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ARTICLES

LIFE CYCLE AND INDUSTRIAL WORK: WEST GERMAN AND BRITISH PATTERNS IN TIMES OF GLOBALIZATION

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Labour history has recently returned to the stage of historical research. This comeback, after at least two decades of intellectual stalemate and general neglect, owes a great deal to new ideas and projects which have adopted both the global and the cultural turn in recent historiography. The world of labour beyond the familiar eastern and western varieties of industrialized countries is now much more present. Yet notions and discourses framing the experiences of work and industrial relations have been scrutinized more carefully in a comparative perspective. Thus the agenda of contemporary European labour history has been thoroughly renewed.¹ This article presents results and reflections from an ongoing comparative study of the working classes in West Germany, France, and Britain at times of de-industrialization. But I do not use the term 'de-industrialization' in the title of my article, and perhaps it is worth explaining why.

There is no generally accepted definition of 'de-industrialization', but there is a general consensus that it describes the decline (in relative and/or absolute terms) of employment and added value in the

This article is based on my inaugural lecture as Gerda Henkel Visiting Professor 2015/16, delivered at the German Historical Institute London on 15 December 2015. A podcast is available on the GHIL's website at <<https://www.ghil.ac.uk/download/podcast/2015-12-15-Raphael.mp3>>.

¹ Two places where the international dimension of this renewed labour history can be observed are the Institute of International Social History in Amsterdam <<https://socialhistory.org/>>, accessed 12 Aug. 2016, and the International Research Center Work and Human Lifecycle in Global History at the Humboldt University in Berlin <<https://rework.hu-berlin.de/>>, accessed 12 Aug. 2016.

manufacturing sectors of national economies, especially by comparison with the service sector.² The term de-industrialization often appears when a name must be given to a trend, or to a whole period when manufacturing industries were shrinking and losing jobs, and whole branches of industry were disappearing. This has been going on for more than forty years in western Europe, and it is still happening. It started in the second half of the 1970s when the long boom came to an end. After 1945 the manufacturing, mining, and construction industries had grown constantly, attracting the largest numbers (both relatively and absolutely) of the national workforce. Both the 'old' and many of the new industries profited from this boom. This was true even of Britain, whose growth was much less glorious than that of West Germany or France during the first thirty years after the Second World War. The late 1970s and the 1980s mark a kind of watershed—jobs in manufacturing, mining, and construction were starting to disappear while whole branches of industry entered a crisis. From the British perspective, de-industrialization is the key word for critical analysis. It often combines a nostalgic look at the good old times of industrial Britain and the short-lived rise of the British working classes from poverty to affluence from the 1930s to the 1970s with a critical inquiry into growing social inequality in this country since the 1980s. This kind of interpretation is shared by many German scholars, although it loses some of its relevance when the still high level of output in manufacturing is taken into account, especially when it comes to exports. From a German perspective, therefore, de-industrialization is a relative term, while 're-structuring' and 'renewal' are other notions that could be introduced into the debate. The end of old industries such as mining, shipbuilding, and textiles was only one aspect of a broader process by which manufacturing was transformed when markets were changing.

² On the notion itself and the economic debate see Peter Dicken, *Global Shift: Industrial Change in a Turbulent World* (London, 1986; rev. edn. 2011); Stephen Bazen and Tony Thirlwall, *Deindustrialization* (Oxford, 1992); and Royce Rowan Turner, *The British Economy in Transition* (London, 1995). There is a large literature on this subject in Britain, less so in the other country under consideration here. See M. T. Wild and Philip N. Jones, *De-Industrialisation and New Industrialisation in Britain and Germany* (London, 1991).

It is important to remember that de-industrialization in western Europe and elsewhere is not the uniform outcome of an evolutionary trend towards a new economy based essentially on service industries with the financial sector at its core and apex: different paths lead to different forms of mixed economies combining the manufacturing and distribution of goods, services, and knowledge.³ The differences loom large throughout Europe, and Britain and Germany are good examples to illustrate this.

De-industrialization, therefore, was just one outcome of the economic transformations taking place at global level. Since the 1970s the internationalization of markets and production chains, paired with the development of a common European market, has given rise to fundamental shifts in the international division of manufacturing. In the title of this article the conventional but ambivalent notion of globalization is used to cover these trends that changed the world of business and of work. To cut a very long and complex story short, four trends can be identified: the spread of new digital information and communication technologies; the transfer of production sites to new places mainly in Asia but also in Latin America; new forms of organizing work at factory level; and new models of management. All this changed the profile of industrial work. The term 'post-Fordism', coined by contemporary economists and sociologists, was intended to bring together the different dimensions of these changes.⁴ As one single capitalist production regime has never existed,⁵ 'post-Fordism' has been nothing but an umbrella term for a whole set of

³ For a more detailed comparative analysis of this socio-economic framework see Lutz Raphael, 'Industriearbeit(er) nach dem Boom: Bundesrepublikanische Entwicklungen im westeuropäischen Vergleich', in Sonja Levsen and Cornelius Torp (eds.), *Wo liegt die Bundesrepublik? Vergleichende Perspektiven auf die westdeutsche Geschichte* (Göttingen, 2016), 207–31.

