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Class, Division of Labour and Employment in Space

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Class is arguably the single most crucial axis on which human life turns in the modern world, yet is at the same time one of the most difficult of social facts to grasp. Marx provided a powerful conception, rooted in the mode of production, with which to understand the class character of capitalist societies. This theory remains subject to doubt, however, because of persistent failure of vision in the face of a social reality that does not conform to tidy conceptual systems. Space is another fundamental dimension of human life, yet the geographic element in the social sciences has atrophied for want of a way in which spatial relations might comfortably be integrated into social theory. Fortunately, the recent revival of philosophical discourse in the social sciences, which seeks to conjoin 'theoretical realism' with so-called 'structuration theory', has rekindled the spirit of inquiry once known as dialectical materialism, while contributing much in the way of clarity and systematic development of basic tenets. This mode of thought offers a way out of the dead-ends to which class analysis and geography have come, although the refined tools of philosophy need to be fitted into the powerful machine of Marx's theory of capitalism in order for the analytic work to proceed.

Class analysis has been persistently stymied by four problems in social theory which can be fruitfully addressed by a dialectical materialist, or Marxist 'structurationist' approach. The first is that posed as the question of structure and agency, which is addressed in section I.

The second problem confronting class analysis is the stratification of the social world. Social systems consist of several layers of nested

and overlapping sub-systems with their own irreducible structures. The interplay of structure and agency is not a simple dualism between structural mechanism and contingent forces; real events are always the result of multiple 'determinations' or causes. While these can be ranked in importance, the study of other levels cannot be entirely left until after the problem of class has been solved, because these mediating systems help to create the problem in the first place. The principal conundrum of class analysis along these lines has been the conflation of class with division of labour. Therefore, in sections II, III and IV I attempt to sort out the differences between these two fundamental categories of social analysis.

The third problem to be confronted is the lodging of class in the mode of production. The social construction of class takes place in relation to the unfolding dynamics of social production and capital accumulation, which means that class analysis cannot be restricted to the realm of sociology. It goes hand in hand with the difficult work of building a framework for understanding the capitalist economy on the foundations laid down by Marx. I take up this issue in the discussion of class and division of labour, and continue it in the more detailed inquiry into the employment relation, in section V.

Fourth, the theory of class repeatedly bumps into the hard reality of space. The abstract, aspatial character of most Marxist conceptions of class has left a glaring hole which has been filled by classless theories of exploitation between centre and periphery, and the like. In section VI the geographic element is addressed as a necessary part of the meshing of class and division of labour in the workplace. It is argued that class in a structured and stratified capitalist world incorporates an irreducible spatial dimension.

Along the way I wish to counter two errors in the geographic study of classes. One is the fallacy of sequential ordering, or treating the use of space (location) as a problem to be addressed by pre-existing classes. This is the normal mode of analysis of industrial and social geography. It lacks any understanding of structuration, or of the incorporation of space into the process of class formation itself. The second error is of more recent vintage, and comes hard on the 'rediscovery' of space by many radical social scientists. This is the fallacy of decomposition, which regards the introduction of space as necessarily undermining classes as coherent social entities. This view lacks sufficient appreciation of the complexity and agency involved in class formation.

I The structuring of class

The 'problem' of class begins with the inability to see classes revealed in a self-evident way through empirical scrutiny of the everyday social world. There have been various attempts by Marxist theorists to wrestle with the unhappy correspondence of class theory to apparent reality, and I shall indicate these in summary fashion.

The first is to treat class as a strictly empirical category. Classes then appear as boxes into which individuals may be sorted on the basis of their measurable characteristics. This empiricist fallacy, which goes back at least to Kautsky, usually leads to reading non-conforming groups out of the class structure of capitalism altogether, herding them into sizeable middle classes (new petty bourgeoisie, new class, etc) which come to ingest so much of the populace as to render the bourgeoisie and proletariat mere shadows of their Marxian selves.[1]

One answer to this dilemma is to push all the problems of nonconformity between theory and reality into the realm of consciousness. That is, objectively the proletariat includes the vast mass of people, but they do not all know it or act on it. This is Lukács' dualism of class-in-itself and class-for-itself (conscious of itself).[2] E. P. Thompson's influential break with tradition was to make a virtue of adversity, and to focus on the everyday, subjective experience of people as the heart of the process of class formation, rather than an afterthought.[3] History, ambiguity and struggle were thus reinserted into what had become an academic debate. Life was breathed into the history of classes and class struggle. But Thompson's grasp on the dialectics of agency and structure has subsequently been shown to be slippery, and the ties between the subjective, creative aspects of experience and their objective base in economic relations frequently becomes so attenuated in this approach as to bear little resemblance to Marx's analysis.[4] Agency overwhelms structure and the problem of empiricism remains. History stays a great flood with many eddies but no central currents. Przeworski's effort to grasp the dialectics of structure and agency for class analysis has admirably recaptured the spirit of Thompson, but remains subject to the same limitations: the economic relations virtually disappear from the discussion.[5]

Recently there have been several attempts to restore the 'objective' character of Marxist class analysis while recognising certain complexities of correspondence between class categories and empirical positions. Poulantzas introduces structural theory into the study of class,

but he does so in such a rigid structural–functionalist manner that he remains fixated on class position and class boundaries, allowing no real room for the interplay of structure and agency. In the end, he joins the ranks of empiricist critics of Marxian theory by reading virtually everyone out of the working class.[6] Wright's solution, by contrast, is to introduce the concept of contradictory class locations, whereby people are allowed to straddle class boundaries for objective, economic reasons.[7] This tackles the problem of ambiguous class position head-on, and is a point well taken. But Wright, too, fails to take the idea of structuration to heart, and in the end has merely inserted boxes between boxes at the empirical level.[8]

All these treatments of class suffer from a lack of philosophical vision, which hamstrings all subsequent theorisation. It is therefore necessary to set out four basic elements of a dialectical materialist view of class which I take to be compatible with modern structuration theory.[9]

Class is first of all a structural category. It is part of the essential 'mechanism' of the capitalist mode of production. That mechanism exists, independent of individual will, because of the aggregate social relations in which people are enmeshed. The mechanism of class can only be witnessed through its effects, as refracted through the innumerable contingent causes of human history. It has no one-to-one empirical manifestation because social development is an open system, not a closed experimental situation. Such an appeal to underlying structure cannot, however, be used to beg certain questions about non-conforming categories, contradictory locations, mixed modes of production or even the place of additional classes in the capitalist scheme of things. What it does, rather, is to break the discussion out of the empiricist straitjacket in which it is usually confined. Class is felt as lines of force, then, not as the bars of a cage that define existence.

