Acta Poloniae Historica 115, 2017 PL ISSN 0001–6829

Mariusz Jastrząb

Department of Social Sciences, Kozminski University

Joanna Wawrzyniak

Institute of Sociology, University of Warsaw

# ON TWO MODERNITIES OF THE POLISH AUTOMOTIVE INDUSTRY: THE CASE OF FABRYKA SAMOCHODÓW OSOBOWYCH AND ITS STAFF (1948–2011)\*

### Abstract

Focusing on the history of the Polish main car factory, the FSO, the paper examines two modernisation waves in the country's automotive industry: the socialist Government's purchase of a license from the Italian Fiat in the 1960s and the acquisition of the factory by the Daewoo Corporation in the 1990s. The history of the FSO as an enterprise shows, above all, the pitfalls of dependent development. It has, however, resulted in the training of a class of specialists and engineers for whom the implementation of foreign technologies and management cultures presented opportunities for self-advancement, redefinitions of their identity, along with reconsiderations of the value and meaning of work.

**Keywords:** passenger cars, automotive industry, *Fabryka Samochodów Osobowych* (FSO), Fiat, Daewoo, Poland, socialism, capitalism, transformation

<sup>\*</sup> Research work financed within the programme of the Ministry of Science and Higher Education (Poland), under the name 'The National Programme for the Development of Humanities', between 2012–18. The authors would like to thank two anonymous readers for their helpful comments and Hanna Gospodarczyk for an initial report on the FSO and for delving into the archives of the Ministry of Treasury. Our gratitude goes also to interviewees participating in the project 'From a Socialist Factory to an International Corporation: Archive Collection of Narrative Biographical Interviews' for sharing with us their recollections, as well as to the students of the Institute of Sociology of the University of Warsaw for conducting these interviews (see also n. 6).

### I INTRODUCTION

The Fiat 125p has been an icon of socialist modernity in Poland.<sup>1</sup> The history of its Warsaw producer, Passenger Automobile Factory (*Fabryka Samochodów Osobowych*, FSO) stood in the background of this image.<sup>2</sup> The attempt to transform the FSO into a large, modern factory took place in the 1960s and 1970s. By that time, however, the global automotive market had already achieved a stage of maturity with very high entry barriers. In 1970, a fairly small group of large manufacturers from the United States, Western Europe, and Japan controlled 90 per cent of the global car market.<sup>3</sup> In the following decade, any enterprise with the ambition to be globally competitive had to produce at least 500,000 units of one car model annually. The largest market players entered into strategic alliances, producing parts and components

<sup>2</sup> No comprehensive academic study on the history of the factory is available. There are, however, some publications that appeared on the occasions of its anniversaries: Zdzisław Konieczniak and Piotr Majewski, 20 lat Fabryki Samochodów Osobowych (Warszawa, 1971); Zdzisław Konieczniak, Fabryka Samochodów Osobowych 1951-1976 (Warszawa, 1976). Moreover, FSO Fans and Friends Club has published several works targeted at motorisation enthusiasts. They include: Zbigniew Boniecki (ed.), Opowieść o FSO. Historia tej warszawskiej fabryki (Warszawa, 2010); Leopold Brzechowski, Fabryka Samochodów Osobowych w Warszawie 1951-2006. Kalendarium (Warszawa, 2008); Jerzy Dembiński, Album samochodów FSO (Warszawa, 2004); Mirosław Górski, Historia konstrukcji samochodów FSO 1951-2006 (Warszawa, 2009); Tadeusz K. Rękawek, Wspomnienia o ludziach i wydarzeniach w FSO na Żeraniu 1951-1991 (Warszawa, 2009). In addition, books on the cars manufactured in the FSO have been published: Karol J. Mórawski, Syrena. Samochód PRL (Warszawa, 2005); Zdzisław Podbielski, Katalog części zamiennych FSO Syrena 104. Powstanie i rozwój konstrukcji samochodu Syrena (Warszawa, 2009); idem, Polski Fiat 125p / FSO 1500 (Warszawa, 2009). Finally, considering the history of the factory, the issues related to the license contract with Italian Fiat are of key importance. Hubert Wilk has recently discussed them in the article 'Próba modernizacji polskiego przemysłu maszynowego w drugiej połowie lat 60. Przypadek fiata 125p', Roczniki Dziejów Społecznych i Gospodarczych, lxxvi (2016), 411-37. From the Italian point of view, one may explore them in the memoire by Riccardo Chivino, La Fiat in Polonia, Jugoslavia e Russia nei ricordi di Riccardo Chivino (Turin, 2014).

<sup>3</sup> For comparison: during this time, only 5 per cent of global manufacture of vehicles was produced in the Council for Mutual Economic Assistance (Comecon) countries.

<sup>&</sup>lt;sup>1</sup> Radosław Bugowski, 'Polski Fiat jako "miejsce pamięci". Rola i obraz marki w kulturze polskiej drugiej połowy XX wieku. Refleksje wokół koncepcji', *Klio*, xvi, 1 (2011), 123–39.

for each other to benefit from the economies of scale. The demand for cars was not rising as rapidly as it had in the preceding decades, therefore, companies were required constantly to increase their flexibility to be able to tailor their vehicles to the needs of individual clients. The public opinion demanded improvements in car safety features and environment protection standards. Consequently, the automotive industry had to spend growing amounts on research and development. Although processing and assembly operations became not only automated but also computerised, labour remained a crucial component of the total production costs. Thus, large manufacturers attempted to relocate production to those countries where workforce costs were lower.<sup>4</sup>

In this paper, we present how a periphery producer tried to find its role in this reality.<sup>5</sup> The paper highlights two distinct moments in the history of the FSO: purchasing the licence for the Fiat 125p model in the late 1960s and the acquisition of the company by the Daewoo Corporation in the mid-1990s. These two events resulted in transferring

<sup>5</sup> The automotive industry has been for some time an important field for research into the social and cultural impacts of technology and management style transfers. Researchers, dealing with the history of the automotive industry in Europe, most frequently ask about the scope of adaptation and renegotiation of American patterns of mass production and mass consumption. Research conducted in peripheral areas of Europe, i.e. in Spain and Portugal, shows how a modern automotive industry was created with almost unlimited access of enterprises to cheap labour, under protectionism and in relative isolation from external markets, and further, what the course of its development was like when the market began to open to the world, and how the industry changed the local economy and industrial relationships. See Tomàs Fernández-de-Sevilla, El desarollo de la industria del automóvil en España: El caso de FASA-Renault, 1951–1985 (PhD thesis, Universitat de Barcelona, 2013); Montserrat Pallares-Barbera, 'Changing Production Systems: The Automobile Industry in Spain', Economic Geography, cxxiv, 4 (1998), 344-59; Tommaso Pardi et al., Les Actes du GERPPISA, xvi, 40 (2007): State and Politics in the Automobile Industry: Extending the Notion of Compromise of Government; Andrea Tappi, 'El fordismo en la industria europea del automóvil y la SEAT (1950-1970)', Revista de Historia Industrial, xvi, 34 (2007), 97-128. See also Dankbaar, Economic crisis and institutional change, 85-103.

<sup>&</sup>lt;sup>4</sup> To learn more about the development trends within the automotive industry see Yves L. Doz, 'The Internationalization of Manufacturing in the Automotive Industry: Some Recent Trends', *Social Science Information*, xx, 6 (1981), 857–81; Bernard Dankbaar, *Economic crisis and institutional change. The crisis of Fordism from the perspective of the automobile industry* (PhD thesis, Rijksuniversiteit Limburg te Maastricht, Maastricht, 1993), 85–103.

of two different technological and management concepts into Poland, the Italian and the Korean one, respectively. Although each of those modernization waves took place in drastically different circumstances, they both originated from Poland's dependence on foreign technologies and pertained to the same site and its employees.<sup>6</sup> Thus, against the background of general FSO history, the paper explores how its specialists and managers experienced the two modernizations of their factory.<sup>7</sup> In both cases, the implementation of foreign technologies was a challenge for them not only on practical, but also on reflexive grounds, forcing them to redefine their identities. The Fiat 125p model was already slightly outdated when entered into production in the FSO in the second half of the 1960s. Nevertheless, technological and organizational changes that the factory was undergoing at that time constituted a genuine encounter with modernity for the staff: an experience with a potential to reshape their beliefs, aspirations and worldviews. A quarter of a century later, when the factory was sold

<sup>7</sup> We focus on the circumstances influencing the perspective of technical personnel and management. Working class perspective is comprehensively described both in the historiography of post-war period and in the sociology of transformation. See for example, Juliusz Gardawski, Poland's Industrial Workers on the Return to Democracy and Market Economy (Warszawa, 1996); Padraic Kenney, Rebuilding Poland, Workers and Communists, 1945-1950 (Ithaca, 1997); Katherine Lebow, Unfinished Utopia: Nowa Huta, Stalinism, and Polish Society, 1949-56 (Ithaca, 2013); Adam Mrozowicki, Coping with Social Change: Life Strategies of Workers in Poland's New Capitalism (Leuven, 2011); David Ost, Defeat of Solidarity: Anger and Politics in Postcommunist Europe (Ithaca, 2005), and numerous works on the Solidarity social movement. Studies on the ways of creating and experiencing modernity by 'technocracy', are still undeveloped in Polish recent history, even though the issue has been studied by sociologists and management specialists of the socialist times, see for instance: Witold Kieżun, Dyrektor. Z problematyki zarządzania instytucją (Warszawa, 1974); Witold Morawski, Zmierzch socjalizmu państwowego (Warszawa, 1994), and Jacek Wasilewski, Kariery społeczno-zawodowe dyrektorów (Warszawa, 1981).