⁴ Cf. M. J. Elam, 'Puzzling Out the Post-Fordist Debate: Technology, Market, and Institutions', *Economic and Industrial Democracy*, 11 (1990), 9–37; Klaus Dörre, 'Gibt es ein nachfordistisches Produktionsmodell?', in Mario Candeias and Frank Deppe (eds.), *Ein neuer Kapitalismus?* (Hamburg, 2008). For a synthesis of this approach based on empirical data from Germany, the Netherlands, Spain, Sweden, and the UK see Max Koch, *Roads to Post-Fordism: Labour Markets and Social Structures in Europe* (Aldershot, 2006).

⁵ This notion, too, is the subject of critical debate among social scientists and, like the term 'globalization', it is used as a useful abbreviation for the struc-

very different regimes of industrial production that were taking shape, worldwide, from the 1970s and 1980s. To speak of globalization allows these transformations in western Europe to be placed in their international contexts. The redistribution of market shares in manufacturing was part of a wider process of internationalizing production chains and of a further push in technological innovation. We can therefore regard the 1980s and 1990s as a period of experimentation, when new clusters and patterns of industrial production were created worldwide.

Two contradictory views seem to exist about the impact these transformations had on the life cycles of billions of industrial workers worldwide over the last thirty to forty years. One interpretation may best be subsumed under the heading 'precariousness',⁶ or, for those going further in their critical inquiry, 'informalization'. Despite a trend towards growing diversity in production regimes at national, branch, or even factory level, many sociologists of work describe and generally criticize a general trend towards deregulating how and when work in factories is performed, who does it and at what price.⁷ The acceleration of production cycles seems to operate like a low tide in an estuary, drawing back all kinds of social regulations, moral restraints, and the habitual patterns by which work is organized in

tural links between forms of production in manufacturing (at the different levels of companies, plants, branches, and nationwide), patterns of industrial relations, and forms of political and social framing (mainly welfare politics). The debate concentrates on the macro levels of national frameworks but the notion is used here in a more flexible way, allowing for different varieties at regional or branch level.

⁶ Again, there is no generally accepted definition of this category. Its use varies substantially from country to country. See Jean-Claude Barbier, 'La précarité, une catégorie française à l'épreuve de la comparaison internationale', *Revue française de sociologie*, 46 (2005), 351–71.

⁷ Comparative studies mostly refer to the member states of the OECD. Empirical data is less easy to get and even more difficult to compare for industrial work and labour markets in Latin America, Africa, or South Asia. General overviews and case studies have been published on a regular basis by the International Labour Organization (see the World Employment Programme since 1975). For the post-socialist countries of eastern Europe since 1990 see Sandrine Cazes and Alena Nesporova, 'Labour Market Flexibility in the Transition Countries: How Much is Too Much?', *International Labour Review*, 140 (2001), 293–325. For a particularly striking example of

societies. As far as the worlds of manufacturing, mining, and construction industries are concerned, experts critically discuss the trends corroding the status of the industrial workforce and changing the patterns of workers' lives. At least three of these may head a list of general trends. First, we see a trend towards more flexible work contracts that allow employers to engage their workforce in accordance with the ups and downs of demand. This, of course, is an old and yet ever young dream of managers and shareholders, namely, to cut costs and save capital during a slump. Secondly, there is a trend towards reducing the social costs of work, such as employers' contributions to social insurance systems or housing and other social investments that are not in their own discretionary power. Thirdly, we can identify a trend towards avoiding high wages via outsourcing or global production chains.

This kind of interpretation is criticized by those who defend the upward dynamics of globalization on the working conditions of industrial workers. It is mainly economists who stress the long-term trends towards higher skills and higher wages in manufacturing worldwide. From very different starting points and levels of socio-economic affluence, this culminates in a trend towards stabilizing working lives. In this liberal view, rising opportunities in labour markets and individual options for higher qualification are driving forces transforming market flexibility into life stability. But there is another element: in many societies flexibility and insecurity as the overall patterns for working lives are rejected for moral or political reasons.⁸ This kind of social resilience has resulted in the placing of legal or moral limits on dismissals, and in preferences for stability of staff and clear rules of seniority, but also in political consensus on welfare regulations protecting older workers, the unemployed, and families from the risks of the new globalized economy. All of these aspects function like buffers against the pitfalls of the labour markets, and they are of vital concern for our topic. We can think about the effects

growing informality see Kamel Bouadam and Hakim Meliani, 'Analyse exhaustive de la politique de l'emploi en Algérie', *Studia UBB Oeconomica*, 56 (2011), 74-97.

⁸ Sandrine Cazes and Peter Auer, *Employment Stability in an Age of Flexibility: Evidence from the Industrialized Countries* (London, 2002); Peter Auer, 'The Resilience of the Long-Term Employment Relationship: Evidence from the Industrialized Countries', *International Labour Review*, 139 (2000), 379-408.

that pension schemes, unemployment benefits, and the wage hierarchies of skill and seniority established by collective bargaining have on the life courses of workers. Central to this are welfare regulations and legal labour regulations established in the different countries. The semi-official, yet awkward, term for this is 'flexicurity', used by international organizations interested in a more global realization of these trends.⁹

What did this all mean for the life cycles of industrial workers in western Europe? A comparative view may allow us better to understand the differences and similarities in these transformations. The following article will concentrate on the relationship between work and life cycle. This implies that other important aspects, such as family and household structures or national welfare regimes, are not discussed in detail. Consequently, what follows is a far from comprehensive view of the changing life cycle patterns among industrial workers, or, more broadly, what we might call the working classes linked to these kinds of jobs. This study explores the relationships between life cycles or work biographies and such aspects as levels of unemployment and job insecurity, the loss or gain of working skills, wages, age, and gender.

