VW’s Modular System and Workers’ Organization in Resende, Brazil*

JOSE´ RICARDO RAMALHO AND MARCO AUR´ELIO SANTANA

Introduction

This article analyses the changes taking place in the Brazilian vehicle assembly industry of the 1990s with particular reference to the state of Rio de Janeiro, Brazil. It focuses upon a case study of Volkswagen’s bus and truck plant and its workers at Resende. The plant opened in 1996 on a greenfield site and was presented as a major development in vehicle assembly. The unique feature of the plant’s production system rests on the relationship between the assembler (VW) and its component suppliers. At Resende these were involved in a joint enterprise to establish a ‘modular system’ of production. In this system, the component suppliers finance a part of the factory and organize the assembly of their components on site. As such, few of the production workers are employed by the assembler, whose main role in the process is to coordinate production and to market the vehicle.

The restructuring of production and new ways of managing the workforce in Brazil have been accelerated since the beginning of the 1990s by the increase in foreign investment in industrial activities and the need for firms to compete in the world market. The car industry has represented an important part of this movement. New locations and new management and organizational strategies have been introduced and experienced in the country.

Despite many difficulties, labour unions linked to the automobile industry have also been working closely together in order to keep pace with changes in the negotiating process for new forms of management and their consequences, such as rising unemployment, putting jobs right on the firing line. However, labour unions appear to be facing an additional difficulty. Moving into a new investment phase, the auto-assemblers were a source of much political and economic competition between states and municipalities through a range of fiscal incentives to attract them (Rodriguez-Pose and Arbix, 2001). However, the establishment of new assembly plants also reflects a shift in strategy with regard to the workforce, with a clear-cut trend towards seeking alternatives outside the city of São Paulo’s industrial belt (usually known as ‘the ABC region’), which has been for decades the most highly unionized area of Brazil and the militant centre of the metal workers’ union and the socialist confederation, CUT (Seidman, 1994). The

* We are grateful to Faperj (Projeto Cientistas do Nosso Estado), Cnpq and Capes for their support. A first version of this article was presented and discussed at the 9th GERPISA Colloquium, Paris, June 2001. The authors thank the GERPISA members and the journal’s three anonymous referees for their comments.
The latest listing of Brazilian auto-assemblers reveals a flight from this region, although this segment still remains concentrated in the south/southeast. The reasons put forward for this move include the labour union element, as unions at the new locations would be either inexperienced or appear more receptive to business initiatives.

This article discusses the originality of VW’s new form of organization of production (see also Frigant and Lung, 2002) and the strategy of the firm to look for localities with weak labour unionism. It also argues that despite the difficulty of the local union to intervene in the process of wage bargaining and to influence the management of aspects of production, there has been a rapid process of mobilizing the new workers for effective labour union action. The question to be explored is the contradiction between the search by the firms for new locations with a docile working class and the increase of union participation engendered by new work activities created by VW and its ‘modular system’ in Resende.

**Restructuring and inward investment in Brazil**

The automobile industry in Brazil was established within the context of import substitution in the 1950s. The purpose behind the implementation of this industry was to seek modernity, which was attempted by a dynamic interaction between state policy and the global auto industry (Shapiro, 1994; Addis, 1999). The government succeeded in attracting a number of transnational assemblers to set up operations and, according to Humphrey (1998: 5), ‘by the early 1960s cars with a high degree of local content were being produced’. In the 1970s ‘the capabilities of Brazilian firms were further developed’ (ibid.: 7) as a result of an export development programme and the introduction of alcohol-powered cars; and in the 1980s ‘by the slump in domestic vehicle sales, which forced both assemblers and component manufacturers to seek export markets’ (ibid.: 9).

Major changes have taken place in the vehicle manufacturing sector of Brazil in the 1990s. More liberal economic policies were adopted, but transformations were not the only result of trade liberalization. All of the major assembly companies have made significant investment in new plants and production facilities (see Table 1). These plants were geared to the expanding domestic market facilitated by Mercosul (Southern Cone Trade Zone — constituted by Argentina, Brazil, Paraguay and Uruguay), and increasingly to exporting cars and trucks to the USA and the expanding new markets of eastern Europe, South Africa and China.

