacturers.

In Russia, we looked at the oldest national manufacturer GAZ (Gorkovsky Avtomobilny Zavod), established in 1932 and located in Nizhny Novgorod. The company mainly produces commercial vehicles, but also assembles some passenger cars (Siegelbaum 2008). It was hit hard by the collapse of the Russian car market in the 1990s, with production slumping from some 370,000 vehicles in 1990 to 200,000 by the late 1990s. In 2000, GAZ was bought by the oligarch Oleg Deripaska and integrated into a new group, GAZ Holding, which owns a number of plants for manufacturing commercial vehicles, buses, engines, and components as well as the GAZ car plant in Nizhny Novgorod. However, the new owner was also unable to stem the drop in production and employment. By 2010, GAZ’s workforce was down to 24,000, compared with its previous 100,000. Since the company lacked the capacity to develop competitive cars independently, it embarked on a strategy of contract manufacturing, buying production equipment from Chrysler and assembling Chrysler vehicles on licence. When GM contemplated selling its German subsidiary Opel at the most acute stage of the economic
In 2010, there were ambitious hopes of buying Opel in consort with Magna International, the Canadian-Austrian automotive supplier. When this plan foundered, GAZ agreed contracts to produce vehicles on licence for VW, Skoda, and General Motors.

In India, we conducted research at Mahindra & Mahindra, established in 1945 and now one of India’s largest family conglomerates and a multinational company itself, with around 150,000 employees worldwide. The automotive division includes the production of cars, commercial vehicles, parts, and production equipment. Mahindra & Mahindra has six car plants in India together with CKD facilities in Egypt and Brazil. As with GAZ, the company has also pursued a contract manufacturing strategy. In 1995, it entered into a joint venture with Ford that was terminated in 2005 as sales failed to match expectations. In 2005, Mahindra & Mahindra began a joint venture with Renault that was also terminated after only a short while. Since the early 2000s, the company has accelerated the development of its own products and has acquired both the Korean manufacturer Ssangyong and Reva, an Indian manufacturer of electric cars. The successful launch of its own SUV in 2002 marked a major step forward for the company.

In China, our research was conducted at Geely (formally, Zhejiang Geely Holding Group Co., Ltd). Originally established in 1986 to manufacture refrigerators, Geely is now a conglomerate with automotive and education divisions, and subsidiaries in commerce, tourism, and hotels. The automotive division encompasses distribution and aftermarket services, component suppliers, eight assembly plants in China (together with CKD assembly of Geely vehicles by licensees in Russia, Ukraine, Indonesia, Sri Lanka, and Malaysia), and a research and development division. In 2009, the automotive division had 13,000 employees. The company is entirely privately owned, an exception to the traditional state-dominated corporate governance model in the Chinese car industry. However, the state is a significant stakeholder. Geely has enjoyed the support of the Zhejiang provincial government, where it was founded, ever since its establishment. This has taken the form of support for obtaining necessary licences, low cost provision of land, tax subsidies, and lobbying (Anderson 2012). Geely’s first vehicles were based on Daihatsu models (Wang 2008). Since 2009, the company has aimed to shed the image of a low-cost producer and has launched two independently developed models—a small car and a mid-size saloon (Li and Xie 2010). In 2010, Geely bought Volvo to gain access to more demanding segments of the market through transferring technology. The company also now owns the firm that manufactures the traditional London taxi.

The manufacturers in this study represent a contrasting range of firms. While Volkswagen and Toyota are very large-scale multinational producers, GAZ, Mahindra & Mahindra, and Geely are indigenous manufacturers with fairly low volumes and barely any presence on the world market—although Mahindra and Geely are engaged in efforts to internationalize themselves, primarily through sales operations but also with some manufacturing affiliates.

As multinational manufacturers, both Volkswagen and Toyota have long histories of internationalization but with a particularly rapid expansion of their global presence during the 2000s. For example, the share of employment outside Germany at the Volkswagen group grew from 48 to 54 per cent between 2002 and 2012; 16 per cent of group employment (and 30 per cent of all employment
outside Germany) was accounted for by the BRICs alone (Volkswagen 2006, 2013). In the case of the Toyota Motor Corporation (and excluding Daihatsu and Hino), the proportion of foreign employment rose from 65 per cent in 2007 to 71 per cent in 2012. The BRICs’ share of total employment was 20 per cent in 2012 (corresponding to 28 per cent of foreign employment) (Toyota, 2007, 2012). In the case of the three indigenous manufacturers, annual output in 2012 was just under 500,000 units at Geely and Mahindra & Mahindra, and 90,000 units (cars only) at GAZ. Table 1.2 sets out figures for production and employment at all the companies in the present study.