Second, class operates in a stratified social world in which many sub-systems come into being with their own substructures; hence there are multiple determinations or forces at work, not one structure encountering a series of random contingencies. These structured subsystems are far more various than the Althusserian triad of economy–polity–ideology implies. Some are formal institutions, while others are much harder to delineate; some are fundamental, while others are of less importance. Part of the work of social analysis is carving away the nested layers of a stratified reality, determining the coherence of different sub-systems and the strength of their structures

as effective causes, and assigning weights to these causal forces in the overall scheme of things. Living societies are woven from many colours and patterns which give the overall fabric its distinctive character.

Third, class formation is also a creative process; classes are the product of human agency. This is not a matter of people learning fixed class roles, but of their coming to understand in a practical way the class-based rules of the game. These rules are both limiting and enabling. While structural reproduction depends heavily on strong patterns of thought and action, or what Bourdieu calls 'the habitus', it also allows room for creativity and change in a way that puts to shame the finest formal games.[10] In that sense, structure is enabling. It follows that agency cannot merely be grafted onto structure; it is not a counterpoint of 'free will' to 'determination', but the way most creative activity of groups and individuals is bound up with unseen structuring conditions. Structural forces may operate behind people's backs, but they nevertheless depend upon human agency. Without the creative exercise of individual and group initiative, the structure of class would not be reproduced and capital would never accumulate. Class power is not a sort of potential energy which agents put into effect more or less completely depending on their resourcefulness. It must be exercised in the pursuit of practical interests in order to maintain the conditions from which it flows; for example, a capitalist must control the workers sufficiently that his/her capital investment is realised profitably or s/he will not be in a position of power over them in the future.

Finally, the preceding points lead to a fourth: class formation is an historical process and class structure is subject to change. As human creativity harnessed to capital introduces new ways of doing things, old forms of life, organisation, thought, etc. are transformed. New forms arise which bear the stamp both of the past and the functional pressures and limits of the present order. Class relations must be repeatedly formed and reformed under changing circumstances, through a whole host of intersecting levels of institutions, group agents and individual life paths. The problems of power, exploitation, ideological hegemony and the rest must be fought out again and again on a shifting terrain. Furthermore, a dialectical conception of class must allow room for the innovative and the non-functional – even the substantially unexpected, contradictory and dysfunctional. Agency wrestles with structural logic, stratified sub-systems collide and interpenetrate, and the past confronts future possibilities. None

the less, lest all this seem a return to relativism and historicism, capital does still accumulate, the working class rears its head with the spread of capitalist relations of production around the world, and the social scientist can, after all, slice through the uncertainty to reveal something of the shape of underlying mechanisms at work – although capturing the essentials of social history is perhaps harder work and less precise business than generations of optimistic scientific socialists and positivist social scientists have been willing to acknowledge.

It is not surprising, then, that people have found class to be an elusive phenomenon. But we can understand something of both the dilemma and the opportunity opened up by a structuration approach once we begin to enrich class analysis through the inclusion of the division of labour, employment and location of workplaces as intersecting 'levels' of capitalism.

II Class power and production

We must start by saying something about the substance of class as a particular kind of structuring relation. At the most abstract, or metahistorical, level, class is a relation of power between groups of people. If we cast the net this wide, however, we come up not with Marx's conception of class, but that of Dahrendorf.[11] We shall leave concerns with domination in human life in all its dimensions to Foucault and his followers; class in the Marxist sense requires an object of power, and an end other than domination in itself.[12] The Marxist definition of class rests on the relations of production, or the social conditions under which the human labour of transforming nature to support the populace is undertaken. Central to these relations are the way in which surplus labour (surplus output) is extracted from the direct producers (exploitation/distribution), the form of possession of the means of production (property rights) and the degree of domination over production (control of the labour process). Modes of production, such as capitalism, are taken to be particular constellations of these factors, in relation to a set of forces of production. This much is common knowledge and common ground among Marxists. But here the trouble begins.

It is obvious that at such a level of generality the concept of class is only a guideline for thought which cannot bear the weight of much historical specificity. It tells us where to look, not what we shall see. Class is too slippery a phenomenon to be captured by a handful of

historically frozen categories. One needs, therefore, constantly to go back and forth between the abstract and the concrete, the better to clarify and enrich both.

A common mistake here is to confuse generalisation and abstraction.[13] The level of abstraction at which the concept of class, derived from the study of capitalism, is generalisable to other modes of production is not the same question as the essence of class under capitalism – or rather, at what level of abstraction we can begin to say anything very meaningful about capitalist societies and their histories using class as a tool of analysis. Marx may have begun his probing of class with the classic triad – extraction of surplus, ownership of means of production, and control of the labour process – but he did not end there. For class is an historical construct.

Let me illustrate. In the period immediately preceding the rise of industrial capitalism in England or the United States, there was a class of merchant capitalists defined, in part, by their control over the means of commerce and control of commercial money, but who did not control production or the means thereof. At the same time a class of small masters existed which owned its own tools and directed the work of apprentices. (Wright is quite wrong to assert, against John Roemer, that there cannot be a relation of class exploitation without the exercise of class power over the labour of the direct producers: that is precisely the *modus operandi* of the nexus between petty commodity production and merchant capital. He is quite right, on the other hand, to call Roemer's model of economic exploitation without *any* exercise of class power a fiction.)[14] The separation of the peasants from the land and the artisans from their tools, and the creation of an army of wage labour – a process in which, observes Marx, 'lies a world's history' – added a new element to the pre-capitalist system, but did not immediately revolutionise it nor usher in a whole new class system. Wage labour coexisted for a long time with petty commodity production, as day labour on docks or building roads. As Przeworski argues, the formation of classes under capitalism depends as much on the way in which wage-workers are absorbed into the new economy as the fact of their divorce from the means of production.[15] Thus, to say that class is defined by wage labour is not enough.