The debate on Brazil’s automotive chain restructuring process during the 1990s systematically emphasizes the relocation of new investments and new factories. Although industrial decentralization had already been present in the main states of south-eastern Brazil since the 1970s (Pacheco, 1999), the recent years’ trade liberalization has revealed a process with specific characteristics, particularly regarding the automobile sector. The ‘flight’ of firms from more traditional automobile production centres, such as the ‘ABC region’, as well as the fierce competition between states and municipalities for new investment, has given rise to a real ‘tax warfare’ in which public funds have been generously used to attract assembling firms. In this last case, the competition was greatly increased by the growth of direct external investments in Brazil during the 1990s. This was further fuelled by the incentives offered by the ‘new automotive regime’. From December 1995 to September 1998, multinational assembly firms invested US $10.683 billion in the restructuring of existing plants and in the construction of new ones (Rodríguez-Pose and Arbix, 2001).

Located in southeast Brazil, Rio de Janeiro was among the states competing for part of these fresh foreign investments. These changes were prompted by multi-sector deregulation that allowed imported products to enter the country, in tandem with a regionalization strategy implemented by the industry itself worldwide (Freyssenet and Lung, 2000). Together with many other parts of the country, Rio de Janeiro state strove to...
offer attractive conditions to the auto-assemblers and their suppliers, consolidating fresh investments.

This spatial shift has been associated with significant changes in the production system and specifically in the relationship between the assembly firms and the component suppliers. This has involved a radical restructuring of the Brazilian component industry (Castro, 1996; Carvalho, 1997; Posthuma, 1997; Abreu et al., 1999; Beynon and Ramalho, 1999). In the case of the auto-assemblers, Gitahy and Bresciani (1997) have stressed the increasingly marked shift towards the outsourcing of mainstream activities. Salerno (1997) has documented the trend towards ‘industrial condominiums’ that cluster suppliers around the main assembly plant, reducing transportation costs, streamlining integration and ensuring a steady flow of just-in-time supplies. This case also confirms a tendency, indicated by Frigant and Lung (2002), for this reorganization to be accompanied by a reinforcement of the clustering effect.

These studies all indicate that the relationship between the assembler and the component suppliers has been the basis for experiments in new production processes. The new bus and truck plant, opened in 1996 on a greenfield site by Volkswagen in Resende, was an advanced expression of this experimentation. According to Frigant and Lung (2002), in this context, when the most common are hybrid configurations that combine the more traditional methods of supplier relationship management with the new principles of ‘modular assembly’, the VW experience can be considered an exception to the rule. At Resende the component suppliers were involved in a joint enterprise with VW to establish a ‘modular system’ of production. Previously attempted by VW in one of its car assembly plants in Argentina (Miozzo, 1999), this system involved the component suppliers as partners in the financing of the factory and in the organization and assembly of their components on site. As such, few of the production workers were employed by VW, whose main role in the process was to coordinate production and market the vehicle.

### The modular system in Resende

At Resende¹ a total of US $300 million was invested with a planned production of 30,000 bus-chassis and trucks a year. The biggest part of this production was to be for export — to Mercosul, the USA and Europe. The plant was opened with considerable publicity,

---

¹ A more detailed analysis of this topic can be found in Abreu et al. (2000).