### Table 1.2. Production and employment in case-study companies (2012)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Toyota Group</td>
<td>9,909,000</td>
<td>325,900</td>
</tr>
<tr>
<td>Volkswagen Group</td>
<td>9,255,000</td>
<td>550,000</td>
</tr>
<tr>
<td>Geely</td>
<td>491,000</td>
<td>18,500</td>
</tr>
<tr>
<td>Mahindra &amp; Mahindra</td>
<td>483,000</td>
<td>17,800</td>
</tr>
<tr>
<td>GAZ</td>
<td>90,000</td>
<td>7,300 (2010)</td>
</tr>
</tbody>
</table>

Note: The Volkswagen Group includes VW, Audi, Skoda, SEAT, and several other marques. The Toyota Group includes Toyota and Lexus, plus Daihatsu and Hino Motors. Only data for the automotive division is included for Mahindra & Mahindra. At GAZ, figures are for light commercial vehicles, excluding trucks. Employment figures do not include temporary, agency employees. Sources: Company data, annual reports.

1.4 THE PLANTS

Table 1.3 provides an overview of the plants included in the study for all the companies researched.

There are major differences between the plants:

- Different production histories, with both long-standing and very recently established operations. For example, both of Volkswagen’s operations in Brazil (Anchieta and Taubaté) are fairly old, as are VW’s two Chinese plants (Shanghai and Changchun), with the GAZ plant at Nizhny Novgorod the most senior of all; on the other hand, some of the plants have only been established since 2000.

- Different ownership structures. In some cases, the assembly plants are not wholly owned subsidiaries of the manufacturers but joint ventures with local partners. For example, in China Volkswagen operates joint ventures with two state-owned enterprises, SAIC and FAW. The Toyota operation in China we researched is also in the form of a joint venture with FAW. In all these joint ventures, the Chinese partner occupies some positions on the executive board and is able to exercise particular influence over HRM. The Toyota operation in India is a joint venture with Kirloskar, although the Indian partner only owns a 10 per cent stake and does not exert any operational influence.

- Very diverse production programmes, with large facilities such as Shanghai, Changchun, or Anchieta, which encompass several plants, and smaller units,
such as Toyota St Petersburg. There are large variations in the complexity of the product programmes. Volkswagen’s and Toyota’s joint ventures in China and the new VW plants at Kaluga (Russia) and Pune (India) produce a very wide range of vehicles, which imposes particular demands both on work organization and employee skills. In contrast, Toyota’s plants in Brazil and Russia, as well as the plants belonging to the indigenous manufacturers (Geely and GAZ), have much simpler product programmes.

- Differing degrees of production automation. All the case-study plants are considerably less automated than plants in Europe and the United States. The level of body shop automation is especially low in India, where wage costs are also notably low. However, there are differences between the companies on this issue. Volkswagen tends to adopt a higher level of automation than Toyota—with the notable exception of FAW-Toyota in Tianjin—and the local BRIC manufacturers. Automation also has impacts on HR systems, primarily in terms of skills and training requirements. Intensive automation is one of the factors that has led to VW placing considerable emphasis on the