Perhaps, then, the crucial moment was the real subsumption (control) of labour by the rising class of industrial capitalists. This corresponds to the stage of manufacture (small workshops with a developed detail division of labour but little machinery) in which small capitalists mastered production and hired wage labour, but did not

displace the class of merchants on whom they were dependent. The critical step may then be the displacement of merchant capitalists at the stage of widespread development of the factory system and credit money, and the achievement of financial and commercial independence by industrialists; this point was reached roughly by the time of the Civil War in the US. It is the state of things that corresponds to Wright's tripartite definition of class: control of the labour process (variable capital), control of the means of production (physical capital) and control of investment (money capital).[16] But one cannot freeze the matter there. It ignores, for example, the problem of the degree of control which capitalists have over the labour process, which was rather low in many factories employing skilled labour in relatively unmechanised processes, as in the steel industry of the late nineteenth and early twentieth century. As one solution to this analytic problem raised by this independence, Braverman introduces the phase of 'monopoly capitalism' which sees the destruction of such pockets of traditional skilled labour.[17] On another front, just as the industrial capitalists were freeing themselves of merchants, a whole new world of finance and financiers emerged to complicate the class structure. Does control over industrial capital also mean control over the credit and banking system? Arguably it meant just the opposite in the heyday of J. P. Morgan. And what of the modern corporation that arose from Morgan's manoeuvrings? That introduced a whole new question of the control of corporate management.

Without taking positions on these issues of capitalist control, it is easy to see the dilemma. It is impossible to say at which point the real capitalist class stood up. In short, one cannot settle on a tidy definition of class that stops history in its tracks.

Nor can the number of dimensions of class be easily delimited. Again Wright is illustrative. He is determined to reduce class to a classic triad, but that triad changes as he recognises additional dimensions of class. In one article he begins with the labour process and chooses for his three elements control of one's own labour, control of the tools and control over the labour of others. In a later text he realises this is inadequate because it leaves out control over investment, so the triad becomes control over money capital, physical capital and variable capital (labour).[18] The dilemma is that the list could easily be extended to other aspects of the production, circulation and organisation of capital, such as control of the product of labour (commodity capital), control of credit (fictitious capital) or control of business organisations (corporate capital). Marx's method

was to spiral up and out from a 'bare bones' definition of class, not just adding elements to the analysis, but recasting the initial categories as they are seen from new angles. In other words, Marx's analysis of the dimensions of class is part of his entire study of the dimensions of capital.[19] (The 'secret' of the mysterious unfinished chapter of *Capital* on class is that there are unlikely to be any surprises there to anyone who had read the rest of the book.)

As Marx shows, once industrial capital stood up on its own feet, it began to revolutionise economy and society in ways that soon left the issue of enclosures or the hand-loom weavers, that is, the mere fact of wage-labour, far behind. New areas of economic importance such as the engineering and sales functions have been opened up which have become the cutting-edge of class change and as much a part of the 'essence' of class as the formal condition of working for wages, which has lost some of its force in class formation today. This does not in any way reduce the historical significance of classic proletarianisation, but wage-work now establishes capitalist class relations only in the weak sense. Class is a relation of power which must continually be maintained, extended and recreated in the face of changing conditions. It is therefore inextricably entwined with the development of capital(ism) as a system of production, circulation and exploitation. Carchedi, despite other problems with his analysis, is thus right to insist on lodging the definition of class within a framework of the evolution of capitalism.[20]

In short, not only does the course of class struggle, or the everyday clash of people in a class-structured context, 'determine' the strength of the class relation and the clarity of class formation, but that struggle must be placed on the shifting ground of an unfolding economy, or system of production as a whole. The latter cannot be adequately treated, nor the problem of class formation tackled, however, without delving into another fundamental level of political economy – the division of labour.

III The division of labour

The division of labour refers to the organisation of work in society, or the allocation of social labour. It has generally atrophied as a category of social science, including Marxist thought. On one side it has been replaced by the term 'function', which is disconnected from

sociology.[21] On the other side it has been reduced to bare technology, as in the phrase' the technical division of labour'. Wright makes use of both terms as counterpoints to his concept of class, for example.[22]

The distinction between division of labour and technology, or the forces of production, is especially difficult. Technology has at least four meanings. The first refers to the practical mastery of nature (knowledge); the second to the techniques of production, or the physical steps/processes to be followed in order to create a desired end-product; the third to the means of production and their capabilities; and the fourth to the overall capabilities of social labour given all the above.[23] None of these is the same as the organisation (or division) or labour to carry out the many particular technical projects of production. This is part of the social relations of production.

The distinction is not as clear as this would indicate, however. On the one hand, the division of labour as individual work tasks, systems of tasks and divisions among work units has a strong technological basis. On the other hand, technology is infused with social relations, not only in the practical choice of techniques in place, but in the very form of some tools and machinery, and even in the paths down which technical knowledge travels. Finally, the organisation of work is a kind of technology itself: organising capabilities as mastery of human interaction, organisational schemes as techniques of labour allocation, and organisations as means of production. But the technical base, the practical mastery of both nature and our own nature, never determines the way people actually do things.

Under capitalism there are at least two fundamental considerations other than technology involved in the organisation of work: economic calculation by competing capitals and class (control of labour). But the division of labour is not a simple product of these three forces, nor of any others. It has an integrity as a distinct level of social ordering in itself. That level becomes, in turn, a structuring force on the rest of social life, distinct from the social relations of class.