---

### Table 1 The new assembly plants and their locations in Brazil

<table>
<thead>
<tr>
<th>Company</th>
<th>Location</th>
<th>State</th>
<th>Opening Date</th>
<th>Model</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>VW</td>
<td>Resende</td>
<td>Rio de Janeiro</td>
<td>1996</td>
<td>truck/bus</td>
<td>40,000</td>
</tr>
<tr>
<td>Honda</td>
<td>Sumaré</td>
<td>São Paulo</td>
<td>1997</td>
<td>Civic</td>
<td>30,000</td>
</tr>
<tr>
<td>Chrysler</td>
<td>Campo Largo</td>
<td>São Paulo</td>
<td>1998</td>
<td>Dakota</td>
<td>25,000</td>
</tr>
<tr>
<td>Toyota</td>
<td>Indaiatuba</td>
<td>São Paulo</td>
<td>1998</td>
<td>Corolla</td>
<td>15,000</td>
</tr>
<tr>
<td>Renault</td>
<td>S.J. dos Pinhais</td>
<td>Paraná</td>
<td>1998</td>
<td>Scenic</td>
<td>120,000</td>
</tr>
<tr>
<td>Mercedes-Benz</td>
<td>Jui de Fora</td>
<td>Minas Gerais</td>
<td>1999</td>
<td>A Class</td>
<td>70,000</td>
</tr>
<tr>
<td>VW-Audi</td>
<td>S.J. dos Pinhais</td>
<td>Paraná</td>
<td>1999</td>
<td>Golf/Audi</td>
<td>160,000</td>
</tr>
<tr>
<td>GM</td>
<td>Gravataí</td>
<td>Rio Grande de Sul</td>
<td>2000</td>
<td>Blue Macaw (Celta)</td>
<td>120,000</td>
</tr>
<tr>
<td>PSA - Peugeot</td>
<td>Porto Real</td>
<td>Rio de Janeiro</td>
<td>2001</td>
<td>206/Xsara Picasso</td>
<td>100,000</td>
</tr>
<tr>
<td>Citroen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ford</td>
<td>Camaçari</td>
<td>Bahia</td>
<td>2002</td>
<td>Amazon (Fiesta)</td>
<td>250,000</td>
</tr>
</tbody>
</table>

Source: Press
with both the company and the Brazilian government emphasizing its enormous significance for the Brazilian economy and the future of the automobile industry worldwide. In a language which was to become common in the industry, VW argued that its new system of ‘modular assembly’ was governed by a ‘fractal concept’ (Arbix and Posthuma, 1996).

In mathematics a ‘fractal concept’ represents a complete and radical break with all that has gone before. At Resende, this break was made most clear by the fact that of the totality of employees of the assembly line, 80% would be working for seven subcontracting firms. The tyres and wheels are to be produced and assembled by Remon (Bridgestone), the chassis by Iochpe-Maxion. Meritor is responsible for the installation of axles and shock absorbers. The transmission units and engines are brought together by Powertrain — a firm created in a collaboration between Cummins and the German firm, MWM. Cabin construction is the responsibility of Delga and painting that of Carese/Eisenmann. The steering and electrical work is done by VDO.

In this new Volkswagen factory, therefore, a collection of US, Brazilian, German and Japanese companies share the responsibility for the supply of components and the final assembly of all the vehicles produced. In each module, the firm (or firms) responsible for the supply of parts, sub-assemblies and systems step into the production operation to actually assemble the truck. Here, the main production corridor has become the domain of the subcontractors. At each step in the assembly process, these companies are to organize the delivery and supply of components and coordinate the final assembly and installation of these in the vehicles and chassis. As such, the final assembly work completed by employees of Cummins and MWM inside the plant is passed forward to employees of VDO and so on.

In all previous assembly plants (Fordist/post-Fordist/lean etc.) the role of the component suppliers has been to deliver components to the assembly plants. Recently, considerable attention has been paid to the role of the supply chain in the management of production and the dynamic processes associated with subcontracting (Gereffi and Korzeniewicz, 1994). In the Resende system, a revolutionary change took place in the notion of the supply chain as the component suppliers were brought inside the factory as assemblers. Here, their role has been transformed to one of subcontractor and an involvement in the day-to-day running of their part of the assembly process. In recognition of this, they were directly involved in the construction of the new installation and contributed $50 million of the initial $300 million investment in the plant. In explaining this arrangement, VW’s operational director at the plant, Roberto Barretti, asserted that: ‘the idea is like this: the house is ours, the furniture is yours’ (Luquet and Grinbaum, 1996: 72).