<sup>&</sup>lt;sup>6</sup> To this end, besides the published recollections and press materials, we have chiefly used interviews and archives. In the years 2015–16, 23 interviews with former FSO employees, mostly engineers and specialists, were recorded with the use of the biographical method. Most of the interviews have been archived in the History Meeting Centre (*Dom Spotkań z Historią*, DSH) in Warsaw. For the purpose of this article, the interviewees remained anonymous (FSO1, FSO2, etc). Archive materials, kept in the branch of the Warsaw State Archives (*Archiwum Państwowe w Warszawie* [hereinafter: APW]) in Milanówek, come from the FSO collection [hereinafter: FSO]. These are mainly annual reports of the factory's activity and employee council documents.

to Daewoo, the situation of rapid learning repeated itself, followed, however, by a bankruptcy. Thus, although the history of the FSO as an enterprise shows mainly the pitfalls of dependent development, its human feel is that of changing horizons of expectations.

After Shmuel N. Eisenstadt, we understand modernity as 'continual constitution and reconstitution of a multiplicity of cultural programmes' influenced by globalisation processes.<sup>8</sup> From this perspective, socialism involved modernisation dependent on the combination of global pressures and local conditions.<sup>9</sup> By the same token, the 'new Polish capitalism'<sup>10</sup> built after 1989 was a local and temporary configuration of transnational elements rather than 'the end of history'.<sup>11</sup> Combining the approaches of economic and business history with those of social history and an everyday life perspective, we show each of those forms of modernity at a microscale of a car factory.

### Π

### MODEST BEGINNINGS

The factory located in the Żerań district of Warsaw was the first, and the most significant, site of the passenger cars production in Poland.<sup>12</sup>

<sup>&</sup>lt;sup>8</sup> Shmuel N. Eisenstadt, 'Multiple Modernities', *Deadalus*, cxxix, 1 (2000), 2. See also, for instance: Johann P. Arnason, 'Communism and Modernity', *Deadalus*, cxxix, 1 (2000), 61–90; Peter Beilharz, *Socialism and Modernity* (Minneapolis, 2009). On the relationships between mobility (thus, among others, the development of the automotive industry) and modernity in socialism: Kathy Burrell and Kathrin Horschelmann, 'Introduction: Mobility in Soviet and East European Socialist and Post-Socialist States', in *eaedem* (eds.), *Mobilities in Socialist and Post-Socialist States: Societies on the Move* (New York, 2014), 4–10.

<sup>&</sup>lt;sup>9</sup> Writing about automotive industry in the Soviet Union, Romania, and the German Democratic Republic, Luminita Gatejel emphasised that within the Soviet bloc there were no universal patterns of industrial development, nor uniform solutions to the problem of satisfying consumers' needs or building relations with other socialist countries and the Western world. See *eadem*, *Warten*, *hoffen und endlich fahren*. *Auto und Sozialismus in der Sowjetunion, in Rumänien und der DDR (1956–1989/91)* (Frankfurt am Main, 2014).

<sup>&</sup>lt;sup>10</sup> Jane Hardy, Poland's New Capitalism (London, 2009).

<sup>&</sup>lt;sup>11</sup> Francis Fukuyama, The End of History and the Last Man (New York, 1992).

<sup>&</sup>lt;sup>12</sup> In the early 1970s, Small Engine Car Factory (*Fabryka Samochodów Małolitrażowych*, FSM) in Bielsko-Biała and Tychy was established, producing, among others, the Polish Fiat 126p. On the FSM and Fiat 126p: Ryszard Iskra, *Historia Fabryki Samochodów Małolitrażowych* (Bielsko-Biała, 2013); Aleksander

It is estimated that for the whole period of the FSO's existence, approximately 200,000 employees worked both in Warsaw and in the factory's branches all around the country.<sup>13</sup> However, its beginnings were modest. The construction of the plant began in 1948. According to the initial plans, its objective was to continue the country's pre-war collaboration with Italy and manufacture Fiats 1100.14 For political reasons, the contract with Fiat was quickly terminated and replaced by an agreement between Poland and the Soviet Union. Soon after, the first Warszawa, a licensed version of the Soviet Pobeda, was manufactured. The termination of the Fiat license meant a profound change of an enterprise concept: from a plant sub-contracting parts and components to an autarkic factory. In the early 1950s, the strive for self-sufficiency was both a result of economic shortages and a consequence of a concept that the factory should be capable of continuing production even under war conditions. The factory's aim was to reach the capacity of 25,000 cars annually.<sup>15</sup> This moderate volume was to satisfy the needs of the State administration and the Party apparatus rather than those of individual consumers.

<sup>13</sup> FSO6 and FSO10.

<sup>15</sup> In practice, even this capacity could not be reached for a long time. For comparison, in 1949, Fiat specialists calculated that their plants were to manufacture 1,000 cars daily. See Francesca Fauri, 'The Role of Fiat in the Development of the Italian Car Industry in the 1950s', *Business History Review*, cxx, 2 (1996), 167–206.

Sowa, Fiat 126p. Mały, wielki samochód (Gliwice, 2008); Zdzisław Podbielski, Polski Fiat 126p, czyli Maluch (Warszawa, 2011); Mariusz Jastrząb, 'Nadzór nad wielką inwestycją przemysłową. Budowa Fabryki Samochodów Małolitrażowych i wdrożenie produkcji fiata 126p', in Elżbieta Kościk and Robert Klementowski (eds.), Z dziejów przemysłu po 1945 r. (Wrocław, 2012), 113–22; Mariusz Jastrząb, 'Fiat's Small Cars for Polish Mass Motorisation: The Small Engine Car Factory in Bielsko-Biała and Tychy 1971–1980', The Journal of Transport History, xxxviii, 1 (2017), 37–52.

<sup>&</sup>lt;sup>14</sup> Subject to the contract with Fiat, since 1932, a state-owned concern *Państwowe Zakłady Inżynierii* (State Engineering Works) produced trucks, buses, and later passenger cars, the Fiat 508 and Fiat 518. See on this subject: Mariusz W. Majewski, 'Eksploatacja licencji motoryzacyjnych w Państwowych Zakładach Inżynierii', *Annales Universitatis Peadagogicae Cracoviensis. Studia Historica*, x (2011), 82–98. On the license contract with Fiat after the war: Hubert Wilk, 'Nawet samochodów nie ma, zostały graty po Niemcach. Motoryzacyjny punkt startu. Polska 1944/45–1989. *Studia i Materiały*, xii (2014), 327–9; Boniecki (ed.), *Opowieść o FSO*, 17–19.

In the early years of the FSO the organisation of work was in fact pre-Taylorian.<sup>16</sup> 'It was all done by hand', as an FSO mechanic emphasised.<sup>17</sup> With machines bought second-hand, only a few tools were equipped with electric, hydraulic or pneumatic controls. At first, only the processing of the Warszawa's engine block was automated. At the time, the FSO staff numbered 1,400 persons and three quarters of them had no prior industry-related professional experience, the majority coming from rural areas: "it was called the factory of youth", one of the long-standing employees recounted.<sup>18</sup> Another one added: "when it came to the design engineers, or as they were called technologists, the average age was 24 years ... None of them had their own car!"<sup>19</sup> When the Soviet license was obtained, about 300 FSO employees had a training programme in the Gorky Automobile Plant in the USSR, but the group comprised mostly engineers, technologists, design engineers, and foremen, not ordinary workers.<sup>20</sup> The operation of the uncomplicated machinery was quite easy to master, but many positions in the divisions responsible for production setup and maintenance, as well as the manufacture of mechanical components and parts, required highly-qualified personnel with craftsman's skills, and such people were not easy to find.

A few years later the FSO went down in the history of the Polish Thaw thanks to two events. First were the speeches of a young worker, Lechosław Goździk (1931–2008), who, as the secretary of the Party committee of the FSO, supported Władysław Gomułka, appeared at political rallies in Warsaw, and called for political reforms and the creation of genuine workers' councils.<sup>21</sup> The second was the introduction

<sup>&</sup>lt;sup>16</sup> Heavy reliance on manual work was not a distinct feature of the FSO. In the 1940s and 1950s, the situation of the automotive plants in other Soviet bloc countries, including those with a far richer industrial tradition than Poland was similar. Valentina Fava described it in more detail with respect to the Škoda factory in Mlada Boleslav. See *eadem*, *The Socialist People's Car: Automobiles, Shortages and Consent on the Czechoslovak Road to Mass Production (1918–1964)* (Amsterdam, 2013), 98–111.

<sup>&</sup>lt;sup>17</sup> FSO19.

<sup>&</sup>lt;sup>18</sup> FSO6.

<sup>&</sup>lt;sup>19</sup> FSO16.

<sup>&</sup>lt;sup>20</sup> Konieczniak and Majewski, 20 lat, 12–13.

<sup>&</sup>lt;sup>21</sup> In 1959, Goździk was expelled from the Party. He settled in Świnoujście, by the Baltic Sea, and made his living from fishing. After 1989, he was a municipal councillor.

of a new car model – the Syrena.<sup>22</sup> Launching the production of a new car, much cheaper than the Warszawa, was a sign of a more benevolent attitude of the authorities towards the consumption needs of the private customer.<sup>23</sup>

The Syrena was also the symbol of the developing symbiosis of the factory with the Warsaw University of Technology, which started educating the technical elite of the FSO. "This decade, from 1955 to 1965, was, I dare say, a golden era of design in the factory".<sup>24</sup> For the engineering personnel, growing along with the enterprise, the first Polish passenger car in history was a source of national pride. Central planners, however, viewed the Syrena as a model to be produced for a limited period only. They intended to replace it with a more advanced small-engine car, manufactured in a new factory. Thus, the production setup did not change substantially, the automation level remained low,<sup>25</sup> and the production scale small.<sup>26</sup> Despite that, at the turn of the 1950s and 1960s the factory was clearly evolving towards Taylorism. Breaching workers' resistance, the management introduced 'technically-founded work norms', based on time consumed for individual operations and the capacity of a machine's performance.<sup>27</sup>

According to the official standards that the State bureaucracy applied in the 1960s to assess the level of innovativeness of Polish industrial output, all FSO products fell into the so called 'B' and 'C' groups of modernity. This meant that even the Polish State considered none of the goods produced there as meeting the demands of the times.<sup>28</sup> The machines were estimated to be of 57 per cent worn out in 1966.<sup>29</sup>

<sup>&</sup>lt;sup>22</sup> Mass production was launched in 1958.