A comparative analysis needs a starting point to describe transformations. That is in itself a problem. I shall resolve it in the classic manner by presenting an overly simplified picture of the relationship between life cycle and industrial work in West Germany around 1970. My analysis will thus take into consideration only one group of employees, the largest one, that of blue collar workers, leaving aside technicians, engineers, and managers. The years around 1970 were the time when blue collar workers, who were predominantly male all over western Europe (about 70 per cent in construction, mining, and manufacturing industries), could look back on stable working lives. The majority had experienced upward mobility in their firms or jobs, and all had profited from increased material comfort and consumerism. In the 1960s and 1970s, for the first time in West German society, their life cycles were fundamentally similar to those of white collar workers in private or public services. Most had left school at

⁹ Sonja Bekker, Ton Wilthagen, Per Kongshoj Madsen, Jianping Zhou, Ralf Rogowski, Maarten Keune, and Andranik Tangian, 'Forum: Flexicurity – A European Approach to Labour Market Policy', *Intereconomics*, 43 (2008), 68–111.

the age of 14, but a growing number had received a vocational training and started their working lives as skilled workers at the age of 17 or 18. Social welfare protected them in case of illness or invalidity, and the pension system gave them a realistic chance of a comfortable retirement after the age of 65, as life expectancy had passed the age of 70 for men and 75 for women.

But alongside this kind of what we may call a standard life pattern, at least two very different models also existed. The first was rather old, but changed character under the impact of affluence and consumerism: female blue collar workers, who were in the minority, had quite different work experiences and life expectancies from those of their male colleagues, brothers, or husbands. In 1970 many started factory life as unskilled workers without any qualifications or vocational training, and they often quit the factory as soon as possible, that is, after marriage or the birth of their first child. Some returned ten or fifteen years later, often on a part-time basis, and again as unskilled workers. There was no well-defined moment of retirement, but women could expect to benefit from their husbands' pensions and to survive them by at least five years.¹⁰

In 1970 there was a third group of blue collar workers whose life cycle pattern was also different: the migrant workers who had been recruited en masse during the 1960s and the early 1970s all over western Europe. At this time they were predominantly male, relatively young, and often unskilled. The proportion of the industrial workforce that they made up was still growing: up to 15 and 20 per cent and even higher in some branches.¹¹ Some had taken their first steps into working life in their home countries, but unemployment and low wages had interrupted their careers. The best way to describe the very different life cycles resulting from this kind of labour migration is to call them 'suspended', since a large majority sought to accumulate savings and lived a provisional life in order to return home and continue a working life there. Rates of return were high, but the num-

¹⁰ Christine von Oertzen, *Teilzeitarbeit und die Lust am Zuverdienen: Geschlechterpolitik und gesellschaftlicher Wandel in Westdeutschland 1948–1969* (Göttingen, 1999).

¹¹ In 1973 migrant workers represented around 22 per cent of the workforce in mining, the metal industry, and construction in West Germany. Karin Hunn, *'Nächstes Jahr kehren wir zurück . . .': Die Geschichte der türkischen 'Gastarbeiter' in der Bundesrepublik* (Göttingen, 2005), 213.

ber of those starting to bring their families to Germany was constantly growing.¹² Migrant workers who stayed longer in West Germany often worked continuously in one factory, thus starting to share a common working experience with their German colleagues and having a job/work biography comparable to that described as the first variant. As unskilled workers they profited from the booming business cycle in the manufacturing industries, producing the new products of mass consumption on a large scale, from cars to TVs and washing machines.

How were these different life cycles changed by the transformations from the mid 1970s? Information gathered by the Sozio-oekonomisches Panel (SOEP) in a representative Panel Study of more than 12,000 German households since 1984 allows us to take a closer look at the real life cycles of manual workers. This is possible because the same households were interviewed year on year, making information available about their work situation over a period of more than twenty years.¹³ This data allows us to combine a more detailed look at the social fabric of work biographies with statistical evidence that enables us to measure the frequency of such biographical patterns. If the information about the past collected at the time of the first interview is added, individual biographies run from the start of working life to retirement, covering up to forty and more years of working life. This ongoing research project works with the statistical information collected about more than 3,000 people from the working classes in (West) Germany, but this article will focus on 630 work biographies that provide very detailed information over longer periods of fifteen and more years. These biographies have been analysed in two complementary ways. Elementary information about job situation, qualification and skills, age, gender, and nationality has been studied quantitatively. As a result, different types of work biographies were constructed that provided a starting point for selecting a smaller number of individual cases whose biographies were reconstructed using all the information available in the SOEP panel data. This two-step procedure made it possible to embed individual life courses in their larger social contexts without eliminating the indi-

¹² Ibid. 343 ff.