This description is an evocative one. It also points to the strengths and weaknesses of the new arrangements. The ‘modular system’ draws upon the cooperative strength of the parties to the production process, and to an important extent overcomes the diseconomies of coordination associated with arrangements between separate firms. However, the firms remain legally separate entities — they remain juridically independent — and as such it has proved necessary to divide the floor space of the new plant into separate ‘allotments’ through which the companies could have their own addresses and legal identity (O Globo, 2 November 1996).

At Resende, therefore, Volkswagen (the assembler corporation) is to remain outside the direct production process, focusing instead upon strategic functions such as overall vehicle design and architecture, as well as quality, product and marketing policy and sales. However, in this system, the assembler cannot simply ignore production. It also has to develop organizational capacities which will enable it to integrate a group of supplier companies — now co-manufacturers — into a production unit. As such, VW has a significant administrative staff, with its own office area preoccupied with monitoring the production flows. What this raises, nevertheless, is the nature of the relationships between
the assembler and the component manufacturer, legally and within the Resende factory. The ‘modular system’ with its subcontracting relationship clearly absolves the assembler from the day-to-day problems of managing labour. But it may also create new problems. To begin with there is the question of quality and quality control. At Resende:

Every lorry that leaves the plant has the signature of an employee. He is the ‘maestro’, the person responsible for the quality of that product . . . The responsibility of the ‘maestro’ is to supervise all stages of the assembly, doing the link between the various partners (Neto, 1996: 15).

The trucks that leave Resende would carry the VW badge and the company needed to be certain that its brand image would not be tarnished. This concern to guarantee quality also extended to other issues relating to financial relationships, delivery guarantees, production penalties and the like. Luquet and Grimbaum followed the negotiations involved in the Resende arrangements and have recorded how:

During one year dozens of lawyers, chosen by VW and the sub-contracting companies, got together to negotiate over the division of risks. A contract of eighty pages was prepared establishing the responsibility of each member of the team. It is a secret treaty, it is in the safe of the eight partners and the competitors want to see it (Luquet and Grimbaum, 1996: 72).

In time, however, certain things became clear. The component suppliers, having contributed to the capital costs, would also contribute to the ongoing running costs of the plant. Furthermore, their financial relationship with VW was accounted on the basis of sales and not production. As such, VW absolved itself of many of the financial problems associated with stocks and the like. In the case of Resende, VW pays for the components that make up the truck in a special way. According to a module supplier manager ‘only when the truck has been assembled and approved by VW do we receive our share of the product’. In figures, this means that each module receives 90% of its payment once the assembly is complete and 10% after VW’s quality test (Pires, 2002).

Looked at in this way, the radical nature of the departure represented by the Resende system takes on a new significance. In 1920, Ford financed his development of the Model A by passing costs on to the retailer: they paid Ford on delivery and not on sale. The Resende arrangements took this a step further by displacing VW from production altogether, obtaining profit through its badge and through the organization of distribution and sales.

After five years of the Resende experience, one can say that some adjustments have been made to the original project. Two important examples of this are related to VW’s quality measuring system and its relationship with the suppliers’ chain.

As Frigant and Lung (2002) have indicated, in the beginning of its operation VW did not meet the initial expectation in terms of quality and productivity. For Pires (2002), VW faced quality problems as it tried to apply the same quality requirements used in car plants in the process of assembling trucks. VW has normally used two corporate indicators for quality measuring: one based on a monthly survey among consumers; and the ‘Audit’ which evaluates product quality on a scale aiming at zero value. The explanation for this comes from an account of a VW manager:

As it is a unique plant in the world, we need to create a specific instrument for trucks . . . We cannot compare the level of details applied to cars and trucks. The truck is a more simple product than a car. A car ‘Audit’ can reach the mark 1.6, 1.8. For trucks we have already reached a level between 2.2 and 2.4. Our goal for this trimester [2000] is 2.0. We have begun the year 2000 with the 2.4 mark and have ended it with a 2.0 Audit.