<sup>&</sup>lt;sup>23</sup> See the article by Jerzy Kochanowski, 'A "Great Change", or, the Poles' Unfulfilled Daydream about Having a Car (1956–7)' in this issue of *Acta Poloniae Historica*. On the role of the automotive industry in the representations of affluent lifestyle under socialism, emerging after the death of Stalin: Lewis H. Siegelbaum, 'Introduction', in *idem* (ed.), *The Socialist Car: Automobility in the Eastern Bloc* (Ithaca, 2011), 2–5.

<sup>&</sup>lt;sup>24</sup> FSO3.

<sup>&</sup>lt;sup>25</sup> Mórawski, Syrena, 30-3.

<sup>&</sup>lt;sup>26</sup> In 1965, employing over 11,000 people, the FSO produced barely 31,000 cars (13,300 Syrenas and 17,700 Warszawas). APW, FSO, 1/657, Economic analysis for 1966, 16.

<sup>&</sup>lt;sup>27</sup> Konieczniak and Majewski, 20 lat, 16.

<sup>&</sup>lt;sup>28</sup> APW, FSO, 1/658, Economic analysis for 1967, 6-7.

<sup>&</sup>lt;sup>29</sup> APW, FSO, 1/657, Economic analysis for 1966, 18.

In the same year the poor condition of machines and difficulties with supplies were the reasons for issuing 1,390 'technology noncompliance cards'. In this way the management acknowledged that the production deviated from technological norms. Officially, in 674 cases the deviations resulted in lower quality of output.<sup>30</sup> The factory repeatedly sent notes to supervising authorities to inform about the increasing expenditures on repair and renovation works, but no significant measures were taken to solve the problem. Production was irregular; with over 40 per cent of the manufactured cars having been assembled during the final days of the month. On the one hand, the factory was pestered by production stoppages resulting from the lack of production factors or machine failures, and by working time losses as a result of poor discipline. On the other hand, however, the staff worked many overtime hours, mainly at the end of a month, to catch up with the production plans.<sup>31</sup> All this means that when the FSO commenced its collaboration with Fiat in 1966, it had been suffering from all typical problems faced by the Polish industry of those times.

### III

## **TECHNOLOGICAL HOPES**

In his seminal book, Lewis H. Siegelbaum pointed out that the personal attitude of political leaders towards the automotive industry influenced directly its development in socialist countries.<sup>32</sup> Władysław Gomułka, particularly reluctant in his support for the growth of a passenger car industry, granted his agreement to purchase a foreign license in return for the promise of "bringing dollars to Poland".<sup>33</sup> A licence contract with a Western firm was to provide the modern technologies needed to increase car exports. Before the decision to sign a contract with Fiat was taken, Poland had spent a number of

<sup>&</sup>lt;sup>30</sup> Ibidem, 37.

<sup>&</sup>lt;sup>31</sup> Ibidem, 11.

<sup>&</sup>lt;sup>32</sup> See Lewis H. Siegelbaum, Cars for Comrades: The Life of the Soviet Automobile (Ithaca, 2008), 84–5.

<sup>&</sup>lt;sup>33</sup> FSO6. At the turn of the 1950s and 1960s, the FSO was exporting to the German Democratic Republic, Turkey, Venezuela, Columbia, and the United Arab Republic. The production of ca. 15,000 cars annually for poor countries did not generate sufficient amount of increasingly necessary foreign currencies.

years holding ultimately ineffective talks with Czechoslovakia and the German Democratic Republic, on the co-production of a small, cheap passenger car. Polish leadership had also considered purchasing a Fiat license from the Crvena Zastava factory located in Kragujevac in Yugoslavia. However, the Yugoslavs did not agree to Polish export to markets where they themselves were present. The Polish side was also concerned that a contract through Yugoslavia could limit access to Fiat's patents.<sup>34</sup>

Italian Fiat was an attractive partner to automotive factories in the socialist states. Until the end of the 1950s, headed by Vittorio Valletta (to be succeeded in 1966 by Giovanni Agnelli), Fiat virtually eliminated its competitors from the Italian market. During the period of the Italian economic miracle, the company supplied more affluent, but still insufficiently rich Italians, with mass-produced, budget cars with engine capacities from 500 to 1000 cc.<sup>35</sup> Valletta focused strongly on the automation of production processes, as it contributed to cost reduction. While designing new models, Fiat engineers aimed at limiting the weight of a car (to save on raw materials), shortening the production cycle and ensuring that the production technology would be easy to master, even for less skilful workers. Knowing the estimated sale price, the design engineers had to come up with a vehicle that would meet a given revenue indicator per one kilogram of its weight. Production engineers, in turn, controlled whether all car elements could be manufactured with the technology owned by Fiat or whether any potential design changes could shorten technological processes.

Thus, over a few decades, the company developed practices of adjusting to the needs of a client with little purchasing power. The expertise on how to run effective mass production of budget cars, and how to simplify operations carried out by a worker, fitted the needs of the less wealthy and less motorised countries with poorerqualified workforce.<sup>36</sup> In addition, the Fiat structure was centralized and hierarchic; and engineers had the last word in any discussions on the

<sup>&</sup>lt;sup>34</sup> Wilk, 'Próba modernizacji', 415–26.

<sup>&</sup>lt;sup>35</sup> Valentina Fava, 'Fiat and AutoVAZ Togliatti: In Search of the Lost Fordism', *Storicamente*, ix, 4 (2013), <http://www.storicamente.org/07\_dossier/est/fava. htm>, DOI 10.1473/stor433 [Accessed: 11 May 2017].

<sup>&</sup>lt;sup>36</sup> Giuliano Maielli, 'The Machine that Never Changed: Intangible Specialisation and Output-mix Optimisation at Fiat, 1960s–1990s', *Competition & Change*, ix, 3 (2005), 249–76.

direction of the company's development. These factors made the Turin company similar, and therefore particularly attractive as a business partner, to automotive industry on the other side of the Iron Curtain.

Valetta carefully followed the course of East-West political relations and boldly entered into contracts with the socialist states. Besides the agreement with Yugoslavia and Poland, he also signed, in 1966, 'the deal of the century' for the sale of a license to the Soviet Union, and the launch of the production of Lada in the Volga Automobile Factory in Tolyatti. Valetta was of the opinion that Fiat's interest was aligned with the Italian national interest, and that while running the business, he was simultaneously involved in a kind of soft diplomacy. Providing the possibility of economic cooperation between the East and the West, he would contribute to lessening of the tension between both of the political and military blocs. Additionally, passenger cars would spread the 'virus of consumerism' behind the Iron Curtain, forcing the governments of the socialist countries to pay greater attention to the satisfaction of the needs of their citizens, who, in turn, owing to better access to Western technology-based products, would become increasingly aware of the advantages of a market-based system over a centrally planned economy.<sup>37</sup>

However, the crucial reason why Fiat was interested in the sale of its license to the FSO was related to business. In the mid-1960s, it was already apparent that Fiat had difficulties in coping with the competition on the international market. The primacy of technology-led over market-led processes was becoming an increasing burden for the Turin company. The entry of Japanese producers into the global market, as well as competition from the American and European companies, which combined mass production with flexibility, introduced lean production principles by limiting stocks of materials and parts, and applied advanced sales techniques, posed a threat to Fiat, which failed in its attempt to fight the competition at the higher end of the market.<sup>38</sup> This failure encouraged the company to build a strategy based on its expertise in the production of smaller cars. Consequently, the company was ready to sell licenses to poorer countries with a lower car density.

<sup>&</sup>lt;sup>37</sup> Fava, 'Fiat and AutoVAZ'.

<sup>&</sup>lt;sup>38</sup> Györgyi Berta, 'Central and Eastern European Automotive Industry in European Context', in János Rechnitzer and Melinda Smahó (eds.), *Vehicle Industry and Competitiveness of Regions in Central and Eastern Europe* (Győr, 2012), 36–7.

Fiat management, watching the situation in the automotive markets of the socialist countries, realised that the cars produced there were outdated, production size was small, and the concepts of its co-ordination within Comecon, emerging from the turn of the 1940s and 1950s, were ineffective.<sup>39</sup> It was assumed that the level of car-ownership in these countries would grow and the management saw this as an opportunity.<sup>40</sup> The management of the Polish automotive industry was, in turn, aware of Fiat's problems on the global markets and believed that they could encourage the Turin company to offer Poland favourable conditions in the licensing contract.

Fiat 125p, the model to be license-produced in Żerań, combined a body from the new Fiat 125 with a chassis, mechanical parts and an engine from the Fiat 1300/1500 model that had entered into production in the early 1960s. In the second half of the 1960s the 125p could still be considered a vehicle that met the demands of the time but in no case was it the latest advancement in automotive technologies. Thus, the implementation of the licensing contract allowed Fiat an opportunity to transfer outside Italy the management and production techniques that were getting outdated by the standards of the most advanced markets. For the Polish partner, however, they represented a leap to modernity.<sup>41</sup> The introduction of Italian technologies is recalled by the FSO technical staff as a "positive shock", a "window to the world", a "driving force of the whole industry", and "wonderful collaboration".<sup>42</sup> After the licensing contract was signed, intense training programmes of various types began: Italians were coming to Poland and many Poles were traveling to Turin, not only FSO

48

<sup>&</sup>lt;sup>39</sup> Valentina Fava, COMECON Integration and the Automobile Industry: the Czechoslovak Case (European University Institute, Max Weber Programme Working Paper, 18, Badia Fiesolana, 2008); Burghard Ciesla, 'Difficult Relations: German Automobile Construction and the Economic Alliance in Eastern Europe, 1945–1990', in Corinna Kuhr-Korolev and Dirk Schlinkert (eds.), Towards Mobility: Varieties of Automobilism in East and West (Wolfsburg, 2009), 87–100.