---

**Table 1.3. Overview of case-study plants (2011)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Plant Name</th>
<th>Year</th>
<th>Production</th>
<th>Employment</th>
<th>Automation*</th>
<th>Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>VW Anchieta</td>
<td>1959</td>
<td>400,000</td>
<td>14,600</td>
<td>60% (Polo line)</td>
<td>Gol, Polo, Saveiro, Kombi, Parati, Gol, Voyage, Fox, Golf</td>
</tr>
<tr>
<td></td>
<td>VW Taubaté</td>
<td>1976</td>
<td>250,000</td>
<td>4,600</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VW Curitiba</td>
<td>1999</td>
<td>180,000</td>
<td>3,200</td>
<td>50%</td>
<td>Fox, Golf</td>
</tr>
<tr>
<td></td>
<td>Toyota Indaiatuba*</td>
<td>1998</td>
<td>60,000</td>
<td>2,000</td>
<td>25%</td>
<td>Corolla</td>
</tr>
<tr>
<td>Russia</td>
<td>VW Kaluga</td>
<td>2007</td>
<td>125,000</td>
<td>5,600</td>
<td>20%</td>
<td>Tiguan, Polo, Octavia, Fabia</td>
</tr>
<tr>
<td></td>
<td>Toyota St. Petersburg*</td>
<td>2007</td>
<td>18,000</td>
<td>800</td>
<td>&lt;5%</td>
<td>Camry</td>
</tr>
<tr>
<td></td>
<td>GAZ Nizhny Novgorod*</td>
<td>1932</td>
<td>53,000</td>
<td>6,600</td>
<td>20%</td>
<td>Gazelle, Woldai, heavy commercial vehicles</td>
</tr>
<tr>
<td>India</td>
<td>VW Pune</td>
<td>2009</td>
<td>100,000</td>
<td>3,800</td>
<td>13%</td>
<td>Polo, Vento, Fabia</td>
</tr>
<tr>
<td></td>
<td>Toyota Bangalore</td>
<td>1999</td>
<td>80,000</td>
<td>5,200</td>
<td>n.a.</td>
<td>Corolla, Innova, Fortuna</td>
</tr>
<tr>
<td></td>
<td>M&amp;M Chakan*</td>
<td>2009</td>
<td>50,000</td>
<td>2,000</td>
<td>12%</td>
<td>Maxximo Minitruck, heavy commercial vehicles</td>
</tr>
<tr>
<td>China</td>
<td>Shanghai VW</td>
<td>1985</td>
<td>1,200,000</td>
<td>24,000</td>
<td>35% (Car Plant 3)</td>
<td>Touran, Polo, Passat, Octavia, Lavida, Fabia, Superb, Tiguan</td>
</tr>
<tr>
<td></td>
<td>FAW-VW Changchun</td>
<td>1991</td>
<td>1,000,000</td>
<td>18,500</td>
<td>25%</td>
<td>Jetta, Audi A4/A6, New Bora, Sagitar, Magotan, Audi Q5, Golf</td>
</tr>
<tr>
<td></td>
<td>FAW-Toyota Tianjin*</td>
<td>2002</td>
<td>400,000</td>
<td>15,000</td>
<td>60%</td>
<td>Crown, Reiz, New Corolla, RAV4</td>
</tr>
<tr>
<td></td>
<td>Geely Ningbo</td>
<td>2002</td>
<td>100,000</td>
<td>3,000</td>
<td>25%</td>
<td>Emgrand</td>
</tr>
</tbody>
</table>

* 2010. Data for VW Anchieta, Shanghai VW, and FAW-VW are for the entire facility, including several assembly and component plants and company headquarters. The level of automation is for body shops (principally welding). Unless stated otherwise, data is the average figure where several body construction lines are in operation.
Figure 1.3  Production in case-study VW plants in the BRICs, in million vehicles, 1999–2012
Source: Figure created by authors based on data provided by Volkswagen

Figure 1.4  Production in case-study Toyota plants in the BRICs, in million vehicles, 1999–2012
Source: Figure created by authors based on data provided by Toyota

Figure 1.5  Home country output at GAZ, Geely, and Mahindra & Mahindra, in million vehicles, 1999–2012
Source: Figure created by authors based on data provided by the companies
German approach to vocational training, as automated equipment requires especially skilled operators and maintenance.

- The new plants have grown at very different speeds. In particular, Volkswagen’s plant in Russia attained full production on three shifts within a very few years, which called for massive efforts in terms of recruitment and training. In comparison, Toyota’s plants in Russia and Brazil, and also the new plants opened by Geely and Mahindra, went through a much slower period of growth, with more time available for recruitment and training.

These different speeds are interesting as they highlight a number of important differences in how the operations included in our research have developed. Figure 1.3 shows the production figures for Volkswagen plants in the BRICs, Figure 1.4 for Toyota, and Figure 1.5 for the indigenous manufacturers. In the case of VW, the enormous increase in production at the Chinese plants after 2005 is very evident as are the relatively rapid increases in Russia and India (with 40,000 vehicles attained in the second years and over 100,000 in the third).