VW has also changed the components purchasing process, during these last years. Instead of leaving this process for the modules, VW has decided to do it itself, selecting the suppliers, buying the components and passing them to the modules in a consignment system. The advantage of this, as Pires (2002) has pointed out, is the fact that VW has got
more strength to negotiate with the suppliers, forcing them to push the prices down. On the other hand, it has increased VW knowledge on modules’ cost structure.

The question of labour and the worker union

Public discussions in Brazil at the time the plant opened emphasized its modern nature and the contribution that it would make to the development of automotive production techniques. The statements by the company and the government were redolent of a rhetoric of transformation. For VW the Resende factory made clear that it was: ‘leaving behind the era of Fordism, which is already obsolete. Resende is “the paradigm of the twenty first century”’ (O Globo, 2 November 1996: 5).

In spite of this, however, the technological developments within the plant, and the changes in established work practices were very few. We have noticed, not only through visits to the plant but also through all published accounts, that the focus has not been on technology (robots, computers and the like) but rather on the surrounding environment of the work stations. The language is anything but revolutionary. While corporate rhetoric looked forward to the twenty-first century, these factory accounts returned to many of the behaviourist depictions of workers popular in the early part of the twentieth century. Thus VW’s manager, Roberto Barretti has claimed that 10% of the investment in the factory was directed at ‘the comfort of the employees’. In her visit to the factory, Germana Moura focused on these issues pointing out that:

At first sight it doesn’t even look like a high tech factory. Instead of machines and robots the visitor encounters the hills of Paraiba valley, and if he is lucky he can even see the sun invading the assembly line. But this is just one of the details that gives distinctiveness to this new unit of VW in Resende. All of the environment was projected to give the feeling of liberty to the employee. The objective is to avoid fatigue and with it the loss of productivity (O Globo, 2 November 1996: 17).

For its part, the company has emphasized how the process has been organized in ways which minimize the amount of bending required of the operatives, and how the shop floor temperature is regulated through an extremely sophisticated system involving 16 air conditioning units, each weighing two tons. The walls are painted white rather than the conventional grey and designed to reduce the levels of noise.

In many ways, therefore, the public emphasis on technology and newness and the novel attempt to, once again, mark the end of Fordism missed the main significance of the Resende case. In relation to labour, for example, VW’s concerns are still quite orthodox. Arbix and Zilbovicius (1997) have noted the lack of any sign of innovation in the organization of work groups or, in the scheduling of group activities, that concern has been taken to develop autonomy of the operators. In their view, the entire concept of the plant was based on a conventional flow production system which makes no space for the involvement of the worker or the labour union in its configuration or functioning. Interestingly (given the emphasis on human resource management in the literature), worker-involvement was not mentioned in any of the corporate discussions which related to the fractal concept at Resende. Although there was an attempt at introducing team working in 1999, our examination of the records of the labour union show that no talks took place in the first five years of the plant on issues other than wages, benefits and working conditions. There is no mention of any discussions relating to the production process or styles of management.

VW and its partners, however, made considerable efforts to ensure that the new factory recruited employees who would respond favourably to training and induction to its new working arrangements. In Brazil, a chain of technical schools (Serviço Nacional de Aprendizagem Industrial — SENAI) existed for the dedicated provision of vocational
courses. One such school existed in Resende and VW made extensive use of this organization. In our interview with its Director in 1999, A. de Almeida, he explained how:

They wanted to know how we could help them. It was interesting work because it involved a different philosophy — that of the ‘modular consortium’ as a production system. It was different from São Bernardo. For us it was a positive experience and the largest part of the workforce at VW were students of SENAI.

The companies subsequently established a training partnership (convênio) with SENAI setting up a Centre for Automotive Technology to train new and existing workers in new production processes.