¹³ See <https://www.diw.de/en/diw_02.c.221178.en/about_soep.html>, accessed 12 Aug. 2016.

vidual variety behind the collective clusters of work biographies of a certain type. In a first step data was divided into four different categories: first identifying five different age cohorts,¹⁴ secondly, differentiating between workers of German and Turkish origin/background,¹⁵ and thirdly separating men and women. The sample represents households, yet the majority of women had jobs in other sectors of the economy, or, indeed, had no job at all. Only a small minority of women worked in manufacturing industries, and only these were analysed in this context.¹⁶ The fourth category was that of job continuity. As a proxy variable, the frequency of job changes, including a change in branch and/or job category was taken from the SOEP.¹⁷ In this sample of work biographies the very different situations of the various branches of manufacturing in West Germany were well represented: about 10 per cent worked in metalworking industries or construction, and about 5 per cent in tool-making, chemical industries, or the automotive industry respectively. All other branches were represented by less than 3 per cent of the biographies.¹⁸

How did those who acquired relative stability and affluence at the end of the 1970s fare in the new era characterized by the return of mass unemployment, a general reduction of jobs in industry, and a return of the business cycle with its regular ups and downs? Let us

¹⁴ Those born before 1945; 1945 to 1954; 1955 to 1964; 1965 to 1969; and 1970 to 1979. This makes it possible to take changes in labour markets into account for the different age cohorts of industrial workers from 1975 on.

¹⁵ There were 473 and 163 individuals, representing 74 and 26 per cent respectively of all biographies. Migrants' biographies were therefore over-represented in this selection, making it possible to have enough cases to observe variation among this group that represents 17.2 per cent of the subtotal of 3,565 cases of the SOEP (year 1985) defined as 'manual workers' (from unskilled to masters/foremen).

¹⁶ Ninety-four of 405 women's biographies have been taken into account; 62 of German origin, 32 of Turkish origin. The total number of men's biographies is 636; 473 of German background, 163 of Turkish origin.

¹⁷ The overall majority of cases represented no such change at all and this category has been used to take a closer look at the specific conditions of precariousness and job insecurity.

¹⁸ Construction (10.2 per cent); metal industries (9.6 per cent); chemical industries (5.1 per cent); vehicles (4.3 per cent); tool-making and engineering industries (4.3 per cent); electrical goods (2.4 per cent); furniture and timber (2.6 per cent).

first look at those entering this period ten years or more after they had started working. Born between 1930 and 1945, these workers were in the middle of their working lives when economic turmoil hit their enterprises. The first thing that strikes one when examining this data is that most of them continued to work in manufacturing. Many even continued their careers in the same firms that had employed them in 1975.

The work biography of A., a joiner born in 1939 and living near the city of Bremen, is easy to sum up. In the late 1950s (1957), after finishing his apprenticeship, he was employed as a skilled worker. From 1965 he worked in the same factory in the automobile industry, and during the 1980s and early 1990s he was a foreman or leader of a work team. In 1996 at the age of 57 he was dismissed, probably as a part of a plant agreement, and was then unemployed for twenty months before getting an early retirement settlement. His real wages had been rising during the 1980s but after his fiftieth birthday his monthly pay started to go down (by about 17 per cent).¹⁹

A second biography, chosen from the group of unskilled workers, presents a more dramatic variant of such a work biography: M., a Turkish metalworker living in Dortmund, had been working in the same mechanical engineering factory since 1967, when he was 26, as an unskilled worker operating various tool machines. He was dismissed in 1990 at the age of 49. A long period of unemployment began and M. was eventually unemployed for more than 85 months, a full seven years, before being accepted on an early retirement scheme in 1997 at the age of 56. The end of his working life coincided with a dramatic change in his personal life: his marriage broke up at the same time. He was divorced in 1990, and lived alone from then on. In economic terms his situation changed drastically: he lost up to 60 per cent of his earlier monthly income.²⁰ This may be an extreme case, but it is part of a larger pattern of work biographies. Technological change and international competition led to a huge loss of jobs for unskilled workers. Among the more than 230 manual workers in West Germany born between 1946 and 1965 whose careers are reported for more than fifteen years in the panel data and analysed in detail, migrant workers represented about 9 per cent, but they were

¹⁹ Sozio-oekonomisches Panel (hereafter: SOEP) ID 85201.

²⁰ SOEP ID 572101.

particularly hard hit by these changes. Of this group, one in four in this age group ended his working life before the age of 60, some very early in their 50s. Older workers, in general, were regarded as unable to cope with the introduction of new technologies, and were more likely to be made redundant than their younger colleagues. For German workers this moment often came at the age of 57 or 58 or later. The reasons for this difference between migrant and German workers are yet to be investigated.

In most cases, redundancy at this age meant the end of a working life that had started at the age of 15. Early retirement was perceived as ambiguous: it prevented further deterioration in health, opened new options in private life, but also cut people off from social networks and sociability centred around the workplace. M., like many others whose files were examined for this study, regularly insisted on his good relations with his colleagues. We should keep in mind that M. was one of those whose life cycle in 1970 may be described as having been 'suspended', meaning that decisions about the future were postponed, be it marriage, transfer of the family, or the search for a decent home. But during the 1980s and early 1990s, when this first generation of mainly Turkish blue collar workers had more or less involuntarily opted to stay in West Germany permanently, they faced a dramatic turn in their life cycle, cutting them off from their new social surroundings. This could even result in sudden exclusion from social life and contacts. This social fact has rarely been seriously discussed in debates about immigration, generational conflicts, and integration over the last thirty years in Germany.