Compared with VW, the growth of production at the Toyota plants in Brazil, Russia, and India has been relatively restrained. Moreover, the plants in Brazil and Russian produce only a single model, which considerably eases the process of expanding production.

Of the indigenous manufacturers, Geely and Mahindra & Mahindra have grown steadily and in 2012 produced around half a million vehicles each, although time-series data is only available for the total production for all the plants of these companies. In contrast, production fell at GAZ up to 2009 and, at the time of our research, had stagnated at a low level.

1.5 METHODOLOGY AND DATA

The core of this study consists of case studies of a number of car plants in the BRIC countries. These case studies entailed wide-ranging primary research, as set out below. Research was undertaken by the authors in all the countries,7 with the support of four research collaborators based in the BRICs: Adriana Marotti de Mello (University of São Paulo) in Brazil; Elena Shulzenko (University of Copenhagen) in Russia; Sanyjot Joshi (consultant) in India; and Yu Nan (University Jilin) in China.

The case studies were anchored in a number of theoretical considerations that we had developed beforehand, but also involved a substantial exploratory element that meant that we were especially open to the influence of contextual factors (cf. Hirsch-Kreinsen 2010; Brewster and Mayrhofer 2009). As such, our approach shared some common features with Grounded Theory (Charmaz 2006): that is, simultaneity of data collection and analysis and step-by-step development

7 The field research in Brazil, Russia and China was carried out by Ulrich Jürgens and Martin Krzywdzinski and in India by Ulrich Jürgens together with Florian Becker-Ritterspach.
of theory over the course of the research process. We repeatedly subjected our
questions and categories to a process of revision in order to adapt them to the
knowledge we gained from our interviews.

In contrast to Grounded Theory, however, we did not enter the field without
any prior knowledge or expectations but had already developed a provisional
matrix of categories based on our prior theoretical work. This matrix was also
paralleled by a number of assumptions about the differences between the person-
nel and production systems in the companies in the study and the possible effects
of institutions in the BRIC countries. Our assumptions and the reasoning behind
them in the context of the discussion of the theories involved are set out in
Chapter 2. However, the research was not designed expressly to test any specific
hypotheses. Rather, the concepts and assumptions used served to organize the
empirical research.

The research was based on qualitative case studies. One issue we faced was how
to ensure the quality of qualitative research in countries with highly diverse
cultural and institutional contexts. Flick (2007: 21) suggests that the quality of a
research process should be established through transparency in the researchers’
strategies towards three key tasks:

- Selecting the relevant data sources.
- Quality assurance when collecting data.
- Quality assurance when interpreting data.

The first step in terms of selecting the relevant data was the decision about the
choice of locations and of companies. We decided to include multinational com-
panies (Volkswagen, Toyota) and indigenous manufacturers in order to capture the
approaches introduced by the multinationals as well as locally developed practices.
The choice of Volkswagen and Toyota was shaped by the fact that both these
companies have set up plants for car production in all four BRICs. Although both
GM and Ford would have also met this criterion, and we would have been happy to
have included these, at the time of our research these companies were seriously
afflicted by the economic crisis, which had a particularly severe impact on the US
car industry and made a research study impossible. More positively, Toyota and
Volkswagen were also chosen because both have played a leading role in the most
recent wave of the internationalization of the car industry. Each also represents a
distinctive model of HRM. As yet, there has been no comparative study of these two
models in the research literature.

As far as the choice of the indigenous manufacturers was concerned, the
research literature did not provide a great deal of prior information.

Our study focused on the final assembly of passenger cars. Although the plants
in our research differed considerably in terms of size and age, they were similar in
terms of organizational structures and technical processes. There is a large body of
comparative plant-based research on the car industry: our findings can therefore
contribute to this wider discussion.

We included those aspects of HR systems that we felt were relevant to the
research question: that is, recruitment, training, employee development, pay and
incentive systems, communication systems, and employee voice. In addition, we
included related aspects of production systems: that is, work organization and the organization of improvement processes. Table 1.4 sets out the research variables by topic area that we aimed to capture through interviews.

We did depart from our research plan at the request of Toyota, which asked us not to investigate industrial relations and employee voice at its BRIC operations on the grounds that, at the time of our study, the company considered this too sensitive an issue.