Within the factory, VW, while operating the ‘modular system’, seems to have been aware that disparities between the workers of the different companies might be a source of conflict. With an eye to this it introduced a standardized dress code. All employees in the plant, including the executives, wear the same uniform. The trousers are dark grey and the shirt light grey. The only difference between them is the logo-mark of the firm that is on the right pocket of the shirt. On the left pocket all have a daisy, which is the symbol of the consortium.

VW has also been concerned about the wage issue. To avoid disputes, the company insisted in 1996 that all the firms (VW included) would share a common wage and benefits agreement. In the view of VW’s plant manager, Luiz de Luca: ‘If you start with wage differentials, the plant stops the day after’ (Neto, 1996: 15).

In moving to Resende, the company did not attempt to hide the fact that part of its plan focused on the establishment of labour relationships different to those of ‘the ABC region’. Volkswagen carried out a survey in Resende in order to scale its wages to those of other companies in the industrial district of the region. According to its Industrial Director, Luiz de Luca, ‘we would not want to pump up the market’. He was particularly concerned to emphasize that, on this greenfield site, the company was determined to avoid ‘the bad habits of the ABC’, where ‘it is not possible to negotiate [with the labour union]’. Claiming that ‘everyone was getting out of’ São Paulo’s industrial belt, he said that there was ‘perfect harmony’ with the metal-workers union in southern Rio de Janeiro State (Folha de São Paulo, 9 December 1996: 15). Resende had a further attraction of being a centre for the Força Sindical union. This union was seen to be highly responsible and conservative in contrast with the socialist Central Única dos Trabalhadores — CUT (Unified Workers Confederation) that dominated the ABC district. VW considered the Força Sindical to be more ‘affable’, with policies that were more in sympathy with the aims of the company. In this new location it was assumed that the labour unions and the workers would be much less experienced in the issues affecting the industry and more receptive to business initiatives.

For its part, the metal-workers union viewed the arrival of the Volkswagen plant in Resende as an important opportunity to regenerate a depressed labour market. In VW they saw the potential for employment expansion in a growing industrial sector, opening up more jobs for local workers and expanding the union’s membership. Luiz Rodriguez, its president in 1997, was openly appreciative of a ‘flagship company’ moving into the region. There is a suspicion that this enthusiasm helped to bolster the impression amongst VW executives that Força Sindical would operate as something of a ‘house union’ at Resende, following the company’s lead on all matters. Its inexperience of modern techniques of vehicle production, together with the novelty of the modular production system, supported this view. However, the union had had experience of industrial closures in the steel industry and this seemed to have equipped local organizers with an understanding of the problems and issues involved in industrial change. They were particularly aware of the significance of the wage rates to the company and the fact that the wages at Resende were lower than those paid to workers doing similar jobs in São...
Paulo. According to the metal-workers union leader we talked with in 1997: ‘wages are low in this region. The average pay . . . in the ABC is 60% higher’. From the beginning, therefore, it sought to increase the rate in line with those operating in the ABC district.

This notion of ‘parity’ is a powerful one and has been seen as critical by automobile workers throughout Europe and the USA. It was a clear concern for the union in Resende, and during the late 1990s became a critical issue for the unions in the ABC district also. For these unions, the dispersal of plants away from the ABC was seen to be part of a low-wage strategy for the industry. In 1999 the two main union federations (CUT and Força Sindical) joined forces to draw attention to the fact that while wage levels in São Paulo stood at R $1,500 (US $750) a month, those in Fiat in Minas Gerais were R $800 (US $400) and at Resende R $600 (US $300). This demand for greater parity produced a firm response from the companies. VW was centrally involved in this opposition and its Vice President for Human Resources, Fernando Tadeu Perez, put it like this:

The companies will not accept a proposition for a unified national wage . . . The labour unionists should forget the idea of regulating wages taking the ABC as a basis. This is not going to happen. This would kill the Brazilian automotive industry (O Globo, 26 August 1999: 18).