Marx distinguishes the *detail* from the *social* division of labour[24] and we need to amplify this simple dualism. For the term 'division of labour' causes no small confusion: the word 'division' emphasises the differentation of projects among work groups *and* tasks among individuals. But the connections between projects and tasks are equally important to the way labour is allocated in social production. We can say, therefore, that the detail division of labour refers to distinctions of task (occupation) within a given project or work unit, whereas the

The practical meaning of the detail division of labour poses no great problem. It should not, however, be equated simply with task specialisation, because very few workers actually perform a single, technically given task; the key to successful work organisation is how to combine and allocate many tasks to a smaller number of workers.

The social division of labour is harder to pin down, since it is a vague and broadly inclusive concept in Marx. It develops along with the appearance of new commodities, new methods of production, new means of circulation and new forms of organisation. The following distinctions need to be made, at the very least:

1. among branches of commodity production, or what are normally called 'industries';
2. among stages in the whole production cycle of a commodity, including both (i) the immediate process of production, that is, sequential stages of processing or component-assembly systems; and (ii) the extended process of production, including product research and development before regular production and maintenance and repair services after product delivery/installation;
3. between production and exchange (commodity circulation), and, in the sphere of exchange, among branches of activity such as wholesaling, retailing, advertising and transport;
4. between the circulation of commodities and the circulation of money and money–capital (including credit money and fictitious capital), that is, the various branches of banking, insurance, etc.;
5. among organisational units of capital, that is, corporations and other types of firms. This division overlaps the others.

The line between the social and detail divisions of labour is a fluid one. Production systems normally consist of several technically discrete sequential or simultaneous processes, which may be combined or separated in various ways, with varying degrees of impact on economics, labour control and other considerations. Although the association of tasks or work groups in close proximity is often physically necessary for carrying out the collective project, one cannot assume that work tasks carried out side by side always have strong technical connections. For example, Marglin argues that the earliest factories of the industrial revolution gathered workers under one roof chiefly in order to extract more effort (absolute surplus value), not because it was technically necessary or economically efficient.[25] But notice that as soon as one engages the difference between the detail and the social division of labour, space enters into the discussion as a matter of course. The spatial division between discrete workplaces is usually the most practical basis for distinguishing between the two. It does not follow, however, that division of labour is merely an empirical concept, to be contrasted with the 'structural' force of class.[26] One has to extract the underlying structure of work organisation and production systems from the cacophonous reality of corporations, factories, departments and jobs – and the spatial division of labour.

Both the detail and social division of labour are cross-cut by a vertical, or hierarchical, division of labour. This introduces further confusion, which is compounded by the intersection with such concepts as management and corporate hierarchy. Within the detail division of labour, for instance, one finds various levels of managers, or directors, of the immediate labour process. It is not satisfactory to treat such distinctions only in terms of 'authority structures', or systems of class control, separate from the detail division of labour, as Giddens does.[27] The organisation of all large labour processes requires direction, independent of the class character of society. It also requires various kinds of labour skills, with more or less command over the techniques of production and different levels of social status. The confusion arises because under capitalism administration and command of techniques readily become the province of capital, infused with a heavy dose of class relations.[28] The vertical element in the social division of labour, not only within firms but between what appear to be higher and lower functions of capital, is even tougher to handle. Regardless of capitalist class relations, command over large organisations, research and marketing activities, or the circulation of money implies very different levels of command over social production as a whole. This hierarchical differentiation is compounded by distinctions of skill and scarcity of certain kinds of labour.

Thus relations fraught with power differentials emerge from the division of labour and the practical carrying out of social production. That is, the division of labour provides a material axis around which people develop capabilities, knowledge, associations – and power. These power relations are independent from those of class, in the first instance, although they may easily become overlapped or even absorbed into the nexus of class power. All discussions of class trip over this tangle of social relations. Critics of Marx have asked repeatedly how ownership and exploitation can be the only sources and objects of

power. The answer is they cannot. The problem, then, is to mesh the division of labour and class without eliminating the distinctive character of either.

IV Class and the division of labour

Class and division of labour are perennially conflated; either class becomes a dimension of the division of labour or vice versa. There are several ways not to consummate a marriage of the categories.

The first kind of error is to make class a dimension of the division of labour. This has several variants. One sees class as a product of the forces of production and the inherent command function in all social production. While class may historically grow out of differences in the division of labour, both take on lives of their own at a certain point. A second variant speaks of occupational classes, which trivialises class power by attributing it to any and all differences thrown up in social production.[29] A third assigns different class positions to producers and non-producers of surplus value.[30] A fourth distinguishes exchange classes from production classes.[31] The last two fail to grasp the unity of production and circulation under industrial capitalism (which is not to say that under a different mode of production, such as the nexus between petty commodity production and merchant capital, classes might not be defined, with care, along the line between production and circulation).

A second kind of error inserts division of labour into a prior framework of class. One variant subjects each class (capitalists, workers, etc.) to an internal division of labour that does not alter predetermined class boundaries.[32] Another variant, Wright's contradictory class locations, allows the blurring of class lines. The intermediate position of managers and professionals is based on their control over the work of others or of themselves, respectively. Wright fails to recognise that these characteristics rest, in fact, on their position in the division of labour, either as organisational workers or skilled technicians; instead, he tries to shoehorn all these features into class relations.[33] A third variant, also due to Wright, is to relegate division of labour to the position of 'function' while preserving for class the notion of 'structure' – as if class did not have a function (for example, exploitation) or division of labour a structure.[34] In other words, Wright lacks a notion of multiple structured levels/systems which

must be meshed in order to comprehend the complexity of the social order.