The picture is a mixed one, but continuity prevailed up to the age of 50. Obviously both the introduction of new technologies and new production regimes on the one hand and the closure of older factories while downsizing 'old' industries, on the other, produced the same effect: they both meant a general farewell to the older, old-style blue collar worker (called *Malocher* in German).²¹ It resulted in a dramatic rejuvenation of the remaining workforce that was more open to, and better prepared for, the new high quality production regimes and their increasing demands for flexibility, but also communication and technical knowledge. This intergenerational change was espe-

²¹ Cf. Wolfgang Hindrichs, Uwe Jürgenhake, and Christian Kleinschmidt, *Der lange Abschied vom Malocher* (Essen, 2000).

cially dramatic in branches and factories where manpower was drastically reduced over short periods of time, as was the case, for example, in the steel industry or, to some extent, in the car industry. French, British, and German oral sources tell us a great deal about the conflicts resulting from the dramas of 'social ageing' and 'generational shift'.

What about the young workers, those who entered the job market after 1975? Their life stories read a little differently, the range of variants seems to get bigger, and some may suggest a general trend back towards greater precariousness. Among this age group, job changes involving a change of branch or craft were more frequent than among the older age cohorts, and these changes more often than not included periods of unemployment. But closer study of their work biographies supports another interpretation: a more twisted, but largely successful path into a stable job in a medium-sized or larger enterprise seems to be a common feature for the majority of young skilled workers born between 1965 and 1975 whose careers have been reconstructed. They profited from the trust that West German managers, engineers, and foremen/masters enjoyed in the dual system of vocational training. It offered them the chance to recruit young workers at a very early stage and to integrate them into their strategies of technological innovation and adaptation. The upward mobility that had been characteristic of the boom years did not end in 1975 or 1980, but continued to be the realistic horizon for younger skilled workers who often replaced the older ones.

B. was born in 1958, lived in Duisburg, and started his working life after nine years of schooling and a three-year apprenticeship as an electrician or expert in industrial electronics. He was one of those who, after their apprenticeship, were taken on by their firms as skilled workers. From then on, he continued his career in the same enterprise, probably the Thyssen steel plant fifteen minutes away from his home. In 1993 he became head of a work group, having taken a 'master course' preparing him for supervisory functions (from 1990 to 1993). In 1996 he officially changed status, receiving a promotion from manual worker to an intermediary employee with supervisory functions. His salary rose constantly, and in 2002 at the age of 45 he earned three and a half times as much as he had in 1985. In the interviews for the SOEP he was regularly asked about his job satisfaction. In 1985 and again in 1990 and 1992 (during his training

course) it was very high but after that fell to a miserable three points out of ten. The risk of a blocked career frustrated the young man until 1996, when he received his internal promotion.²² Internal promotion continued to be an important means of upward mobility, opening up the chance of a professional career for industrial workers. This was all the more important as external options for change were becoming rarer for workers, and they often had to move away to other regions where job opportunities in their trades could still be found.

Changes, however, also occurred in this zone of stability. Young men entered the industrial workplace a little later because schooling was extended, with a tenth or eleventh year added to the traditional nine years before beginning an apprenticeship. And retirement continued to start earlier, but it is too early to say anything definite about this: most of these workers are still employed.

D., born in 1969 near Göttingen, left school after ten years (with a *Realschule* diploma), did an apprenticeship in industrial painting, and started working in his trade at the age of 20, in 1989. But he soon quit his job and became unemployed before restarting his working career as an operator in a glass factory. Continuity at the work place and in family life (he was married in 1991 at the age of 22) seem to be two sides of the same coin and in 1996 he became a homeowner after a steady rise in his monthly wage during the first ten years of work.²³ At the age of 37 in 2006, D. was promoted to foreman. But—and this indicates another change in the life course of industrial workers during the late twentieth century—wages no longer continued to grow, and over the next ten years D.'s monthly wages fluctuated widely between €1,700 and €2,300, depending on his employer's business cycle.²⁴

D.'s biography contrasts sharply with that of a young man born in 1966, who lived first in Wuppertal and later in Düsseldorf. F. had a very unsteady working life until the age of 29, when he started a new job as a driver in a steel factory, later becoming an operator in the smelting sector of the same factory. Before he finally found this job, F. had spent twelve years looking for a good job for an unskilled young male like himself. He was dismissed four times, returning

²² SOEP PID 110101.

²³ From €1,063 to €2,000 or (inflation-adjusted) from €1,000 to €1,589. Ibid.

²⁴ PID 57205.

more or less regularly to periods of employment. Here, again, the start of a more stable working life and a personal relationship went together. In 2001 we received the latest news: at the age of 35, F. was still in the same job and in the same relationship.²⁵

This biography presents another situation that was not completely new, but that had spread considerably since 1975: the emergence of a world of precariousness and instability mainly affecting unskilled workers, especially those who had migrated to Germany during or after their school years. If we compare their biographies with those of their older cousins or fathers, who had arrived in Germany in 1965 or 1970, we can see the difference. Changing production regimes made it much more difficult for them to find a stable position, as the number of jobs for unskilled workers in manufacturing was shrinking dramatically. Now much more time and, often, social capital was needed to enter the high wage zone of industrial production. Often branches such as motor repairs or the construction industry offered these young men their first jobs. Some of these careers ended in stability and regularly rising incomes. But we also see that the jobs they did were more exposed to the business cycle, and they had to be flexible. In this case we should not forget that there was a long period of instability between the end of school and the stable years of continuous industrial work, lasting from the ages of 15 to 30. It is quite interesting to see that this pattern of an extended period of youth, remote from regular waged work, is one that also developed among students, especially among those seeking professional jobs in media, culture, and social services.²⁶

What about women? A look at the working lives of women in manufacturing industries since the 1970s does not offer much that is new. Most women stayed in these industries for four, five, or six years, often doing unskilled work; their working lives were interrupted by marriage, birth, or dismissal. In terms of biography, instead of work biographies it would be better to speak of social or household biographies in the sense that part-time work done by wives was dependent on the rhythms of their households or their families, the

²⁵ SOEP PID 563701.