However, there were aspects of the ABC that VW was concerned to establish in Resende. Most notable was the ‘hours bank’ arrangement which it had agreed with the labour union at São Bernardo. The ‘hours bank’ operates with an understanding of an average working week that the company can reduce or exceed in relation to demand without penalty to either side. The workers would not lose wages in their short weeks nor would the companies be responsible for premium payments in the long ones. The union at Resende was unhappy with the kind of arrangements proposed for their plant. VW wanted the flexible arrangements to cover as many as 300 hours. This was rejected and after a series of conflicts and industrial stoppages (culminating in a week-long strike in August 1999) the size of the ‘bank’ was reduced to 150 hours. Later on it was rejected completely by the organized workers and abandoned by the company.

A further question, which troubled the labour union, related to the operation of the ‘modular system’ within the factory. There was a worry that the system, in its very nature, would produce vertical divisions within the workforce that would operate in ways which prevented successful plant-level bargaining. This suspicion was confirmed at one point when the company indicated that they were prepared to consider a wage increase for VW employees but not for the assembly line workers employed by the other firms. However, this approach proved unsustainable. What VW learned in these negotiations was that in order to guarantee consistent production in the plant, it had to ‘hold the ring’ on plant level wage discussions. As such the company increasingly took the role as lead wage negotiator for the consortium as a whole. Furthermore, they had to adjust their stance with relation to the comissão de fábrica (factory committee). In line with the logic of the modular concept, VW had initially refused to formally establish the collective bargaining institutions that had operated in its other plants in Brazil, considering that many of these arrangements would be the purview of the individual members of the consortium. However, this proved problematic, and informal discussions and negotiations developed across the plant to the point that a de facto comissão de fábrica existed. In 1999, and after a strike, the companies agreed that they would formalize this arrangement.

This process of negotiation (and the attendant patterns of collective action by workers across the plant) had important consequences for the operation of the ‘modular system’. In the interviews we have conducted with workers from the Resende plant it has been clear that they have developed a clear identity as VW workers. While the rhetoric of the company insistently draws attention to the ‘modular system’ and its importance, the workers and their union have emphasized another reality. In their view, VW is the key player and their own particular employer has a minor part to play in the general operation of the plant and its future. In answering our questions and in natural conversations they
assert their own perception of their position in the factory as de facto employees of the German multinational. This also affects their position in the community. As one of them put it to us: ‘Generally people say “wow — this guy works for VW; he must have a good job”’. The union leaders emphasize the strategic significance of this interpretation. In their view, VW determines the rules of the consortium and in their negotiating strategy they have been keen to use the owner of the factory against those who simply own the furniture. Nevertheless, they recognize the real problems for defending workers’ rights created by the ‘modular system’. Although VW dominates the other partner firms in relation to wage bargaining, this hegemony does not extend to the day-to-day treatment of workers in the plant. Here, it seems, there are real differences. In the view of the local union leaders we talked with in 1999:

There are eight firms, eight different heads, eight different philosophies of work. Some have a philosophy of understanding the workers, of answering to workers’ demands; others are hard — they don’t want to give anything . . . If it was only VW it would be easier. But the fact is that VW is only the ‘chief head’ [cabeça chefe] and the others have a say.

In fact this has been one of the most interesting aspects of this process. Although the union has found it difficult to deal with this sort of organization of production, it quite immediately realized that the ‘modular system’ somehow weakens the firms in terms of workers’ mobilization.

In terms of radical unionism, the ‘modular consortium’ is very vulnerable, very vulnerable, because if one sector stops, tiny as it may be, the whole production stops, do you understand? . . . For instance, the firm ‘U’ was here to negotiate an extra-wage, and it said it did not want to grant it. I went there early in the morning and told them . . . and everyone came too, everyone came down together: “U people, stay here.” Everyone stood absolutely still. Volkswagen got desperate at once: “For God’s sake . . .”, and the production stopped. They called the firm owner in São Paulo, and he even cried on the phone. And the question was immediately settled. This is why they say the strategy is very fragile. So, to prevent this kind of action, it is necessary to reach an agreement, not to create dissatisfaction (interview with Mr I, director of metal-workers’ union in Resende, 5 June 1999).