<sup>&</sup>lt;sup>40</sup> Fava, 'Fiat and AutoVAZ Togliatti'; Siegelbaum, Cars for Comrades, 88-98.

<sup>&</sup>lt;sup>41</sup> In fact, the Italian licence reorganised the whole automotive sector. *Zjedno-czenie Przemysłu Motoryzacyjnego* (Polmo) became the governing body over: other automotive factories, enterprises dealing with car sales and service (Polmozbyt and Polmot), research and development of new constructions (*Przemysłowy Instytut Motoryzacji*), along with enterprises specialising in the design of automotive plants (Motoprojekt). See Boniecki (ed.), *Opowieść o FSO*, 72.

<sup>&</sup>lt;sup>42</sup> FSO1, FSO6, FSO18, FSO16.

employees, but also engineers and technicians from other enterprises which were to supply the factory.<sup>43</sup> Italian and English language courses were held in Warsaw. For trainees, mostly coming from provincial areas, contact with Italian industry was usually their first exposure to advanced technology. Over the following years, Polish Fiat (and later Polonez) assembly plants were built in Yugoslavia, Columbia, and Egypt.<sup>44</sup> Exports went mostly to developing countries, such as Algeria and Pakistan, and to the socialist markets, including China.<sup>45</sup> All in all, socialist managers, engineers and experts began to travel around the world to negotiate contracts, oversee transport, assembly, on-site repairs or to take part in fairs and learn about technological processes.

The Warsaw plant underwent significant technological and managerial changes. It was organized into divisions accountable for the way they ran their remuneration fund, employment level, and labour productivity indicators.<sup>46</sup> Entering into cooperation in this regard with academic institutions dealing with management and organisation was a true novelty.<sup>47</sup> One of the most important elements of the 'Economic Progress Plan' drawn up in 1966 was computerisation. Initially, the computer was intended for production and sales planning along with automatic generation of reports.<sup>48</sup> Modernization of the factory also included the expansion of the Research and Development Centre, which

<sup>&</sup>lt;sup>43</sup> In 1967–71, approximately 600 persons were trained, including 283 employees of FSO itself. See FSO1 and APW, FSO, 1/489, Information on training and development of FSO employees from 1969 to 1971, 1 Dec. 1971, 59–72.

<sup>&</sup>lt;sup>44</sup> APW, FSO, 1/664, Economic analysis for 1973, 111-2.

<sup>&</sup>lt;sup>45</sup> The FSO exported on smaller scale also to technologically more advanced countries like France, Great Britain, or Finland.

<sup>&</sup>lt;sup>46</sup> Warsaw, Archives of Modern Records (*Archiwum Akt Nowych* [hereinafter: AAN]), Polish United Workers' Party (*Polska Zjednoczona Partia Robotnicza* [hereinafter PZPR]) 237/V-809, Fabryka Samochodów Osobowych. Basic plan indicators for 1970, Jan. 1970, 77.

<sup>&</sup>lt;sup>47</sup> E.g. with the Central School of Planning and Statistics (*Szkoła Główna Planowania i Statystyki*, SGPiS) and the Institute for Organisation and Management of the Engineering Industry (*Instytut Organizacji i Zarządzania Przemysłu Maszynowego*). The scholarly institutions were expected to help prepare a cost planning system and a system of managing a remuneration fund. They were also involved in preparing the factory's performance analyses, and review of the organisational structure. APW, FSO, 1/665, Economic analysis for 1974, 51; APW, FSO, 1/666, Economic analysis for 1975, 63–5.

<sup>&</sup>lt;sup>48</sup> APW, FSO, 1/657, Economic analysis for 1966, 39; APW, FSO, 1/658, Economic analysis for 1967, 60–1; APW, FSO, 1/659, Economic analysis for 1968, 41–2.

worked on new constructions and the improvement of older ones. Office employees were trained in planning, company economics, and data processing.<sup>49</sup> In the early 1970s, Warsaw University of Technology introduced alternate study programme for the FSO employees (periods of study were interspersed with periods of work). Later, the Central School of Planning and Statistics offered similar studies. Also large-scale in-situ vocational training programmes were launched for the factory workers.<sup>50</sup> The initial low level of the formal education of the company employees was raised.

Organisational changes derived from theoretical considerations dominant at that time and typical for Polish industry in general. In the late 1960s and early 1970s both scientists and management practitioners believed that electronic machines could not only take over activities related to gathering, processing, storing or copying information, but also help eliminate disturbances in the work of an industrial plant by automating operational coordination of production in different workshops, or controlling the flow of raw materials, components and finished goods. There were also hopes to create systems for the analysis of business operations. On the whole, much was expected from the introduction of a mathematical approach to management, the trend explained by interest in cybernetics and systems theory, vivid at that time.<sup>51</sup>

The introduction of the Fiat license meant also plant expansion. At the end of the 1960s, the production of ca. 3,300 car components and parts was divided among several dozen industrial factories across Poland.<sup>52</sup> The Warsaw plant was significantly enlarged, with newly constructed facilities covering a total area of 30,000 square meters.

<sup>52</sup> AAN, PZPR, 237/V-809, Fabryka Samochodów Osobowych. Basic indicators of the plan for 1970, Jan. 1970, 33. Altogether, subcontractors produced 34 per cent of the total number of parts and 48 per cent of a car's value. The process was gradual, but in line with the philosophy of the centrally managed economy, the plants cooperating with the FSO were being taken under the supervision of Warsaw factory to become its subsidiaries. The first of which, *Zakład Produkcji Części Samochodowych* in Opole, was acquired in 1966. In the mid-1970s, there were eight subsidiary factories. By transforming a subcontracting into a subsidiary, FSO management achieved greater control over its operations.

<sup>&</sup>lt;sup>49</sup> APW, FSO, 1/489, Information on training and development of FSO employees from 1969 to 1971, 1 Dec. 1971, 59–72.

<sup>&</sup>lt;sup>50</sup> In 1973, the training programme included 10 per cent of the staff.

<sup>&</sup>lt;sup>51</sup> Witold Kieżun, Management in Socialist Countries. USSR and Central Europe (Berlin and New York, 1991), 83–98.

The foundry, producing engine components, was furnished with Western European, mainly Italian, equipment. A new facility for engine and gearbox production conforming to Fiat standards was built together with a high-bay warehouse with automatically controlled flow of containers and pallets, like in the Citroën plant in Rennes, on which it was modelled. Advanced pressing machines and new painting equipment were assembled. And the production line for welding bodywork components met the most advanced standards applied by Western automotive factories.<sup>53</sup>

People who introduced the new organization of production in the FSO were technocratically-minded engineers, usually in their forties. There were several hundreds of them in the factory in the 1970s. The majority of them had been working for the FSO for a long time, in many cases for their entire careers. At the turn of the 1960s and 1970s they were achieving promotions to managerial positions.<sup>54</sup> They embodied several apparent contradictions of the time: the belief in scientific management, rigid authoritarianism, and informal flexibility. That is why the FSO, both when implementing the Fiat technology, and later during the crisis of the 1980s, still remained a strongly formalised organisation with tall structure and an autocratic management style. Despite the propaganda of 'rationalisation',<sup>55</sup> the communication was top-bottom. Decision-making powers were not delegated. Superiors gave orders, while subordinates were to report their completion. "I stood in front of the director as before a judge ... He kept swearing like a sailor" - said an engineer working in the design bureau.<sup>56</sup> As one technical manager recalled, one of the engineers, having repaired a malfunction, "saluted him in an upright, rigid pose" while informing him that production had restarted.<sup>57</sup> Professional training programmes for managers did not promote what today is understood

<sup>53</sup> Boniecki (ed.), Opowieść o FSO, 77-83.

<sup>&</sup>lt;sup>54</sup> FSO19 mentioned a thousand engineers. According to the official factory data, in 1974, 46.9 per cent of employees had completed only primary education, 30.8 per cent had vocational education, 18.7 per cent secondary education, and 3.6 per cent higher education. APW, FSO, 1/665, Economic analysis for 1974, 31.

<sup>&</sup>lt;sup>55</sup> 'Rationalisation' was a trend popularised by the media: anyone, even an ordinary worker, could propose a solution to improve organization of production or production methods.

<sup>56</sup> FSO19.

<sup>&</sup>lt;sup>57</sup> FSO18.

as soft skills. The paternalistic work culture was overwhelming; a boss could sometimes, like a father, impose a punishment in defiance of work regulations, but would occasionally turn a blind eye and allow for work on the side, absence from work or other violations of formal rules. In return, the manager expected respect, obedience, and readiness to perform tasks not included in the job description.

In such a way, the factory created an environment where work relations were subject to informal negotiations and sometimes gave room for individual agency. It was particularly visible at the time the Fiat license was introduced, when the change of organisational structures opened unregulated, conciliation-like areas requiring flexibility. Within the informal hierarchy, there truly mattered resourceful, versatile individuals able to sense the plans and moods of the management and quickly solve (constant) technological and organisational problems.<sup>58</sup> In the long run, informal contacts and communities were fostered by extensive social facilities (including shared holiday centres), and primarily by the fact that the FSO, as many other production plants, employed whole, sometimes two- or three-generational families. One of the engineers counted that his family worked in the factory for a total of 175 years. His father, uncle, sister, brother, wife, sister-in-law, brother's children and, periodically, his son, were all employed in the FSO: "this factory truly bonded people to it, like a mother who feeds her child", he emphasized.59

### IV

## CONTINUAL FRUSTRATIONS

Initially, the Italian transfer worked reasonably well. The modernization of the FSO developed simultaneously with other investments and consumption-related expenditures by the team of Edward Gierek as the Party First Secretary (1970–80). However, over the longer term, the enterprise fell victim to the endemic problems of socialist industry, material shortages, scarcity of reliable workforce, and decapitalisation of machinery, which all resulted in poor quality of production.<sup>60</sup>

<sup>58</sup> FSO16 and FSO17.