²⁶ On the changing patterns of (academic) youth and their later entry into working life see Andreas Wirsching, *Abschied vom Provisorium: Geschichte der Bundesrepublik 1982–1990* (Stuttgart, 2006), 316, 317.

age of their children, or their husband's job situation, rather than on an individualized work cycle. This life cycle pattern was common to Turkish and West German women from the working classes.²⁷ We should add that new female work cycles took shape, but mainly in the service industries, education, or the health sector, whereas in industry the number of female skilled workers remained very small. There is only one group whose parallel biographies suggest some kind of pattern: women workers re-entering their trades after a divorce or being widowed, or starting a second career in their thirties or later.²⁸ Again, only a small number (re)turned to manufacturing.

G., born in 1966 of Turkish origins, entered the labour market at the age of 20 after nine years of schooling and three years in an apprenticeship. She started in small retail shops, first full-time and then part-time, before getting married and pregnant at the age of 23. Her working life in manufacturing started only in 1999 after her divorce, when she moved from Düsseldorf to Augsburg in Bavaria with her child. At the age of 33 she began a new job as an unskilled worker in electrical engineering that allowed her to make a modest living for herself and her child.²⁹ We received good news in 2007: at the age of 41, she had accumulated enough resources to become a homeowner.³⁰

It is time to compare these individual and collective biographies with findings from other western European countries. While my project also deals with France and Britain, my comparison in this study will focus on British experiences. We may start with an elementary but necessary observation. In the two decades between 1972 and 1992, Britain lost 2.3 million jobs in manufacturing, mining, and the construction industries. About 24 per cent of all jobs in these sectors were lost per decade. Between 1992 and 2002 this part of the national economy lost another 544,000 employees, but the shrinkage was smaller in relative terms, amounting to 13 per cent in this dec-

²⁷ In the selected sample this group represented one-third of all women in both subgroups (94 of 275 women of German origin, and 39 of 130 women of Turkish origin respectively). SOEP data set.

²⁸ They represent about a quarter of all women's biographies (99 out of 405 women).

²⁹ Income in 2000s: about €1,800/€1,200–1,500 (inflation-adjusted). SOEP PID 565403.

³⁰ *Ibid.*

ade.³¹ This means that the risk of losing a job in manufacturing industries during the first two decades was about 80 per cent higher in Britain than in West Germany, where the number of industrial employees shrank by about 13 per cent per decade from 1972 to 2002, amounting to a total loss of about 1.9 million jobs. Therefore, the types of working biographies strongly affected by insecurity or precariousness in the West German panel data should be found much more often in Britain. In this respect work biographies from the old industrial centres in the northern and western regions of Britain show more similarities with the biographies of east German industrial workers after 1990, when a large proportion of GDR factories were simply shut down and manufacturing disappeared in many regions of eastern Germany.

In Britain, the available social data is somewhat different, as the British Household Panel Survey did not start until 1991. A direct comparison is therefore not possible, and the dramatic transformations of the Thatcher years cannot be reconstructed via the kind of biographical data used for the German case. But both statistical and biographical information exists that helps to fill the gap. The much larger and geographically very condensed loss of industrial jobs between 1979 and 2000 meant that the trend towards early retirement by industrial workers was even stronger than in West Germany. A regional study of the mining areas of Yorkshire came to the conclusion that in the mid 1990s, about 40 per cent of former miners under 65 were unemployed, ill, or in some kind of pre-retirement scheme.³² An ex-miner and strike activist in 1984–5 declared in an interview: ‘Maggie Thatcher closed the pits, right enough, but I think she saved my life. I was 51 when I finished and I would have had another fifteen years underground if they’d stayed open. But what would I have been like with another fifteen years underground?’³³

The situation of British miners was a specific one, but this statement best illustrates the ambiguities of this social ageing of an entire age cohort of manual workers from the different branches of manu-

³¹ Own calculations on the basis of the ILO data base on industrial occupation. This data refers to official estimates.

³² Royce Turner, *Coal was our Life: An Essay on Life in a Yorkshire Former Pit Town* (Sheffield, 2000), 22, 27.

³³ David Hall, *Working Lives: The Forgotten Voices of Britain’s Post-War Working Class* (London, 2014). Interview with Terry Sargeant, 460.

facturing to construction. Often those born before 1940 did not enter the new worlds of digitalized work places or machinery. Instead, they were turned into early pensioners whose health was unstable or bad enough to make them veterans who had escaped in time from their strenuous or unhealthy work places. At the same time, they lost a social world of solidarity and comradeship that had given sense to their individual life cycles. In the case of Britain their working lives have become an integral part of the collective memory of a kind of foreign industrial country that has been lost since the 1980s.