Furthermore, whilst relationships between the partners were established in their legal document this did not cover every eventuality. This made for difficulties on issues that required joint decisions affecting the welfare of all workers across the plant. This was the case in relation to the demand for the provision of buses for workers who lived some distance from the plant. This issue was raised repeatedly by the union in 1999 but the companies were incapable of coming to an agreement on who paid which part of the costs, each blaming the ‘modular system’ for the delay.

In terms of labour union organization, these five years of conflict and negotiation with VW and the companies of the ‘modular consortium’ have provided the metalworkers’ union with a great deal of experience. Although acting most of the time defensively, the performance of the union has indicated an effective movement towards defending the interests of the workers through extensive negotiations and success in obtaining better wage and working conditions. The peak of this process of mobilization was a successful week’s strike in August 1999 when not only wages but also the formation of a factory committee was achieved.2

2 A recent survey of workers at the VW ‘modular consortium’ has shown their positive assessment of the labour union action (Ramalho and Santana, 2002).
Conclusion

Although the case of Resende’s automotive cluster is still an ongoing experience of industrial location, whose future and impact will have to be the object of continued investigation, it seems possible to point out some more elements to this discussion on ‘modular system’ production, as well as its direct consequences for worker participation and labour unions.

In relation to ‘modularization’, the VW experience has shown quality problems as it tried to apply the same requirements used in car plants in the process of assembling trucks. Beyond that, after more than five years of activities, managers have pointed out that the coordination process remains very tense on a day-to-day basis, resulting in moments of instability. Not only in terms of technology, but also in terms of management strategies, the VW plant has not presented anything new so far, and even the attempt at implanting ‘team working’ was unsuccessful due to the different management approaches from the firms of the ‘modular consortium’.

Regarding the labour and union issue, it is interesting to note that as far as the firm is concerned, the new production model did not include the workers in the project phase. The project of the ‘modular consortium’ was implemented without discussion with local union leadership or with the São Paulo Volkswagen union leaders. The announced innovation in the organization of production did not reach labour relations.

Labour union action in Resende can be seen as a good example for discussion about this new kind of industrial experience. Despite the plant’s brief period of existence, the union has been quite effective in terms of workers’ organization. Although still considered by the firm to be ‘affable’, the local union has managed to maintain an intense level of participation and on two occasions actually successfully stopped production (the stoppage of 1997 and the week-long strike of 1999). The results of wage negotiations show that it is rapidly adapting itself to the needs of workers in the automotive sector by the incorporation of demands that have been discussed by unions with greater experience in other industrial regions. This rapid increase in union activity may be useful to counter the usual statements on the efficacy of greenfield strategies.

It should also be borne in mind that, despite the increase in the level of participation, VW and the ‘modular consortium’ have managed to keep lower wages in relation to other regions of the country. In fact, the issue of wages was a significant element in the process for the selection of Resende. Either implicitly or explicitly, it lay at the heart of the discussions during the period when fresh investments were being brought in, as well as during the implementation of the plant.

The recent success of the local union, i.e. the first strike at the plant and the integration of the union and the plant’s workers in the national movement uniting CUT and Força Sindical in the struggle for a national collective contract for assemblers, aimed at reducing inequalities created by new firms throughout Brazil, was the outcome of the failure to meet workers’ demands by the first years of the firm’s operation.

José Ricardo Ramalho (jramalho@ifcs.ufrj.br), Department of Sociology, Federal University of Rio de Janeiro, Largo de S. Francisco 1 sala 418, 20051-070 Rio de Janeiro, Brazil and Marco Aurélio Santana (msantana@bridge.com.br), Department of Philosophy and Social Sciences, University of Rio de Janeiro, Rua Viúva Lacerda 249 Bloco 03 Ap. 305, 22261-050 Rio de Janeiro, Brazil.

References


© Joint Editors and Blackwell Publishers Ltd 2002