<sup>&</sup>lt;sup>59</sup> FSO17.

<sup>&</sup>lt;sup>60</sup> For the anthropological analysis of centrally controlled shortages, see for example Katherine Verdery, *What Was Socialism, and What Comes Next*? (Princeton,

Shortages delayed production and caused the tendency to hoard surplus amounts of raw materials and semi-finished products in the factory.<sup>61</sup> High employee turnover combined with low labour discipline also troubled socialist managers.<sup>62</sup> A former FSO Director recalled:

I remember one day when I entered the Fiat assembly line. I passed by and saw that the line was not operating. It was half past seven and the line should have been working since six o'clock. A member of staff said – We don't have enough people and we cannot start work. So, we started to look for people and managed to find only a charwoman and a plumber.<sup>63</sup>

Measurements of the working time in the first half of the 1970s showed that almost eight per cent of each working shift was unproductive.<sup>64</sup> The total unworked time per one employee was 210–220 hours annually.<sup>65</sup> It was not uncommon for employees to be absent without any notice given in advance. In many cases an enigmatic statement of the necessity to take care of urgent family matters was enough to justify the absence. The FSO was long called in Warsaw 'a drunkard's plant'.<sup>66</sup> A hard-line approach towards unreliable employees, the necessity of which was repeatedly formulated by various bodies, was never implemented. It was difficult to find qualified workers in Warsaw.

The situation slightly improved with the expansion of a piece rate system and the inclusion of the results of competition between shifts into a wage determination scheme.<sup>67</sup> Employees were also

<sup>66</sup> FSO10.

<sup>1996), 19–38;</sup> Elisabeth C. Dunn, Privatizing Poland: Baby Food, Big Business, and the Remaking of Labor (Ithaca, 2004), 8–18.

<sup>&</sup>lt;sup>61</sup> Annual economic analyses drawn up by the FSO usually indicated that expenditures on the purchase of tools and machines were exceeded. At the same time, not all the funds allocated for construction works were spent. This happened usually because construction works were not finished on schedule as the contractors lacked materials and machines. APW, FSO, 1/658, Economic analysis for 1967, 32; APW, FSO, 1/665, Economic analysis for 1974, 22.

<sup>&</sup>lt;sup>62</sup> For example, in 1973, with an annual average employment level of 21,800 employees, there were 5,359 discharges and 6,581 new employments. APW, FSO, 1/664, Economic analysis for 1973, 42.

<sup>63</sup> FSO6.

<sup>&</sup>lt;sup>64</sup> APW, FSO, 1/664, Economic analysis for 1973, 38.

<sup>&</sup>lt;sup>65</sup> APW, FSO, 1/665, Economic analysis for 1974, 21–2.

<sup>&</sup>lt;sup>67</sup> FSO10.

urged to undertake production obligations which were formally an initiative of social organisations within the FSO, for example the Union of Socialist Youth. These measures had a negative impact on production quality but even defective cars sold well, at least on the domestic market. "Quantity mattered more than quality. Everybody got their asses kicked for failing to meet the planned targets but not for missing the quality standards", the head of the FSO finishing unit summed up.<sup>68</sup>

In 1972, production of the Syrena was transferred to Bielsko-Biała, and in 1973, production of the Warszawa ceased. From then on, the FSO produced solely the Fiat 125p and assembled other Fiat models (Zastava, Fiat 127, 131, and 132). However, spare parts and replacement engines for the Warszawa were still produced there. The FSO also made castings for the needs of the arms industry. In 1975, factory production reached almost 123,000 cars, exceeding its originally planned capacity. This was the reason for the introduction of a three-shift organization of some positions. Excessive use of machinery resulted in frequent breakdowns and stoppages. At the same time, the FSO experienced problems with obtaining foreign currency to purchase tools and machine spare parts from abroad and attempts to set up their production in Poland also failed.<sup>69</sup>

In the mid-1970s, the process of restructuring the factory commenced. The launch of the production of the Polonez in 1978 was intended to be just its initial stage. The implementation of a family of engines for the new model was supposed to come next. A new contract with Fiat was signed in 1979. However, its realization never started.<sup>70</sup> The Government tried to limit investments in view of the emerging economic difficulties in the country and the deterioration of the international automotive market caused by the oil crises in the 1970s. Consequently, the 1980s witnessed a considerable production drop in the FSO along with the ongoing decapitalisation of the

<sup>68</sup> FSO23.

<sup>&</sup>lt;sup>69</sup> APW, FSO 1/666, Economic analysis for 1975, 23.

<sup>&</sup>lt;sup>70</sup> AAN, Ministerstwo Przemysłu Maszynowego, II, 11/1, Information [from the Office for Launching the Production of Licenced Cars (*Biuro Uruchomienia Produkcji Pojazdów Licencyjnych*)] for the Minister of Engineering Industry, Aleksander Kopeć, on the realization of industrial and trade contract signed in June of this year with the Fiat Company, 24 Oct. 1979, 14–20. On the package of contracts with Fiat, see also Podbielski, *Polski Fiat 126p*, 196–9.

machinery.<sup>71</sup> A new challenge the factory had to face was the instability of the overall legal situation resulting from the attempts to reform the socialist economy. The FSO was an enterprise with sufficiently strong bargaining power to secure tax exemptions for themselves or exception from other regulations. But many problems of the past, like low discipline and workforce shortages, even worsened. Conflicts between the factory's management and the Solidarity trade union and subsequent strikes made it difficult for the company to meet production plans. A large percentage of the cars left the production line incomplete, and waited, unsellable, for the missing parts.<sup>72</sup> In 1982, Fiat refused to continue to put its name behind the 125p model as the growing number of defects discredited the company's name.<sup>73</sup>

At the time, Polish design engineers were working on a new car model: the Wars. They recollect the time spent on its design as an exhilarating experience. Like in the case of the Syrena in the 1960s, they proudly designed a Polish 'national' car: "We thought that we were creating something new, entirely our own work. We imagined hundreds of thousands of Warses speeding along all the roads of the country."<sup>74</sup> However, the Wars was to be yet another vain hope. It turned out that its production was impossible as there was no money for its implementation; the Polish Government had no such funds, and Western corporations were not interested in purchasing the prototype.

The decline of the Polish automotive industry was taking place at a time of rapid development in transport and just-in-time production within the global automotive industry. The authorities were aware of the necessity for change. The then chief director of the FSO mentioned a visit to a new Nissan factory in Japan:

I asked them – How many [technical] checks do you have? And they said none. [The quality was computer-checked] ... So, I asked them – Where do you have warehouses? ... And they replied that they had no warehouses. So, I asked them how it was with the parts. And they said that all the

<sup>&</sup>lt;sup>71</sup> In 1986, machines and tools wear and tear was at the level of 76 per cent. APW, FSO, 1/672, Economic analysis for 1986, 23.

<sup>72</sup> FSO6, FSO10.

<sup>&</sup>lt;sup>73</sup> Agnieszka Wróblewska, 'Żerania pożycie z Koreą', *Magazyn*, Suppl. to *Gazeta Wyborcza* (13 May 1999).

<sup>&</sup>lt;sup>74</sup> Zbigniew Szczepanik, Research and Development Centre Director in the FSO in the 1990s. Quoted *ibidem*.

parts were delivered on time ... So finally, I asked them where the finished cars were stored. They responded that they would show me, but we had to leave the factory. We went out, and they asked me if I could see the ship. (The plant stood at the seaside). I said yes, I can see the ship, but so what? They said that when a car leaves the production line, it goes onto that ship ... As soon as there are five thousand cars on board, it sails and the next one comes, an empty one ... There were so many astonishing things there ... Order, cleanliness. Unusual. Incredible.<sup>75</sup>

As a response, attempts were made to streamline the organisation's structure of the FSO.<sup>76</sup> Also negotiations on a new license contract continued throughout the whole decade with Renault, Seat, and Fiat. The Polish Government intended to enter into an agreement with Daihatsu, but the attempts were unsuccessful due to Poland's debts and its failure to finish negotiations with the Paris Club.<sup>77</sup> Finally, a new contract was initialled with Fiat for the license production of the Uno in December 1988. However, at the last moment it was not approved by the Minister of Industry. This fiasco was referred to by the socialist management of the factory as a "disaster", and the "beginning of an end".<sup>78</sup>

### V

## QUALITY MANAGEMENT OPTIMISM

The second, capitalistic modernity of the FSO lasted for two decades. It started in 1988, with the liberal reforms by the communist Government, which allowed taking over state assets to set up private firms, and continued with the so-called shock therapy of Tadeusz Mazowiecki's Government, put into effect in 1990. The position of the large State-owned-enterprises, like the FSO, and their employees changed rapidly from key assets of socialist economy to transformation liabilities. For the industrial sector it meant above all heavy taxation and, as a result of fast growing imports, exposure to the competition of western goods. In effect, almost overnight, postsocialist factories found themselves in a highly competitive market,

<sup>75</sup> FSO6.

<sup>&</sup>lt;sup>76</sup> APW, FSO, 1/673, Economic analysis for 1984, 17.

<sup>77</sup> FSO6.