Somewhat different and more ambiguous are the working lives of those who had entered the cycle of accelerated de-industrialization in Britain since the late 1970s at the ages of 40, 35, or younger. They all had to adapt to the shrinking chances of finding work in their industrial branches or in the kind of trade they had learned. Statistics drawn from the Labour Force Survey (established since 1975) may help to shed some light on their realities. If one compares data on the length of employment from 1975 with that from 2000, it is clear that for all age cohorts (25 to 34, 35 to 44, 45 to 54, 55 to 64) the percentage of those working for longer periods with the same employer was generally falling. Still, a majority of workers in manufacturing industries were in stable jobs, and had often worked for more than twenty years at the same company.³⁴ Here we see similarities with the German work biographies. British workers who found jobs in the remaining manufacturing industries, in the newly established sectors such as electronics and electrical engineering, or in new car plants may have experienced life cycles similar to those of their (West) German counterparts. But British social reality was characterized more by a widening gap between those still working in the manufacturing sector, often for many years, and the growing number of those entering a new but much more unstable world of jobs in the service industries. The number of those who ran the risk of losing their wage levels after dismissal and of living through longer periods of unem-

³⁴ In 1975, 50.5 per cent of manual workers aged between 25 and 34 had been working for the same employer for more than 5 years; in 2000 the figure was still 37.5 per cent. For older workers the changes were less dramatic: in 1975, 63.1 per cent of those between 55 and 64 had been working for their current employer for more than 20 years, and in 2000 they were still in a strong majority at 58.2 per cent. Own calculations; data from Labour Force Survey, UK Social Data Archives.

ployment was higher, and the type of working biography we have just seen in the case of unskilled and migrant workers may have been familiar to a larger number of British industrial workers during the 1980s and 1990s. At least the statistical evidence suggests that low wages were more common in British than in German manufacturing, and the risk of dismissal was generally higher.³⁵

But similarities are clear when it comes to the situation of working women. In both countries, even at times of de-industrialization, life cycles in manufacturing work remained strongly gendered. Continuity of employment and skilled work was a prerogative of men, while flexibility and low wages for unskilled work were typical of women's lives. But these patriarchal patterns of labour division were eroding under the double impact of economic globalization and female emancipation, opening up the life cycles of both men and women in work for remodelling. This, however, happened predominantly outside the world of industrial work.

As in Germany, in Britain the proportion of women working full time in manufacturing remained very small and got even smaller at times of shrinking job opportunities. They represented 27.1 per cent of the intermediate and lower levels of the work force in manufacturing, mining, and construction in 1975, and 24.4 per cent in 2000, many working part time.³⁶ Often these wives or sisters from working-class families stabilized the household income at periods of accelerated shift in local or regional economies towards service industries. The rise in Britain of the 'all-work household rate', to use the jargon of the social sciences, was remarkable: from 58 per cent in 1977 to 66.6 per

³⁵ In 1995 low paid employment among skilled trades in the UK was 17.9 per cent and among operators it was 22.8 per cent (source: Labour Force Survey). See Geoff Mason, Ken Mayhew, Matthew Osborne, and Philip Stevens, 'Low Pay, Labour Market Institutions, and Job Quality in the United Kingdom', in Caroline Lloyd, Geoff Mason, and Ken Mayhew (eds.), *Low Wage Work in the United Kingdom* (New York, 2008), 41–95, Table 2.2, 46; in West Germany in 1995 low wage work in manufacturing was 8.9 per cent and 13.2 per cent among skilled workers. Data in Gerhard Bosch and Thorsten Kalina, 'Low Wage Work in Germany: An Overview', in Gerhard Bosch and Claudia Weinkopf (eds.), *Low Wage Work in Germany* (New York, 2008), 19–112, tables at 33 and 37.

³⁶ Labour Force Survey 1979 and 2000.

cent in 2006.³⁷ In the West German case this had become a relatively new but attractive model in working-class households of the 1970s. British working-class families were not far from this, but more often wives had to find part-time or temporary jobs to make up for the lower wages in British factories, and to cope with rising inflation during the 1970s and high levels of unemployment during the 1980s.

Sharp contrasts emerge when we consider the situation of young workers, those starting their working lives in manufacturing during the 1980s or 1990s. At this point we find the most striking difference between the West German and the British case. West German manufacturing industries developed their new regimes of diversified quality production during these decades of transformation, relying more than before on the use of a skilled workforce trained outside the general school system. This was quite rare in Britain. Flexibility and high quality, the two pivotal elements in the new international division of industrial production, were sought by employing a skilled workforce throughout German factories, and reducing the number of unskilled workers. A study comparing thirty-nine German and British factories producing components for the car industry at the end of the 1990s shows big differences in the skill levels of their respective workforces. In Britain only 3 per cent of the shop floor workers were skilled, whereas in the German plants 40 per cent were in this category, and management assigned them more complex tasks than was the case with their British counterparts. Even among the higher ranks of the workforce, there were more engineers and technicians in German factories than in British ones. As a result German wages were higher, and we may conclude that the rank and file probably also had more stability and upward mobility.³⁸

The background to these differences at the plant level is more general: craft apprenticeship training systems in Germany operated on a scale at least ten times greater (per head of population) than in

³⁷ Paul Gregg and Jonathan Wadsworth, 'Two Sides to Every Story: Measuring Polarization and Inequality in the Distribution of Work', *Journal of the Royal Statistical Society*, A, 171 (2008), 857-75, at 859.

³⁸ Karin Wagner and Geoff Mason, 'Restructuring Automotive Supply-Chains: The Role of Workforce Skills in Germany and Britain', *International Journal of Automotive Technology and Management*, 5 (2005), 387-410, figures at 397.