Much of the confusion surrounding the debate over class can be sorted out once division of labour is allowed its rightful degree of independence as a level of social structuration. This is the heart of the dilemma faced by Wright and Carchedi, the two most sophisticated advocates of the Marxist theory of class in recent times. They have tried to give some subtlety and multidimensionality to the concept of class relations, but have, in the process, mixed in elements of the division of labour. It is essential not to collapse division of labour into class and to recognise the causal efficacy of both. But the two also do not exist as separate systems to be brought into juxtaposition once the wheels of industry begin to turn; this is the sort of billiard-ball structuralism one finds too often in Poulantzas and other Althusserians.[35] Class and division of labour are simultaneous features of capitalist production, its social relations and social practices: interactive and mutually modifying, yet independently structured. Both revolve around the axis of capital: its production, distribution, circulation and accumulation. As a first pass, we may say that class is the capital–labour relation approached from the value side, or the way in which one group lives off the labour of another, while division of labour is the same relation approached from the use-value side, or the physical/practical aspects of production and circulation needed to extract surplus value. (This distinction is not strictly true, since the division of labour enters into the value system in the form of the allocation of labour to different sectors; but I find it a useful first approximation.)

Class may occupy a more fundamental place in a world of stratified determinations, but division of labour is not merely a modifier in the grammar of class. The two evolve in tandem. In the industrial revolution capital and the capitalists seized upon the existing division of labour and profoundly altered it through the destruction of household units, gathering workers into workshops and factories, rationalising the detail division of labour, etc. Over the last century and a half this process of change in the division of labour has continued. Some of the change has been the result of the direct exercise of class power, some an indirect result of the economic system which class power helped to install. The idea that technology/technique is permeated with class relations in its line of development, even in physical products themselves, is by now well established. It is even more true

that the organisation of labour (division of labour), as only a semi-technical system, is steeped in class.

The converse, however, is also true – but less widely acknowledged. As the division of labour has been expanded, elaborated, subdivided and reorganised, it has given rise to new dimensions of human acticity – new jobs, new processes, new knowledge, new workplaces, new companies, etc. – and, consequently, new sources of power. These become, in turn, sites and tools of class struggle. Capital must try to secure to itself a prevailing position *vis-à-vis* most important components of the economy if it is to operate effectively. Capitalist class power, like capital, must be extended in order to be reproduced.

It begs the question to assert that class is superior to division of labour or that class power is fully encompassed by control over labour, physical means of production and money. Carchedi has gone the farthest in recognising the advancing front and multidimensionality of class power, by grappling with what he calls the 'functions' of 'global capital' and 'collective labour'.[36] Unfortunately, he, too appears to put class on ice at a certain point. The modern credit system, for example, is of fundamental importance to the operation of capital, giving rise to new groups of financiers, new kinds of monetary instruments and new institutions, such as the Federal Reserve Bank, which must be incorporated into the capitalist class and its practices. Because the relationship to pre-existing capital and capitalists is so clear in this case, the transition happens rather automatically. But the situation is different with, say, the modern medical complex, professional sports or the engineering profession, which have been brought within the constellation of capital more or less imperfectly.

Precisely because the question of class integration is still partly or largely open for many people and positions in the division of labour, the various issues raised by the 'service sector' and the 'professional-managerial class' are a lively subject of debate.[37] If we try to jam them into a rigid set of predetermined class boxes, they do not fit. We would do much better, as Wright suggests, to recognise the ambiguities and contradictions of many positions in relation to class, while stressing the ongoing fact of class power in society. But even this is not enough. A changing division of labour cannot be fully encompassed, in Wright's fashion, by judicious combinations of existing dimensions of class. The dimensions must themselves be extended in theory as they are in practice to deal with new problems of reproducing power and accumulating capital. Since both are imperfect and

fraught with difficulties, and change is persistent under capitalism, class formation is necessarily partial, class structuring incomplete. The openness of history must be faced straight on. But it cannot be faced without a powerful conception of the division of labour. Without the inevitable tensions between division of labour and class, the difficulties of class analysis appear to rest entirely with the overburdened and inadequate category of class, and the vindication of Marx's approach to history is impossible.

We can now isolate one fundamental site of the construction of lived experience and the formation of class: the encounter between capital and labour in the workplaces thrown up by the evolving capitalist division of labour. We will find that even if one goes where class relations ought to be the simplest and most readily apparent, one must deal with the problem of structural levels, human agency and the need to analyse capitalism as it evolves in its full complexity, as part of settling the question of class.

V Where labour and capital meet: the employment relation[38]

In every workplace of the capitalist economy labour and capital come together in order to carry out a concrete work project. Each workplace thus combines the detail division of labour and class in one project in the social division of labour. This intersection of classes in production is necessary for the reproduction of both capital and labour, that is, for the creation of surplus value and for securing the means of existence, respectively.[39] Work and the division of labour necessary to carry it out does more than secure the exchange and exploitation of labour (-power), however; the concrete activity of work is an essential part of the experience and formation of class.[40] The junction of capital and labour in the workplace is thus more than the sum of division of labour and class; it generates a certain life of its own – 'relative autonomy' – as a structured sub-system in its own right. We therefore require a new category to deal with it; the employment relation.

The employment relation is structured by the following elements:

First, every workplace has a production process with a definite 'performance structure' that is strongly determined by the practical, technical problems of the project. While it is essential to recognise the technical component of work organisation, I do not want to introduce it as a strictly exogenous variable, lacking a social and

historical base. The ends of capitalist production are, of course, strongly wrapped up in the character of that system and the needs it engenders; but so are the means. On the one hand, projects do not call forth technologies from an ideal scientific matching of human labour to natural systems. What we do depends on what we can do, which depends on the state of scientific-engineering knowledge, of practical shopfloor knowledge and skills of the workers, and of the technical capabilities of existing materials and machines, all of which develop over time through practical problem-solving in production as much as by abstract leaps of scientific insight.[41] On the other hand, there is usually some range of technologies available to reach the same end (or roughly comparable ends) from which to choose. Exchange (price) and worker control conditions (see below) have a considerable impact on choice of technique in the short run and the long-run technical development path as well.