<sup>&</sup>lt;sup>78</sup> FSO18, FSO6.

the situation they needed to face with depreciated machine stock, poor quality of goods, and the lack of marketing know-how. The situation was further complicated by conflicts between the members of the old elite and those Solidarity activists who accused the Party's *nomenklatura* of misappropriating State assets. In effect, former directors were often dismissed and members of technical and engineering staff promoted to managerial positions.

In 1990, over 80 thousand cars were produced by the FSO. The following year, however, sales fell, the production had to be reduced,<sup>79</sup> and, finally, the factory had to cease operation due to accruing debts,<sup>80</sup> insufficient demand, worn out machinery, and problems with payments to suppliers. The public discourse around the FSO was extremely unfavourable. The media demanded cheap, well-built cars, and argued that the times of 'State philanthropy' in the automotive industry had already been gone for good.<sup>81</sup> Economic analyses drawn up by the FSO management emphasised external factors as the causes of factory's difficulties: tax regulations imposed on State enterprises, hyperinflation that caused prices of the parts ordered from contractors to rise; customs and anti-monopoly policy of the State which enabled, in 1991 alone, the import of ca. 350,000 cars from abroad; the dollar exchange rate, which made exports unprofitable.<sup>82</sup>

The initial rescue steps taken by the FSO included: setting up spin-offs to which tax regulations imposed on large companies would not apply,<sup>83</sup> attempting to defer tax payments, and exercising pressure on authorities to introduce higher duties on imported cars. In addition to using its bargaining power to bend the existing rules and make external conditions more favourable for the FSO, the factory undertook

<sup>81</sup> Stefan Bratkowski, 'Krótko a zwięźle', *Gazeta i Nowoczesność* (15 Nov. 1990). For instance, a former Minister of Industry, Mieczysław Wilczek, referred to FSO products in the TV debate as 'carrion' while the editor hosting the discussion said that, apparently, it is a hard task to 'finish the rat off'. Piotr Ambroziewicz, 'Dobijanie gada', *Prawo i Życie* (27 Oct. 1990).

<sup>&</sup>lt;sup>79</sup> Ca. 40,000 cars were manufactured in Warsaw.

<sup>&</sup>lt;sup>80</sup> APW, FSO, 1/674, Economic analysis for 1991, 18–20. See also Marian Karwas, 'Ile naprawdę kosztuje ten samochód?', *Gazeta i Nowoczesność* (8 Nov. 1990), where the former FSO Technical Director (1971–82) blamed Government policy for deliberate enterprise paralysis.

<sup>&</sup>lt;sup>82</sup> APW, FSO, 1/674, Economic analysis for 1991, 20.

<sup>&</sup>lt;sup>83</sup> In November 1990, there were thirteen such companies. See Jerzy Szczęsny, 'Czar czterech kółek', *Tygodnik Solidarność* (30 Nov. 1990).

intense bottom-up modernisation efforts, and continued looking for foreign investors. In 1991, Andrzej Tyszkiewicz, previously the chief technologist of the company, was appointed the new managing director. The first modernisation measures he introduced were inspired by American examples. He widely recommended his colleagues to read books by Lee Iacocca, an American manager who, several years earlier, had successfully restructured the failing Chrysler group by securing government loans and by launching new car models.<sup>84</sup> At the same time, in press interviews, Tyszkiewicz attacked the Government's policies for "killing Polish industry", which won him support of his staff.<sup>85</sup> The new management initiated "the FSO Mission" programme. Its primary objective was to introduce the Total Quality Management (TQM) system - still a novelty in American and European management - which emerged as a response to Asian competition and was based on an ongoing improvement of goods and services.<sup>86</sup> General Motors representatives participated in the implementation of the TQM in the FSO whose crucial element was the adoption of the basic standards of quality for car production under the International Organisation for Standardisation (ISO 9000).

The slogan encouraging staff to participate in the programme called "We have radically changed how we think about quality. Join us".<sup>87</sup> In total, 400 FSO employees took part in training workshops on production control and management in the Juran Institute in the USA, an institution established in 1979, popularising its founder's management theory. Joseph Juran, an engineer and a lawyer, whose theories on management contributed to the exchange of knowledge between the USA and Japan, paid special attention to the key role of managers in the process of planning, managing, and improving

<sup>&</sup>lt;sup>84</sup> In his works published in the times when sales of American cars were dropping, Iacocca emphasized the superiority of American creativity over Japanese diligence. See Lee Iacocca and William Novak, *Iacocca: An Autobiography* (Bantam Books, 1984); Lee Iacocca and Sonny Kleinfeld, *Talking Straight* (Bantam Books, 1988). See also Agnieszka Wróblewska, 'Żerania pożycie z Koreą'.

<sup>&</sup>lt;sup>85</sup> See 'Bliżej Opla. Rozmowa z Andrzejem Tyszkewiczem, dyrektorem naczelnym FSO', *Przegląd Tygodniowy* (19 Jan. 1992).

<sup>&</sup>lt;sup>86</sup> See Dunn, *Privatizing Poland*. The author describes the TQM mechanisms in a Polish processed fruit factory. She shows the dehumanisation and alienation aspect of quality management from the perspective of shop floor workers.

<sup>&</sup>lt;sup>87</sup> 'Fabryka Samochodów Osobowych na Żeraniu', *Gazeta Wyborcza* (13 May 1999).

production, and was one of the first authors emphasising the economic costs of poor quality.<sup>88</sup> FSO employees had mixed feelings about the workshops in the USA. Some of them complained that they gained nothing from them.<sup>89</sup> Others praised the training which gave 'incredible results' not only in terms of educational value, but also by boosting their morale and giving hope that this new knowledge might save the factory. But what was particularly important was their experience of the culture of well-planned work at its most basic level. As one of the engineers emphasised:

In our factory, an employee had three tasks and the production line went so quickly that the worker had to run along. In the States, everything was precisely calculated and the production line was moving with a corresponding speed allowing people to do the job smoothly. It was shocking to us. Truly shocking.<sup>90</sup>

As a result of the restructuring efforts, the FSO's situation improved. Two new models of Polonez (Caro and Atu) were introduced. The clients were given the opportunity to select option packages and engine versions.<sup>91</sup> The factory also started to seek ways of selling its products more actively. A network of dealers was set up. Leasing deals and instalment plans were made available. The cars were offered for purchase under the so-called Ponzi scheme, which was popular in the 1990s.<sup>92</sup> Although the success proved to be short-lived, in 1994, the Polonez alone had a ca. 33 per cent share of the Polish automotive market.

The most important strategic goal was, however, to find a foreign investor.<sup>93</sup> Negotiations were taking place between the Ministry of

<sup>&</sup>lt;sup>88</sup> Joseph M. Juran, Architect of Quality: The Autobiography of Dr. Joseph M. Juran (New York City, 2004).

<sup>&</sup>lt;sup>89</sup> FSO16.

<sup>&</sup>lt;sup>90</sup> FSO5.

<sup>91</sup> Boniecki (ed.), Opowieść o FSO, 126-8.

<sup>&</sup>lt;sup>92</sup> APW, FSO, 1/674, Economic analysis for 1991, 14. The key element of the system was that clients formed self-financing groups and before they could receive a given product, they had to start paying for it in instalments. Withdrawing from the system was difficult, and was connected with contractual fees and extra costs. The Ponzi scheme was later made illegal.

<sup>&</sup>lt;sup>93</sup> Supreme Audit Office (*Najwyższa Izba Kontroli* [hereinafter: NIK]), Postcontrol report 1998, 22.

Industry, the FSO management and the largest global automotive market players: General Motors, Citroën, Fiat, and Rover. Agreements with GM led to the establishment of an assembly line for the Opel Astra. Contracts for engines to be installed in the Polonez were concluded with both Citroën and Rover.<sup>94</sup> Eventually, in 1995, a decision was made that the Daewoo corporation would become the new owner of the FSO. At that time, Korean chaebols were looking for cheap labour and new markets in developing countries and in Eastern Europe.<sup>95</sup> In 1994, Daewoo purchased Automobile Craiova in Romania, and in 1998, shares in the Czech Avia. The Korean investor offered to the Polish Government more favourable conditions than its Western competitors. It undertook to contribute ca. 1.5 billion dollars to the joint venture company within the following six years, to modernise the major FSO product of that time, the Polonez, and to launch the production of new car models (by 2001, Żerań production was to reach 500,000 cars). A social package agreed on with the trade unions guaranteed that the employment level and employee privileges would be maintained for three years. In return, the trade unions committed themselves to refrain from strikes for five years.<sup>96</sup>

Following the agreement with Daewoo, there commenced a procedure typical at that time of privatisation processes involving foreign investors. The State enterprise was quickly liquidated (within six weeks) and instead a sole-shareholder company of the State Treasury, the FSO Motors, was established with the Korean corporation entering into the company less than a month later. In March 1996, a ceremonial inauguration of the Daewoo-FSO Motor Company took place. The parent factory in Warsaw employed 10,000 people at that time, with another 10,000 working in the FSO subsidiaries in other locations. The first years of Korean presence in Warsaw was a time of investments, modernisation of machinery stock, introduction of new production methods and safety standards, both in the workplace and in the manufactured cars. This helped the FSO strengthen its position in the Polish automotive market. In 1998, the company ranked second in the country in the number of passenger and commercial vehicles sold (Italian Fiat ranked first). In the peak year, 1999, the production

<sup>94</sup> Boniecki (ed.), Opowieść o FSO, 132.

<sup>95</sup> Judith Cherry, Korean Multinationals in Europe (Routledge, 2001), 147.