A number of problems had to be resolved to ensure the *quality of data collection*, the second of Flick’s methodological prescriptions. Firstly, access had to be obtained to the proposed case-study companies. This aspect is the focus of a good deal of attention, in particular in the ethnographic literature (O’Reilly 2012; Bucerius 2013). Securing access and building trust are especially difficult in an

Table 1.4. Research variables by topic area

<table>
<thead>
<tr>
<th>Topic Area</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Organization of the HR function</td>
<td>Scope of HR; decentralized organization of HR; forms of communication and channels between HR and employees; central HRM standards; HRM best practices and models.</td>
</tr>
<tr>
<td>2 Recruitment</td>
<td>Recruitment criteria for production workers, workers in skilled roles, white-collar staff (psychometric criteria, training qualifications, work experience, age, sex etc.); fixed-term contracts (proportion of all contracts, duration, where used, reasons); temporary agency employment (proportion of all contracts, duration, where used, reasons).</td>
</tr>
<tr>
<td>3 Training</td>
<td>Initial training for production workers (on and off the job); initial training for workers in skilled roles (on and off the job); training for first-line supervisors; cooperation with educational establishments; support for external qualifications, scholarship programmes.</td>
</tr>
<tr>
<td>4 Employee development</td>
<td>Development and career paths by employee category (barriers, structuring and transparency of career paths); selection and promotion processes for various career stages; supplementary training for development for expert and supervisory positions; competency appraisal (process, criteria, effects).</td>
</tr>
<tr>
<td>5 Incentive systems</td>
<td>Grading criteria for basic pay (job complexity, qualifications, seniority etc.); basic pay differentials; supplements and benefits (type, level, criteria); variable pay elements (individual, collective, gain-sharing—levels and criteria for differentiation); performance appraisal (process, criteria) and its link with pay.</td>
</tr>
<tr>
<td>6 Work organization</td>
<td>Selection and role definition of shop floor supervisors; selection and role definition of team spokesmen/team leaders; teamwork (team size, team tasks, micro-roles within teams, self-organization); continuous improvement processes (team based, expert based, top-down, bottom-up); quality control in cooperation between manufacturing teams and quality assurance; use of ‘Andon’ cords in the production process.</td>
</tr>
<tr>
<td>7 Industrial relations and employee voice</td>
<td>Union density and structure; non-union forms of employee representation; structures for information and consultation between management and employee representatives; inclusion of employee representatives on recruitment, training, employee development, pay and incentive systems, work systems; collective bargaining.</td>
</tr>
<tr>
<td>8 Work attitudes, behaviour, employee satisfaction at work</td>
<td>Number of and reasons for disciplinary measures; implementation of standardized work; absence; labour turnover (reasons, proportion of employee quits).</td>
</tr>
</tbody>
</table>
international study in which researchers come from abroad and are likely to be unfamiliar with the national context. As a consequence, one of the fundamental conditions for our study was establishing cooperation with the corporate centres of Volkswagen and Toyota, which was a prerequisite for being able to conduct research in the depth we aspired to. However, close cooperation with corporate headquarters also entailed the risk that local interlocutors might see us as ‘policing’ them on behalf of the corporate centre. We were also aware that when interpreting the results from interviews we needed to be alive to the fact that our corporate-level access might prompt ‘socially desirable’ responses to questions in line with the group standards set for factory operations. We attempted to control this by interviewing a wide range of actors in varying functions and at varying levels within the corporate hierarchy, together with workplace employee representatives and trade unions. During the course of the research we tried to remain open and receptive to new questions and topics that we had not anticipated and that had emerged during the course of the interviews.