Second, the workplace has a structure of capitalist (management) control and worker resistance, which, while based in class relations, is also strongly embedded in the technical nature of the project. That is, the individual tasks to be performed require a certain kind of worker skill, discipline, autonomy, creativity, etc., and the intersection of tasks demands certain kinds of social interaction among workers. These conditions provide a basis for worker resistance. Against this management establishes various kinds of control systems in order to elicit performance, suppress militancy and maintain its prerogatives over the organisation of the labour process.[42] Capital never rules the kingdom of production absolutely because of the necessary element of worker knowledge and creative involvement in all work.[43] It must therefore balance the desire for control and intensification of labour against the requirement for worker co-operation and sources of worker resistance arising from the nature of the project (and elsewhere). The 'control structure' of production always contains this contradiction.

Third, the employment relation has an economic exchange component, or 'reward structure', deriving from the need to hire labour (power) on the open market. The labour exchange includes, besides the formal wage, such things as benefits, worktime, work environment, and rate of advancement; but its core is the distribution of surplus value between labour and capital. On the one hand, the reward system is strongly limited by capital's ability to pay, based on the economic conditions of the industry and firm: robustness of markets, input costs, degree of competition, competence of management, etc.

On the other hand, reward demands of the labourforce depend on historical/regional standards of living, scarcity of labour (-power), degree of militancy and organisation, etc. In between these two poles lie the contradictory considerations of production, with the reward system serving as both inducement to perform and a form of labour control.

Finally, there is the way in which the three preceding structuring elements are actually put together through the active 'war of position' between managers and workers. This is not a strictly rational ends–means calculation carried out at the level of 'discursive consciousness', or insight into the structures themselves.[44] It is, rather, based on practical knowledge of the immediate situation, its social rules and payoffs. Individual behaviour is socialised into the peculiar social order of every workplace. Certain social 'games' with a life of their own come into being which, while grounded both in the job to be done (division of labour) and in class relations, also mask the latter and often interfere with the former. Burawoy refers to the social order of the workplace as 'relations *in* production'.[45]

This view of the employment relation differs markedly from other extant theories in economics and sociology: the neo-classical view in which the labour exchange is reduced to a direct reward for performance; the radical labour process view in which the labour exchange and performance (technology) follow chiefly from considerations of labour control; the labour market segmentation view in which the labour exchange (labour markets) is organised principally for economic exploitation (based on ability to pay and the principle of divide and conquer); or the industrial sociology view in which resistance (alienation) and control (authority systems) flow from technology and the division of labour without reference to class power or economic exploitation. The approach set out here seems to be borne out empirically by a study of four industries which found a statistically extraordinarily high independence of the three variables, performance, control and reward, and distinctive combinations of the three in each industry.[46]

While giving the employment relation the attention it deserves as a determinant force of social ordering and class formation, I do not want to exaggerate the degree of freedom to be accorded it. Despite the potential variability across industries which this multivariate and open view of employment allows for, there are none the less constant forces across all capitalist workplaces and limits to the whims of the actors involved. Employment is still a structured relation with defin-

ite limits and pressures inherent in the reproduction of capital.[47] That is, employment is structured by the prior relations of class, technology and economics of the market (competition, product uses, etc.) in which the workplace is situated.

Together with Storper, I place particular emphasis on labour-process technology as a force cutting across the myriad individual product lines and workplaces to give them a broader ordering, for example, batch process versus assembly line. Elsewhere we have distinguished six important labour process types, from small batch assembly to continuous flow processing.[48] The particulars are immaterial here; the essential point is that the technical basis of the division of labour exerts a powerful structuring force on the employment relation and hence on the social order of the workplace, that particularly critical site of class encounter and class formation.

Up to this point, I have treated employment in a rather static fashion, which is clearly inadequate to our task of elucidating class formation as a dynamic historical process. We must, then, develop the time–space dimension of employment, or what has traditionally come under the heading of 'industrial location'. That hidebound field can be given a new twist in the process.

VI Employment in space and time: the spatial division of labour

Labour and capital must come together in time and space. Employment not only takes place *in* space; the participants *use* space as a strategic variable in the creation, destruction and re-creation of viable employment relations over time. This is the key to understanding the spatial division of labour.[49] It is also vital to the process of class formation; labour and capital exist only in and through their encounter in space and time.

Employment becomes a spatial problem – that is, a spatial division of labour arises – because of three inescapable facts of production and reproduction at this stage of history.

First, capitalists must invest in fixed and immobile capital (plant and equipment) in order to produce, and they must secure a flow of circulating capital (materials and labour) at the point of production, as well as putting their own output into circulation (marketing). This is the standard fare of traditional location theory: markets and transportation to and from a fixed place of production. Because industrial workplaces differ in their specific production processes,

their input and output linkages and labour demands will be different.[50]

Second, workers require a certain fixity for their reproduction. This refers both to fixed capital in the consumption fund, such as houses, schools and parks, and the time necessary for secure social relations to develop, in the sense of habituated practices. Without these, life ordinarily becomes both materially and socially impoverished. The element of fixity in the formation of working-class communities itself introduces a degree of social divergence among labour forces. People do not randomly mix across space. These differences are compounded by diverse roots in pre-capitalist social formations and the industrial histories of particular communities.[51] The sphere of consumption and labour personnel reproduction thus cannot be treated as if it were wholly unrelated to work, as is so often done.[52]

Finally, the employment relation requires some time and stability for a workable social order of the workplace to arise. Conversely employers must recreate the relations of class by repeatedly reconquering the workplace over time.

None of these things is absolute, of course. Yet immobility is a persistent feature of human life and capitalist production. The issue is actually the *relative* mobility of capital and labour, of one kind of production process versus another. The mobility of capital is highly developed today, thanks to such innovations as electronic money transfer, telephone communication and the multinational corporation.[53] None the less, capital has not freed itself of the necessity of taking a material form as instruments of production. Similarly, capital is not normally invested in wholly new plants, but is added to or drained from existing facilities. There are other barriers to capital mobility, as well, such as small firms with little investment search capacity, poorly developed information or financial linkages, and personal allegiances to place. Industries also vary considerably in their material fixity, from the vagabond character of construction and transport activities to the long life of some mines or large steel complexes.[54] Labour migrates, too. While this is often triggered by, or directly mobilised by, movements of capital,[55] labour migrations have a dynamic of their own once a stream is established, which may come to bear little relation to job prospects.