<sup>&</sup>lt;sup>96</sup> NIK, Post-control report 1998, 25-6.

exceeded 200,000 cars, while its share on the national market reached 28 per cent, even though the sales of the majority of the models (Tico, Polonez, Espero, Nubira, and Leganza) was dropping. Only the Matiz and Lanos models recorded sales growth.<sup>97</sup>

The Asian owner was at first welcome by some of the FSO employees. The collective agreement was remembered by the trade union members as one of the best in Poland.<sup>98</sup> Salaries at the FSO were higher than the average in other large industrial plants in Warsaw. Changes introduced by the Koreans concerning safety matters, workplace layout, and the factory's material resources were generally perceived as positive. Recalling those times, employees often contrasted the dirt and mess of the socialist times with the order introduced by Daewoo: "They put everything in order and taught us what it should look like."<sup>99</sup> The story of repainting the factory premises several times to get the right colour became a part of organizational memory of the FSO.<sup>100</sup> The factory became clean and far better computerized.

However, attitudes towards the new employer varied, mostly depending on education, gender, and the factory department. Workers and employees of such divisions as warehouses or auxiliary facilities under liquidation felt disrespected. Moreover, women complained about sexism in Daewoo corporate culture.<sup>101</sup> On the other hand, engineers were the most privileged group of employees. Koreans combined a meritocratic and autocratic management style with a participatory formula, and this suited the Polish high-level specialists. A design engineer, previously managing the Research and Development Centre of the FSO, emphasised that they were "cherished more" than other divisions in the factory as Daewoo had "greatly valued both construction design and developments in science".<sup>102</sup> Engineers appreciated that they finally had access to global technical expertise and could improve their qualifications. The expansion of Korean chaebols relied on the acquisitions and then perfection of Western licenses. One of

<sup>&</sup>lt;sup>97</sup> Archive of the Ministry of Treasury (*Archiwum Ministerstwa Skarbu Państwa* [hereinafter: AMSP]), Report on the Daewoo-FSO group activity 1 Jan. – 31 Dec. 1999.

<sup>&</sup>lt;sup>98</sup> FSO11.

<sup>&</sup>lt;sup>99</sup> FSO11.

<sup>100</sup> FSO21, FSO13.

<sup>&</sup>lt;sup>101</sup> FSO15, FSO20, FSO21.

<sup>&</sup>lt;sup>102</sup> FSO3.

the engineers emphasised this, understandingly, as a development strategy which Poland was previously lacking.

We saw for the first time how to design cars properly. We received procedures which they had taken several years earlier from Opel, from which they had purchased a license. And this was, as I saw it, their solution, within 10 to 15 years they had done more than we had since 1967. They took licenses with a higher degree of technology, with more procedures and they strived to develop the system so as to reduce the time spent on design as much as possible.<sup>103</sup>

The price the socialist engineers paid for that expert knowledge was the lack of agency and resourcefulness which they used to have previously. From constructors with ambitions to work independently on an original, Polish car design, they turned into dependent, peripheral subcontractors on the global market of advanced engineering skills. Although the FSO staff went already through quality training under previous management, the programmes introduced by the Koreans amounted to a civilizational mission. Slogans present across the production premises insisted: 'do it right the first time'. The management wore company sweatshirts with the emblem NCC – New Car Concept.<sup>104</sup> The Initial Quality Study principle facilitated the identification of defects that could create a nuisance for car users as early as the production stage.<sup>105</sup> Almost 600 persons (managers and qualified workers) were enrolled in the 5S Practices programme in Warsaw. The five 'S' stood for: sorting, setting in order, shining, standardising, and sustaining.<sup>106</sup> To instil these values in employees, competitions were announced<sup>107</sup> along with a special action – 'My Machine' - where each FSO manager had to select a machine from the production line to take special care of. For a period of several weeks, the manager was responsible for its maintenance and had to

<sup>&</sup>lt;sup>103</sup> FSO3.

<sup>&</sup>lt;sup>104</sup> Wróblewska, 'Żerania pożycie z Koreą'.

<sup>&</sup>lt;sup>105</sup> AMSP, Daewoo-FSO sp. z o.o. Management Board report on its operations in 1996 along with the line of action for 1997.

<sup>&</sup>lt;sup>106</sup> AMSP, Daewoo-FSO sp. z o.o. Management Board report on the activity of the Company in 1996 along with the line of action for 1997.

<sup>&</sup>lt;sup>107</sup> There were attractive prizes to win in the competitions. The team of the press shop was awarded a five-day trip to Paris and London and a colour TV set for winning an innovation contest.

clean it, wash it, and paint it in the presence of shop floor workers.<sup>108</sup> Quality was expected to rise along with efficiency. Almost 400 medium and higher-level employees participated in the 'School of Innovation' programme and training workshops run by the Korean KMA company's employees. Their aim was to solve problems coming from ineffective organisation of work.

One of the engineers underlined that: "This striving for quality, this urge to eliminate defects, was going on all the time, constantly, and at each stage. So, it became almost a kind of religion. So that's why nobody concealed any defects".<sup>109</sup> Quality problems were the subject of ongoing discussions and consultations with lower level employees. They were referred to as a 'circus' or a 'craze' by some workers.<sup>110</sup> Others appreciated them: "One may say that this was the first time we understood concurrent engineering, namely, involving the last one in the production line to make them feel connected with the process from the beginning. It was practical and facilitated rapid design development".<sup>111</sup>

Indeed, the number of defects in the Polonez quickly dropped fourfold. Between 1995 and 1998, the average number of man-hours spent on the production of a single Polonez dropped from 67.5 to 42.5.<sup>112</sup> In 1997, the FSO launched the production of three new models: the Lanos, Nubira, and Leganza. This was for the first time in the history of the automotive industry that one company had introduced three models to the market simultaneously, each one in a different segment.

The new organisational culture of greater commitment to the workplace than ever before led, however, to conflicts, even among the highly skilled specialists who profited from it. Socialist organisation of work, based on the necessity to fulfil the production plan and on the piece-rate pay method, taught employees to do their duties swiftly and hastily. Koreans spent much more time at work. "They did everything slowly, calmly. Even during meetings, issue after issue was discussed slowly …"<sup>113</sup> However, Korean specialists did not dedicate

<sup>&</sup>lt;sup>108</sup> Wróblewska, 'Żerania pożycie z Koreą'.

<sup>&</sup>lt;sup>109</sup> FSO3.

<sup>&</sup>lt;sup>110</sup> FSO9.

<sup>&</sup>lt;sup>111</sup> FSO3.

<sup>&</sup>lt;sup>112</sup> AMSP, FSO achievements in 1998.

<sup>&</sup>lt;sup>113</sup> FSO7.

all the time spent in the workplace to the performance of their duties. They also rested in the factory. Meanwhile, Polish FSO employees strictly separated their work from no work, and thought that the presence of Koreans shattered the 'family atmosphere' at the FSO.<sup>114</sup>

Especially the ideas of introducing morning exercises, overhauling machines during holiday breaks or setting out the time for lunch break (and thus extending the working time) faced successful resistance from the Polish staff.<sup>115</sup> The quality of the canteens in socialist times had been so bad that people were used to eating at home:

They wanted to introduce lunches ... We were taught differently: What do you mean, a lunch? A meal should be eaten at home with your family, shouldn't it? ... And they kept going to the bar for lunch and returning to work after lunch. And left the factory after 8 p.m., or later.<sup>116</sup>

As an act of protest, many Polish employees started going out for lunch at the time when production-related meetings were supposed to be held. Not surprisingly, Daewoo quickly withdrew this change. In addition, trade union members were of the opinion that the managers demanded more from Polish workers than from their Korean counterparts. The situation led to tensions and caused ethnic segregation: "The situation was like this: the glazed rooms where Koreans could rest were made opaque, so we could not see what these Korean workers did there during their breaks; and we had to work at that time".<sup>117</sup> Cultural differences between Poles and Koreans were soon to be used when the guilty of the enterprise's bankruptcy were sought.

#### V

### SUDDEN DECLINE

Despite modernisation and production improvements, as early as 1998, the company started to have financial problems. Initially, they were caused by the Polonez, described in the FSO's internal documents as a 'necessary burden': the privatisation contract required Daewoo to continue its manufacturing until the end of 1999, but the

<sup>&</sup>lt;sup>114</sup> FSO17.

<sup>&</sup>lt;sup>115</sup> FSO7.

<sup>&</sup>lt;sup>116</sup> FSO11.

<sup>&</sup>lt;sup>117</sup> FSO7.

decline in demand made its production unprofitable.<sup>118</sup> The Polonez was a product targeted at those low-income customers who, when making their decision on a car purchase, often chose a second-hand car. Even though the new model from FSO, the Lanos, was exported to the Czech Republic, Slovakia, Slovenia, and Hungary, the financial situation of the company was not particularly sound.

The major source of the FSO's problems were, however, the problems of its parent company. Daewoo's global expansion had started when the Korean Government protected them, like other chaebols, against external competition in the domestic market and offered various mechanisms supporting exports. In the 1990s, however, Korean economic policy liberalised and Daewoo had to cope with competition in a more open market. The company continued its ambitious investment programme, financed with bank loans. Decisions on granting loans were made by Korean bankers under political pressure or as a result of personal connections. Capital was still easily available because foreign investors were eagerly putting their funds in the markets of the South-East Asian countries, but not all initiatives were sound. Banks accumulated a bad loan portfolio. The external debt of companies and governments was also growing. When, in 1997, a rapid outflow of investors from the Asian market was recorded, the crisis backfired in Poland.<sup>119</sup>

At the end of the second year after the FSO was acquired by Daewoo, employees became aware of the changes planned by their Korean managers to 'streamline' employment. In August 1998, trade unions' representatives from the FSO sent a strongly-worded letter to the management. They were concerned about the concept of restructuring the company by forming small spin-off companies. The employment decreased by over 2,800 persons. Auxiliary business processes, such as maintenance and minor repairs, cleaning, waste management, transport and communication, security and management of holiday centres were sourced out.<sup>120</sup> In September 1998, trade unions fearing

<sup>&</sup>lt;sup>118</sup> Parts for the Polonez were produced by the FSO subsidiaries across Poland, thus their operation and employment was dependent on orders from Warsaw.