Secondly, we took considerable pains when formulating and translating questions and terms to ensure that we and our interviewees in the BRIC countries shared a common understanding of what these denoted. Although this might seem a trivial consideration at first sight, in fact it proved to be fundamental (on the problems of cross-cultural translation, see Olatundun 2009; Regmi et al. 2010). For example, the concept of ‘teamwork’ has very differing connotations in German and Japanese companies and it was far from self-evident how this term should be rendered in Chinese or Russian. We noted, for instance, that ‘teamwork’ (which we understood in this context as a specific organizational approach within manufacturing) was understood as ‘team spirit’ in China (meaning a general capacity for cooperation, independent of the organization). We attempted to resolve the challenge of translating concepts and categories into other languages, and national and company cultures, primarily through cooperation with our ‘sherpas’ in the BRICs. This in turn required frequent initial explanation, clarification, revision, and mutual discussion in order to avoid and eliminate misunderstandings—also leading to the project itself becoming a rather fascinating intercultural experience for the immediate participants. Many statements made by interviewees passed through a process of multiple translation and we can only guarantee that the risks of getting ‘lost in translation’ were obviated to our best knowledge and belief. One further difficulty in connection with translation was that of rendering company-specific terms. While the worldwide diffusion of Japanese production system terminology in recent decades has meant that there are relatively few difficulties with Japanese terminology, German specialist terms prompted a number of difficulties. It proved particularly challenging to translate a number of core notions within the German employment system in a way that fully reflected their attached connotations: examples included Facharbeiter (apprenticeship-trained skilled worker), Beruf (occupation but also vocation), and Fachlichkeit (expertise and professionalism). Translation problems were also associated with the deceptive equivalence of some functional designations, in particular in the area of job titles within organizational hierarchies—an issue we return to in subsequent chapters.


A third point in connection with the quality of data collection was ensuring the reliability of information obtained from a limited number of qualitative interviews. We made considerable efforts to take into account the differing perspectives and interests that exist within organizations. Structured interviews to collect qualitative data were conducted with five categories of actors:

- Managers from HR and production management (local managers and expatriates)
- Shop floor supervisors (*Meister*, team leaders, first-line supervisors)
- Blue-collar workers (‘operatives’)
- Trade union or works council representatives
- Representatives of relevant institutions (vocational training institutions, universities, employer associations, trade unions) and experts in the car industry.

By conducting interviews with car industry experts, researchers, representatives of industry and employer associations and of official bodies we aimed to ensure that the case-study findings were supplemented by contextual information on production and employment systems in each country, and also to reconcile our observations and assessments with those of experts.

Table 1.5 provides an overview of the number of interviews conducted.

Research began with a one-week pilot study in each country. This comprised an initial visit to the case-study plants, presentation of the research project, preparatory interviews, and a discussion with plant managements about the selection of interviewees. The main research phase usually took place between six to nine months after the pilot study. Two to three years after the main research phase we tried to update and check the information we had obtained by means of interviews at the companies’ headquarters as well as, in some cases, short visits to the companies’ operations in order to establish which of our findings had remained stable and which had reflected specific and immediate situations. In short, there were several visits to each location at different times.

In terms of countries and locations, research took place at the following times:

- Brazil: pilot study in March 2009, main research in November and December 2010, follow-up interviews in February 2013;

Table 1.5. Interview statistics

<table>
<thead>
<tr>
<th>Category</th>
<th>Brazil</th>
<th>Russia</th>
<th>India</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR department</td>
<td>24</td>
<td>25</td>
<td>32</td>
<td>40</td>
</tr>
<tr>
<td>Production management</td>
<td>25</td>
<td>20</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Shop floor*</td>
<td>28</td>
<td>15</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td>Trade union, works council</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>External experts</td>
<td>11</td>
<td>2</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>95</td>
<td>67</td>
<td>75</td>
<td>116</td>
</tr>
</tbody>
</table>

* Supervisors, team leaders, operatives
Our findings are tied to the time at which the research was conducted. They reflect a period of some four years during which the BRICs passed through a very dynamic phase of development. By collecting data at a number of points in time over this four-year period, we have been able to some degree to isolate stable factors and trends from short-term issues at the case-study companies. Nevertheless, our results should be read with an awareness of the fact that they represent a single slice within a process of rapid movement and change in global worlds of work.

The third central aspect for quality assurance in qualitative research, again drawing on Flick, is data interpretation. This required bridging the substantial cultural differences between Germany (home country of the researchers), Brazil, Russia, India, and China, but also between the differing corporate and organizational cultures of Volkswagen, Toyota, and the local manufacturers in the BRICs. We chose four methods to tackle this (cf. Maxwell 2004):

- **Theory triangulation**: we discussed our findings, and our interpretations of them, from differing theoretical perspectives that would suggest differing initial hypotheses about developments in the BRICs.
- **Investigator triangulation**: we conducted interviews together with our local cooperation partners and jointly discussed our interpretations of the interviews.
- **Data triangulation**: we cross-compared the findings from our interviews with various groups of actors (expatriates and local managers, employee representatives, managers from different functional areas, such as HR and production, and from different positions in the workplace hierarchy). In addition to qualitative interviews, we also collected data at the case-study establishments on quantitative indicators such as absence, employee turnover, workplace conflict, and levels of educational attainment. We compared our case-study findings with those from our interviews with sectoral specialists.
- **Respondent validation**: we presented the results of our research to the participating companies in the form of a report and in some cases in the form of personal presentations at the local operations, and asked for comments and corrections.