Britain.³⁹ It was precisely during this period of 'post-Fordism' that the notion of craft or trade lost much of its practical meaning for younger people entering the job market in Britain. We should not forget that even in British factories skill levels were rising, but it was negotiated at a much more individual level than in Germany. As apprenticeship systems were not regulated at national level, only local niches or pockets of older systems survived. Therefore the gap between those classifying themselves as skilled workers, who were often protected by the wage rates negotiated by their trade unions, and those who had completed an apprenticeship was widening during these decades.

In Germany from 1960 to 1990, about half of the young people doing an apprenticeship acquired their vocational skills in manufacturing.⁴⁰ The 'craft' of a skilled worker was adapted to the new levels of knowledge and multiple skills required by manufacturing under new technological conditions. Whereas in Britain the divide between the world of professional jobs (restricted to those with a degree) and all others was widening, in Germany the intermediary level of work skill of the *Facharbeiter* (skilled worker) was getting closer and closer in status to that of a technician, and it was becoming more important both in the sense of strategic impact in production and of numbers in the workforce. I am therefore tempted to translate the generic German notion of *Beruf*, central to the self-esteem and social position of skilled manual workers in manufacturing, by the English term 'profession' and not as 'trade', and surely not by what in English is meant by the generic term 'skill'. This consideration opens up a more general debate on the shifting languages of knowledge and work during these decades in both countries.

In any case, first of all, the apprenticeship system opened a future in manufacturing to a section of young working-classes males, and unemployment rates among them were significantly lower than in those European countries where such systems did not exist, or had faded away under the impact of de-industrialization.

In the 1970s, 1980s, and early 1990s empirical studies by the official German Federal Office of Work used its own detailed data on the

³⁹ Hilary Steedman, 'A Decade of Skill Formation in Germany and Britain', *Journal of Education and Work*, 11 (1998), 77-94, at 80.

⁴⁰ Hasso Henniges, *Ausbildung und Verbleib von Facharbeitern* (Nuremberg, 1991), 11.

workforce employed in enterprises, which produces a better understanding of the contexts. Let us compare the situations in 1970 and 1992. Out of 100 trained skilled workers, only a minority were working in this category, and this group shrank to about 40 per cent in 1992. In the 1980s and early 1990s a rising number were employed in jobs as unskilled workers, totalling 17 per cent in 1992, but a much larger and growing minority (from 18 to 27 per cent) added a further job qualification to their apprenticeship and were working as technicians, engineers, or in middle management.⁴¹

German manufacturing industry relied heavily on the skilled workforce available when it entered this period of adaptation to new technological standards and new market situations. The system of apprenticeship that in Germany and some other European countries survived the Fordist period may be seen as one of the main single factors that explain why stability of life cycles was so strong and continued even for those age groups entering the industrial labour markets in the 1980s and 1990s.

In light of these empirical findings and by means of a comparison we may better understand the links between collective work biographies and the changing patterns of manufacturing in western Europe. In West Germany, the diversified quality production regimes that replaced the mass production regimes of the boom era offered a great variety of options for management, capital, and trade unions to adapt established patterns of work, and hence the careers and life cycles of industrial workers, to the new conditions of the international division of industrial labour. Stability of employment was maintained, but it came at a price: workers' dependence on their firms and their business cycles increased dramatically. The other price for this kind of social contract was a considerable reduction in jobs and a radical rejuvenation of the work force. As we have seen, this drastically changed the life cycle of older workers and created another group of unskilled workers whose working lives now returned to the patterns of precariousness we know best from the proletarian biographies of earlier periods.

The British case offers us insights into the disruptive effects that a radical economic reorientation away from manufacturing had during the 1980s and 1990s. Social ageing via pre-retirement but also the

⁴¹ Ibid. 92.

informal forms of long periods of unemployment or illness were the fate of a much larger proportion of the working class, and it was strongly intermingled with a widening generation gap because all the younger youth cohorts tended to turn their back on the 'old' crafts and trades. Finally, the number of industrial workers, skilled or unskilled, who started a new life cycle as workers in the service industries, was much higher than in the German case. Often it was more or less a reinvention of a working life, for better or for worse. This represents another type of working biography that still needs to be explored.

One aspect is crucially missing from this article: how these life courses were seen and lived by those affected by them. The kinds of sources used here do not permit deeper insights in this respect. In the British case the voices of those who had to cope with, and often had to pay the price for, the effects of de-industrialization are much more present in the public debate and the history culture now openly discussing the consequences of 'de-industrialization'.⁴² The stories of (West) German workers are more private and, at best, present in the regional collective memories of a lost manufacturing past.⁴³ In a comparative perspective they show us many cultural and political differences, but also a very strong attachment to the same values of industrial production and group solidarity based on a shared working experience.

⁴² Tim Strangleman, "'Smokestack Nostalgia,' 'Ruin Porn' or Working-Class Obituary: The Role and Meaning of Deindustrial Representation', *International Labor and Working-Class History*, 84 (2013), 23–37.

⁴³ But in both countries the life experiences of working people are available in the form of oral history interviews, interviews, and written notes in contemporary social studies. They are often collected at regional or even local level. In Britain much more is open for public use and available at a national level. See e.g. the collection of interviews in the British Library Sound Archive: <<http://sounds.bl.uk/Oral-history/Industry-water-steel-and-energy>>, accessed 12 Aug. 2016, or <<http://sounds.bl.uk/Oral-history/Food>>, accessed 12 Aug. 2016.

LIFE CYCLE AND INDUSTRIAL WORK

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