Further, industries differ in the degree of stability needed for a successful employment relation. Some employers, such as automobile companies or machining firms, desire a stable, low-turnover workforce on which they can rely for predictable, knowledgeable long-

term performance. Many working-class communities come to be based on such stable employment, on which long-term financial commitments for houses, etc, are made and to which successive generations will return. On the other hand, many industries are characterised by an in-built variability in employment, as in the seasonality of nineteenth century shoemaking in Lynn, Massachussetts, the war-spending swings of modern jet production or the persistently high turnover of workers in electronics assembly.[56] Associated with such industries one finds workforces and working-class communities with a high degree of adaptation to the unstable conditions of employment, whether through finding counter-seasonal work in other sectors, moving from job to job and place to place within the same industry, temporarily returning to housework, moving on, or recruiting a whole new workforce, as needed. Of course, 'successful adaptation' in such situations can mean acceptance of lower living standards or of profound instability in familial and personal life. One should not, therefore, always associate the regularity of employment practices with stability in a literal sense.

Whatever the degree of personal or market stability involved, every employment relation rests on some degree of regularised practices in time and space. But every employment relation inevitably becomes subject to destabilisation, erosion and either termination or reconstruction in a new form. The sources of destabilisation are, broadly: those originating with changes in the external circumstances of capital, such as macroeconomic cycles, inter-firm competition, or product markets; those originating with labour outside the workplace, such as dwindling supplies from the locale, growing militancy in the community, or changing nationality of immigrants; and, finally, those deriving from the contradictions of the employment relation itself, such as the exchange leverage of skilled workers, high turnover because of oppressive control systems, or rigidity of habitual practices in the face of an ongoing need to introduce new technology to remain competitive. There is, therefore, an inevitable tendency in the nature of capitalism and employment for employment relations to have to be dissolved and reconstituted in the course of industrial evolution.

Employment in space thus has two dimensions: allocative (cross-sectional) and temporal. The former refers to geographical *matching* of capitalist labour demands in each workplace to available labour-forces. This sort of matching takes place regardless of whether capital moves to a pre-existing labour supply or labour migrates to sites of

employment. Allocation is a relatively static conception of the problem, however, which takes us only one step away from conventional neo-classical theories of industrial location. Adding the temporal dimension of employment, the making and breaking of specific employment relations, makes the question of location not only one of *where* to go, but of *when* to go. Furthermore, the concept of where to go, or of 'matching' labour demands and labour supplies, takes on a more rich and subtle aspect. The qualities desired by an employer derive as much from the currently-lived experience of work as from prior skills, attitudes, and so forth. (And background characteristics derive strongly, in turn, from prior work experience.) Employers do not simply choose appropriate workers for a technically-given labour process, except in their dreams when a new plant is opened; most workers are recruited for and socialised into ongoing employment relations, often via connections with old workers. As a result, one can never be sure of the goodness of fit or the internal stability of the employment relation before the fact; it is an ongoing site of struggle.

The location process thus becomes a strategic part of the employment of labour by capital. Looking at it from a simplified perspective of a 'war of position' between the classes, we see that spatial manoeuvre is a fundamental tactic, especially of management, but also of labour. Yet that 'war' still operates under the restraints of the practical problems presented by production in different industries, or the division of labour, as well as the restraints of practical consciousness, which is something less than the 'rationalist' model of decision-making.

The result of the location process is, at any time, a mosaic of workplaces and associated communities. This mosaic is literally a spatial division of labour. That spatial division of labour is necessarily uneven in its development because of the differences among labour processes and the idiosyncratic element in workplace employment relations. And the mosaic shifts continually over time as industries evolve and labour relations are reconstituted, with the new overlaying the old in a rich criss-cross of industrial and class history.[57]

As the sands of capitalist development shift and slide, so do the fortunes, actions and beliefs of the people trying to build on them. I am not concerned here with a critique of the social costs involved in this.[58] Rather, I wish to point up the implications of this spatial flux of employment for the way people constitute themselves as classes and reproduce the class structure of capitalist societies, that is, to take a step beyond showing that the location of industry involves a 'spatial

division of labour' to showing that it is part of the socio-spatial construction of class.

In short, adding another 'layer' of structural determination – the dialectic of fixity and mobility in space over time – to the three layers previously identified – class, division of labour, and the employment relation – adds another degree of richness to the analysis of social life under capitalism. There is much that this leaves untouched, of course, but it illustrates the direction in which we should be going. And in particular, it adds an essential element to an understanding of class formation, to which we now return.

Conclusion: class formation as a geographic process

I have tried here to advance the idea of class structuration a short step by adding three additional layers of structure – division of labour, employment, and space – to class analysis. The focus of this effort has been to portray the employment relation as an open system in which class relations are actively constituted through the practical activities, interactions and power struggles of people on the job. A second purpose has been to argue that given the inherent geographic element in production, class manoeuvre and the reproduction of capital and labour, classes are necessarily constituted in and through the use of space.

This way of looking at things, it should be added, grew out of the practical exigencies of a research effort that was seeking to comprehend the logic of industrial location for a group of specific industries, with specific differences in technology, labour relations, and locational patterns. At the same time, the construction of this model in no way entails rejection of any basic tenets of the Marxist analysis of capital. Indeed, each level of structuration in a sense grows out of the previous ones: division of labour out of the capitalist drive to accumulate, the employment relation out of the class encounter within the division of labour, and the spatial division of labour out of the employment relations in various industries.