<sup>&</sup>lt;sup>119</sup> Yoon-Dae Euh and Jay Hyuk Rhee, 'Lessons from the Korean Crisis: Policy and Managerial Implications', *Long Range Planning*, xl (2007), 431–45; Dong-Jae Kim, 'Falls from Grace and Lessons from Failure: Daewoo and Medison', *Long Range Planning*, xl (2007), 446–64.

<sup>&</sup>lt;sup>120</sup> AMSP, Daewoo-FSO Group report on the activity in 1998. Report for 1 Jan. – 31 Dec. 1998, 4.

a new wave of layoffs sent a letter to the State authorities in which they expressed their concerns about the way the Koreans managed the factory: "Despite our respect for cultural differences, we cannot help but come to the impression that the management of our company, since its very establishment, has been an enemy of the employees' representatives, namely the trade unions, disregarding at the same time the real problems which underlie our activity".<sup>121</sup> In response, the Government reminded Daewoo about the provisions of the privatisation contract but took no further actions. A year later, when the protection period ended, employment in Daewoo-FSO companies was reduced from ca. 14,500 to ca. 9,400 persons, i.e. by 34 per cent, with the procedure of collective redundancies bypassed. The trade unions in the FSO, once again turned to the Minister of State Treasury, reasoning that "it is politically and morally unacceptable for any foreign capital ... that has received various privileges in our country to treat Polish people like native, hired labour force, necessary only in the pursuit of foreign companies' own, global interests".122

However, the factory was to face far greater difficulties. In 2000, Daewoo went bankrupt. The automotive part of the Korean company was ultimately acquired by General Motors. The Daewoo-FSO Motor was still operating in Poland, but the following years brought recession in the automotive sector, and Polish banks refused to finance operations of the company and began to collect their debts. This entailed further layoffs and final termination of the Polonez production. In 2003, the Koreans withdrew from managing the company and the State Treasury regained control. Over time, the company received loan guarantees from the Government and the Minister of Finance decided to write off its tax arrears. These decisions, along with accession negotiations between Poland and the European Union, caused the European Commission to impose a production limit of up to 150,000 cars annually as a penalty for public aid.

In 2005, a new foreign investor was found, the Ukrainian AvtoZAZ company, associated with Daewoo, which took over 20 per cent of the FSO shares and sustained the company's liquidity for some time. In 2006, AvtoZAZ signed a license contract with General Motors to produce a brand-new car, the Chevrolet Aveo. To produce the Aveo,

<sup>&</sup>lt;sup>121</sup> AMSP, Trade union's letter to Emil Wąsacz, Sept. 1998.

<sup>&</sup>lt;sup>122</sup> AMSP, Trade union's letter to Emil Wąsacz, Feb. 1999.

a new company was formed, whose shareholders were the FSO and GM. In 2007, the FSO, for the last time, recorded rapid production rate growth. The company achieved over a 20 per cent share in the domestic car production in Poland - the Lanos made up 98.1 per cent of this – but as a result of the European Commission's decision to cap production, the Lanos was to be slowly phased out in favour of the Aveo. It was expected that in the following years, General Motors would acquire all the FSO shares and establish a European centre for the production of the Chevrolet in Warsaw. However, there were problems with the sale of cars because of the global crisis. The implementation of the Treaty on Free Trade between the European Union and South Korea was the final nail in the coffin for the FSO. GM decided that it was cheaper to import a new Aveo version from Korea than to produce it in Poland. The FSO experienced production downtimes, and finally, in 2011 the plant in Warsaw ceased to operate. Money to make severance payments for the laid off personnel was acquired from the sale of the land on which the factory stood.

### VII

### CONCLUSIONS

The FSO employees identified themselves with the factory even when the plant failed. Recollections of the past arouse strong and mixed emotions, such as the sense of loss, betrayal, regret, bitterness, and nostalgia: "We meet one another on the occasions of the factory's celebrations ... we barbecue, drink beer, exchange views, recall the old times and regret that nothing remains of such a decent company", said one of the members of the Former FSO Employees Club when asked about his pastime.<sup>123</sup> Facing the necessity to explain why the factory collapsed in the end, the post-socialist managers and engineers point to ill will and indolence of external decision-makers. Evaluating in retrospect the contract with Daewoo, some of them argue that it was a mistake. They indicate the strategic weaknesses of the Korean partner, namely, the lack of financial stability; the use of technologies acquired from the Japanese or Americans along with limited capability to launch new car models based on their own, original designs; the dependence on German car styling; lower quality in comparison

<sup>123</sup> FSO23.

with cars by Japanese manufacturers; and the Korean management, who failed to respect local customs.<sup>124</sup>

However, the Polish State could have done worse than sign a contract with Daewoo in 1995. At the time, Daewoo, with its expertise on how to restructure companies in trouble, experience of operating on emerging markets, and specialisation in lower and medium-class car production, seemed to be an investor who gave hope to transform the FSO into a global car manufacturer. After all, Daewoo was a symbol of the Korean path from backwardness to modernity. It participated in the fulfilment of the economic plans of the Korean authorities and benefited from them. It was deemed to be too big to fail. According to all the rules that seemed to prevail in the global economy, it should have not go bankrupt, however, it did fail, along with its Polish subsidiary.

In general, over the past sixty years, the modernity of the FSO remained peripheral. Its first wave brought technological and organisational advancements that were to enable the production of cheap cars for the masses. The second wave was far more complicated because it involved rapid adaptation to market-oriented mechanisms and to quality management by means of ownership change. On the whole, however, the factory developed under the conditions of growing inadequacy in comparison with the dynamic automotive global industry. It was a recipient of outdated technologies, a provider of cheap labour, and, after 1989, it facilitated entry into new markets for international corporations without protection against the flexible rules governing the global economy.

For the specialists from the FSO, the history of the factory is, however, a story of overcoming the challenges posed by modernity. Engineers and managers demonstrate in their recollections that they passed modernization tests and that they had enough expertise and knowledge to adapt to the changing environment. Even though the image of FSO emerging from their stories and archive documents shows an insular modernity (advanced technologies were brought to the factory, but the elements of the old organisational culture remained unchanged), the experience of this modernity – brought up in the recollections to this day – is very much real. Seen from this perspective, the FSO had a significant and lasting impact on the

<sup>&</sup>lt;sup>124</sup> Nikołaj Kirov and Robert A. Rządca, 'Negocjacje Daewoo–FSO z perspektywy dziesięciolecia', *Przegląd Organizacji*, 1 [792] (2006), 7–11.

space of experience and horizons of expectations of a generation of technology specialists from an agricultural country devastated by war.

### SELECTED BIBLIOGRAPHY

Beilharz Peter, Socialism and Modernity (Minneapolis, 2009).

- Boniecki Zbigniew (ed.), Opowieść o FSO. Historia tej warszawskiej fabryki (Warszawa, 2010).
- Bugowski Radosław, 'Polski Fiat jako "miejsce pamięci". Rola i obraz marki w kulturze polskiej drugiej połowy XX wieku. Refleksje wokół koncepcji', *Klio*, xvi, 1 (2011), 123–39.
- Cherry Judith, Korean Multinationals in Europe (Routledge, 2001).
- Dunn Elisabeth C., Privatizing Poland: Baby Food, Big Business, and the Remaking of Labor (Ithaca, 2004).
- Eisenstadt Shmuel N., 'Multiple Modernities', Deadalus, cxxix, 1 (2000), 1-29.
- Fava Valentina, 'Fiat and AutoVAZ Togliatti: In Search of the Lost Fordism', Storicamente, ix, 4 (2013), <http://www.storicamente.org/07\_dossier/est/fava.htm>, DOI 10.1473/stor433.
- Gatejel Luminita, Warten, hoffen und endlich fahren. Auto und Sozialismus in der Sowjetunion, in Rumänien und der DDR (1956–1989/91) (Frankfurt am Main, 2014).
- Kieżun Witold, Management in Socialist Countries: USSR and Central Europe (Berlin and New York, 1991).
- Kirov Nikołaj and Robert A. Rządca, 'Negocjacje Daewoo–FSO z perspektywy dziesięciolecia', *Przegląd Organizacji*, 1 [792] (2006), 7–11.
- Konieczniak Zdzisław, Fabryka Samochodów Osobowych 1951-1976 (Warszawa, 1976).
- Kuhr-Korolev Corinna and Dirk Schlinkert (eds.), Towards Mobility: Varieties of Automobilism in East and West (Wolfsburg, 2009).
- Maielli Giuliano, 'The Machine that Never Changed: Intangible Specialisation and Output-mix Optimisation at Fiat, 1960s–1990s', *Competition & Change*, ix, 3 (2005), 249–76.
- Siegelbaum Lewis H., Cars for Comrades: The Life of the Soviet Automobile (Ithaca, 2008).
- Siegelbaum Lewis H. (ed.), *The Socialist Car: Automobility in the Eastern Bloc* (Ithaca, 2011).
- Verdery Katherine, What Was Socialism, and What Comes Next? (Princeton, 1996).
- Wilk Hubert, 'Próba modernizacji polskiego przemysłu maszynowego w drugiej połowie lat 60. Przypadek fiata 125p', *Roczniki Dziejów Społecznych i Gospodarczych*, lxxvi (2016), 411–37.

Mariusz Jastrząb – 20th century history; senior lecturer at the Social Sciences Chair, Kozminski University; e-mail: jastrzab@kozminski.edu.pl

Joanna Wawrzyniak – 20th century history; assistant professor and the head of the Social Memory Laboratory at the Institute of Sociology, University of Warsaw; e-mail: wawrzyniakj@is.uw.edu.pl