These strategies on data selection, data collection and data interpretation were intended to balance the need to apply a uniform research format at a number of differing locations with a desire to remain receptive to new questions and issues. This dual objective also characterizes the manner of our presentation in the following chapters.
Introduction

1.6 OVERVIEW

The presentation begins in Chapter 2 with a discussion of those theories relevant to our research question and argument. As already noted, given the limited extent of research in this specific field, we opted for a more exploratory approach. However, the research is not ‘theory free’ but rests on a number of initial assumptions and expectations. The aim of Chapter 2 will be to review these assumptions, drawing on the current literature, and refine them for the purposes of empirical research. We make use of four—in part complementary but also opposing—explanatory approaches. These are, firstly, the discussion around High Performance Work Practices, which leads on to the hypothesis of a convergence of production and employment systems based on the companies’ efforts at standardization. Secondly, the counter-thesis, which argues for the persistence of characteristics based in the differences of the national employment systems, originates with Marsden’s theory of employment systems. Thirdly, we engage with the theoretical discussion over the influence of culture either as a hindrance or support for implementing production and HR systems in our case-study companies. Fourthly, and finally, we consider the arguments around the concepts of ‘high road’ or ‘low road’ developmental trajectories, in which the conditions prevailing in the BRICs are viewed as a possible source of dualization and possibly, but not necessarily, of a general deterioration of the conditions for industrial work worldwide.

Chapter 3 introduces the empirical analysis with portraits of the locations and actors included in the study. This begins with a descriptive overview of the plants’ locations that is intended to draw readers a little closer to the places where we conducted our research. Following this, we look in more detail at car workers’ wider living conditions. At some locations—notably China and Brazil—workers have experienced substantial upward social mobility, almost becoming members of the ‘middle class’; in contrast, the situation of workers in Russia and India continues to be heavily shaped by their previous experience of precarious employment. Chapter 3 also includes brief biographies of some of our interview partners: although these cannot be seen as representative, and are not intended as such, they serve to highlight the very differing social contexts in the case-study countries.

The final section of Chapter 3 introduces the case-study plants. This includes an overview of their histories and outlines their product programmes, employment levels, and the degree of automation. One further important aspect for our research is a short description of the companies’ production systems, focusing on the extent to which they have implemented the principles of lean production, as understood within the Toyota Production System.

Chapter 4 deals with recruitment processes. Employees’ subsequent attitudes and dispositions are profoundly affected by their experience of the recruitment process, which provides their first impressions of the future employer. Establishing what type of employees firms look for is central to our research question. Do they recruit production workers ‘off the street’ and without major requirements in terms of skills and qualifications; or do they employ much more stringent selection processes? Do they offer long-term employment or exploit the scope for temporary and short-term employment relationships—which would be an indicator of a low-road approach?
A further consideration in this chapter is that of systems of vocational training in the BRIC countries and the issue of the extent to which these meet the requirements of the car manufacturers. This chapter therefore also encompasses those steps that immediately follow on from recruitment—the onboarding process and initial training. We focus initially on the training of production workers, mainly using on-the-job methods. We then consider the training of skilled workers who operate complex and automated equipment or carry out maintenance roles. In their home countries, Volkswagen and Toyota represent different approaches to the training of such employees. We research how these differing approaches fare in the BRICs. This also opens up the issues raised by our research questions: to what extent do companies opt to invest in skills as an element of HPWP and what differences are there by company and by national context?