The conclusions that flow from this view of class formation are likely to be controversial. It appears, at first glance, to introduce a strong element of class fragmentation along the lines of the division of labour and the regional unevenness of employment. Indeed, it implies a somewhat weaker concept of class and process of reproduction of class structure than most Marxist approaches. But it accords much

better with the findings of geographic differentiation in the working class by historians and geographers.[59] The problem is to account for such observable variations in class formation without having to abandon the principle insights of Marx. It is only certain romantic notions of a revolutionary working class 'for itself' that are damaged by this view of things, not class theory itself. This view also does not accord well with other popular but oversimplified theories of working-class 'bourgeoisification', bifurcation, degradation (deskilling) and the like.

On closer inspection, however, asking whether classes are 'fragmented' begs the prior question as to how classes take shape through human experience and practical activity. It presumes an empiricist or structural–functionalist notion that class is a singular 'thing' which is less real if it is less unified, that is, one can make fewer empirical generalisations about it.[60] But class does not exist in this sense. Class is a dimension of life that people feel more or less strongly depending on circumstances. Even the worker who lives out his life as a coal-miner in the most despotic company town is never fully defined by his working-class status. People experience class as it is built into their lives in particular ways and come to realise the force of class in and through the immediate circumstances they can experience and understand directly. As Giddens puts it '[c]lass boundaries [cannot] be settled *in abstracto*: one of the specific aims of class analysis in relation to empirical societies must necessarily be that of determining how strongly, in any given case, the class principle has become established as a mode of structuration.'[61] *Thus the only way people can develop a practical understanding of class relations is in a fragmented form.* From that base, of course, they may or may not make the leap to class as an abstract, discursive concept.

It has been said that structure is enabling as well as limiting to human action; it might just as well be said that agency is enabling as well as limiting to structure. This applies as well to the various substructures that at first appear to weaken the force of class structuration. That is, while competing structures such as the division of labour or spatial relations have a certain attenuating effect on the force of class in everyday life, they also may have a galvanising effect, as in the case of nationalist class formation. Spatial contiguity and the traditions of place-bound groups, both in workplaces and in communities, are very important bases for the kind of experience and knowledge that clarify class relations – which is why one finds that coal-miners are frequently the most class-conscious of workers.

The issue, then, is not whether or not classes are fragmented but whether the fragments of everyday life provide a basis for weaker or stronger formation of class-oriented institutions, practices and insights. Do people encounter the capital–labour relation in ways that emphasise or hide the class dimension of their existence? And do they encounter it in a manner that makes it possible to build more strongly class-oriented organisations, activities or politics, and hence to reproduce class structure in a progressively stronger fashion? Certain simple and habitual acts, such as going to work for profit-making firms, create the reality of class structure in the weak sense, but no more. The making of a coherent working class or a polarised class society is a cumulative historical process which depends on both existing material sources of commonality and the creation of further resources from those at hand. Hence, crucial defeats of efforts to build up class organisation, class politics or class culture actually weaken the force of class structuration.[62] This approach does not deny that class polarisation can take place very fast, given the right circumstances. But it suggests that, in human as in physical geography, it is often the slower, less dramatic processes of building up and tearing down that have the greatest effect in the long run.

Notes

* e.g. Urry (1981)

1. See Przeworski (1976) and Wright (1980) for reviews.
2. Lukács (1971).
3. Thompson (1968).
4. Anderson (1980).
5. Przeworski (1976).
6. See Connell (1979); MacKenzie (1982); Wright (1976) and (1978).
7. Wright (1976), (1978) and (1980). See also Carchedi (1977).
8. MacKenzie (1982) p. 74.
9. This discussion is based on Giddens (1979); Bhaskar (1978); Sayer (1982); Bourdieu (1977) and Harvey (1973).
10. Bourdieu (1977).
11. Dahrendorf (1959).
12. Wright. (1983).
13. Sayer (1982).
14. Wright (1982); Roemer (1982).
15. Przeworski (1976).
16. Wright (1980).
17. Braverman (1974).
18. Wright (1976) and (1980).
19. Harvey (1982).
20. Carchedi (1977). See also MacKenzie's (1982) sympathetic critique of Carchedi and Connell's (1979) unsympathetic lambasting, as well. I must admit my own previous conception of class has been too static. See Walker and Greenberg (1982).
21. For a critique of functionalism, see the work of Giddens and his followers, for example, Giddens (1979) and (1981b).
22. Wright (1982).
23. cf. Cohen (1978).
24. Marx (1967) ch. 14.
25. Marglin (1974).
26. Wright (1980) p. 354.
27. Giddens (1981a).
28. Marx (1967) ch. 14 and 15. Braverman (1974).
29. Wright and Perrone (1977).
30. For example, Poulantzas (1975). See discussion in MacKenzie (1982); Wright (1978) and (1980).
31. Weber (1978).
32. This is a position I once favoured: Walker and Greenberg (1982). MacKenzie (1982) and Giddens (1981a) fall into the same trap in trying to use labour market segmentation to explain class inequality.
33. Wright (1976).
34. Wright (1980).
35. Thompson (1978).
36. Carchedi (1977).
37. Walker (1979).
38. The following discussion is based on Storper and Walker (1983) and (1984).
39. Marx (1967) ch. 24.
40. Nichols and Beynon (1977).
41. Rosenberg (1976).
42. Edwards (1979).
43. Aronowitz (1978).
44. Giddens (1979).
45. Burawoy (1979).
46. See Storper (1982).
47. In emphasising capital reproduction over labour reproduction, I am open to all the criticisms made by McDowell (1983).
48. Storper (1982); Storper and Walker (1984).
49. Storper and Walker (1983) and (1984).
50. Walker and Storper (1981).
51. Bleitrach and Chenu (1981); Massey (1978a).
52. For example, Giddens (1981a).
53. Bluestone and Harrison (1982); Walker and Storper (1981).
54. Walker and Storper (1981).
55. Clark and Gertler (1983); Piore (1979).
56. Storper (1982).
57. Massey (1978a).
58. See for example, Bluestone and Harrison (1982).
59. For example, Gregory (1982b); Walkowitz (1978).
60. See again Sayer (1982).
61. Giddens (1981a) p. 110.
62. Davis (1980).

The book has a consolidated bibliography, so it's not included here. Sorry.