Chapter 5 then follows employees in their subsequent paths within the case-study companies. Whether long-term career development is provided constitutes an important indicator of the adoption of HPWP and a 'high road' approach. The core of this chapter therefore deals with the issue of the implementation of the two different approaches to employee development at Volkswagen and Toyota under the conditions prevailing in the BRICs. Employee development, especially of the production workforce at Volkswagen, is based on a position-based logic: promotion signifies a transfer to a more complex job or a higher level in the hierarchy and often depends on the employee's individual initiative and the availability of a suitable vacancy. In contrast, employee development at Toyota is based on a ranking system. Promotion depends on an individual competency appraisal, is independent of the job that the employee is currently performing, and is managed very rigorously by the organization and relies much less on individual employee initiative. In this chapter, we explore the extent to which these two systems have affinities with practices in the BRICs and analyse the particular problems in these countries in designing paths for employee development, and the scope for employees to cross between them, as a consequence of the persistence of rigid status differences (such as between blue-collar and white-collar employees) and, in India, the background of caste.

Secondly, one further interest is in the approaches to employee development adopted by the indigenous manufacturers. Do they use any form of career development for blue-collar workers at all or are such initiatives confined to white-collar staff and management? What effect do national institutions and traditions have on employee development policies and practices?

Chapter 6 considers pay and incentive systems, which play a central role in economic theory in limiting opportunistic behaviour and in motivation, and which are therefore key in determining whether production and HR systems can operate successfully in line with company objectives. Pay systems are closely linked with employee development systems and rest on the same underlying principles. Again, in this chapter we draw a distinction between position-based and person-based systems. Marsden’s theory would suggest that affinities will exist in the BRIC countries with either one or the other of these two principles. Do the two multinational firms attempt to implement their systems in the BRIC
countries? What conflicts and tensions does this generate? What types of payment system are operated by the indigenous manufacturers?

Whereas the theory of employment systems focuses on the underlying logic determining basic pay, one of the core principles of the HPWP approach is that systems will converge through the diffusion of individualized performance pay. We consider the extent to which individual variable pay has been implemented in the case-study BRIC manufacturing operations and, in particular, how employees and trade unions respond to this.

Chapter 7 takes us into the plants themselves and directly on to the shop floor of manufacturing operations. Had lean production been diffused to all the case-study plants in line with the paradigm, then it would be reasonable to expect a high degree of convergence, with deviations due only to the age of the plant or the complexity of the production process. In order to detect differences between the BRIC locations, we concentrated on those aspects of production systems for which we might have expected there to be a particularly marked variance as a result of historical and cultural features. These aspects included, firstly, the organization of teamwork and secondly, the extent to which production workers are involved in improvement processes. Traditions of authoritarian leadership styles led us to expect that the BRICs would be characterized by a low degree of self-organized teamwork and worker involvement. Moreover, the case-study firms exhibited major differences in the design of teamwork, the definitions of supervisory roles, and improvement processes. We were also interested in the acceptance of standardized work, a core element in lean production, and the requirement for high levels of work discipline on the part of blue-collar employees both in assembly-line work in general and in lean production systems in particular. The demands of assembly-line work often meet with rejection specifically at new plants and in regions without traditions of industrial large-scale manufacturing. In our case studies, we also found evidence of marked differences in shop floor behaviour that could be traced back to the effect of HR systems, as we explore in subsequent chapters.

Finally, in Chapter 8 we turn to industrial relations and employee voice. Our interest here is the question as to which forms of employee voice companies seek to install in the BRICs and the role of trade union representation. We examine whether union representation and management-led voice channels are complementary or alternatives—a highly controversial issue in the literature. The firms in our study pursued very different strategies. For Volkswagen, union recognition is a corporate standard, complemented by an orientation to the German model of cooperative and professionalized relationships between the works council and the company. We reflect on the difficulties of implementing this model in the BRICs, either because of the fundamental beliefs that characterize these trade unions, the lack of professionalized employee representatives or, in the case of China, the absence of independent trade unions. In the case of Toyota, as already noted, we refrained from investigating the issue of industrial relations and employee voice at the company’s request. Given the profound influence of national regulations on employee representation and industrial relations, we also look in some detail at national institutional arrangements and discuss the strategies adopted by companies in these differing contexts.
Chapter 9 draws together our conclusions in the light of the research questions posed at the outset. The first two sections discuss the evidence supporting either the convergence or divergence thesis. We then move to the standardization strategies in the field of HRM adopted by the two multinationals and the influence of culture in terms of the constraints this might impose on standardization. The concluding section is concerned with the question of the extent to which the systems used by companies exploit the scope in the BRICs for ‘low cost’ solutions or whether they lay the foundations for a ‘high road’ path.