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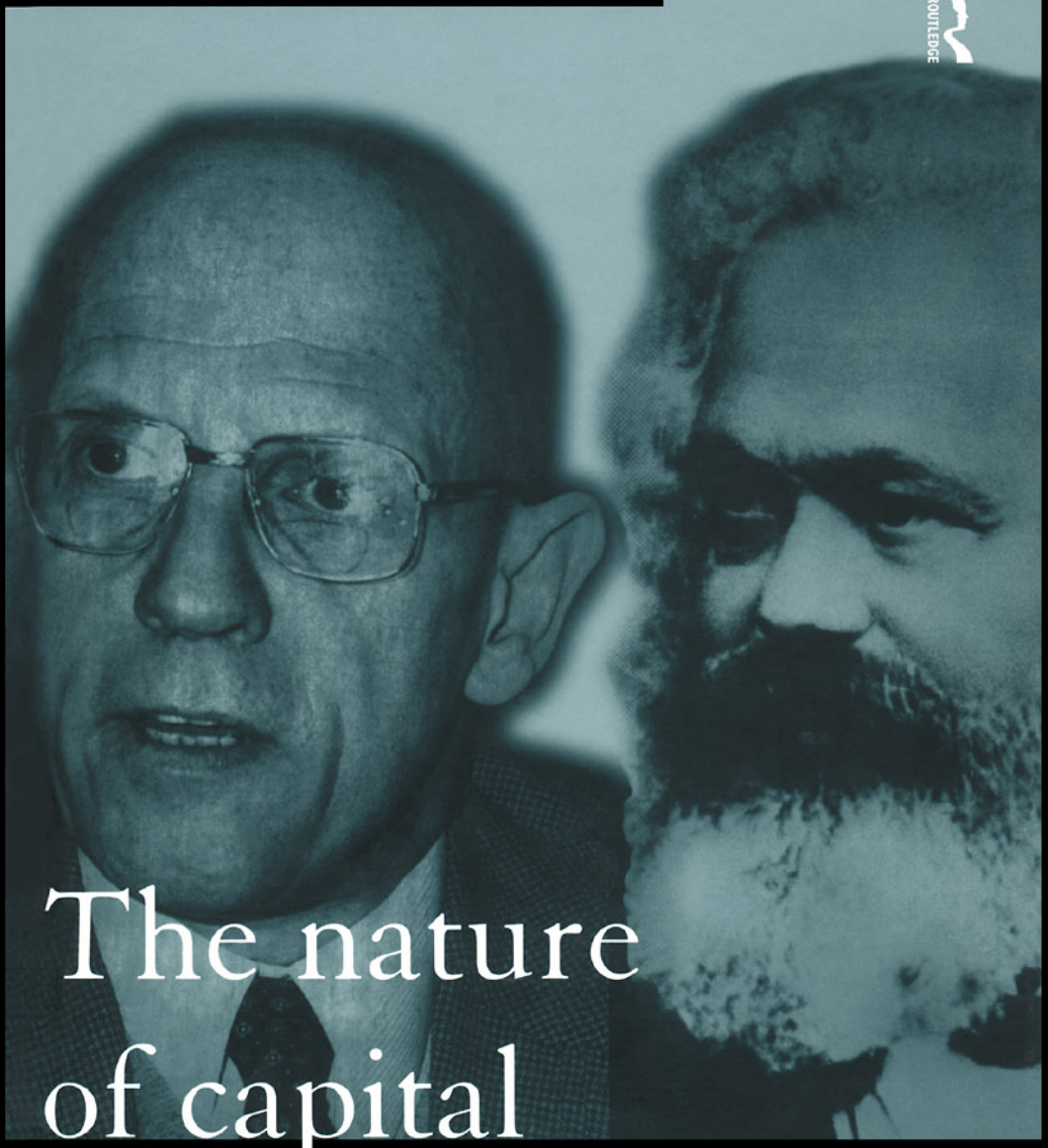

The nature of capital

Marx after Foucault

Richard Marsden

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The Nature of Capital

We embrace virtuality, but long for authenticity. We rush into the future, but yearn for the past. *The Nature of Capital* aims to explain this tension at the heart of the current disturbance of the spatial and temporal coordinates of social life.

It does so by re-reading Marx and Foucault through the lens of critical realism, overturning the received wisdom that their social theories are fundamentally incompatible. The result is an illuminating synthesis between Marx's 'social relations of production' and Foucault's 'disciplinary power', from which the author constructs a model of the material cause of our capacity to act: capital, society's genetic code.

The book places Foucault's concept of power at the heart of Marx's analytic. The logic of power and the law of value, the widening and ascending spirals of disciplinary technologies and capital accumulation, interweave and adulterate each other. Foucault explains the 'how' of power, Marx explains the 'why'. Together, the book argues, they define the operative logic of production relations at work shaping the condition of postmodernity.

Original in conception and clearly written, this iconoclastic work will be welcomed by students of, and researchers in, social, economic and political theory, critical organization and management studies, and postmodernity.

R**ichard Marsden** writes, edits and tutors at Athabasca University, Canada's Open University, where he is Associate Professor in Industrial Relations.

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To Barbara

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Acknowledgements

Readers are entitled to know what they are getting. Authors are poor judges of what they have done. But I think this book uses Marx and Foucault to make sense of capital, and uses capital to make sense of the transformation in the experience of time and space which we recognise as postmodernity. I suspect it is also an intellectual autobiography, for I live the life of a postmodern monad, with all its perils and possibilities, and I wrote it to understand that life.

Not even postmodern monads work alone. Here I would like to acknowledge and thank a few of those who helped me think these issues through.

I set off along the academic trail leading to this book largely because of the example of my first teacher of economics, Jack Eaton. Tom Keenoy's questioning of my developing theoretical approach, long ago now, hung around and helped keep me grounded. A conversation with my friend and colleague, Tony Simmons, started me thinking about the relationship between Marx and Foucault; and Mike Gismondi set me off in the right direction by putting me on to the work of Derek Sayer.

I pursued the relationship between Marx and Foucault initially via a Ph.D. in industrial relations, awarded by the University of Warwick in 1993. I recognize my good fortune in having two such knowledgeable and astute guides as Richard Hyman and Paul Edwards. I am especially grateful to Richard Hyman for supporting my attempt, such as it is, to go beyond an analysis of work which he did much to establish. Most of the clues came from him. But for Paul Edwards' constructive skepticism towards Foucault I would not have dug as deep as I did. The book began to take shape during my sabbatical at the Industrial Relations Research Unit at the University of Warwick, in 1996–7, where I was warmly received. Gibson Burrell was kind and helpful to me throughout and supported the idea of the book when it mattered. I owe him a lot.

Tony Earnshaw, a rare artisan of words, taught me to write. The care and support of Erna Dominey, another fine editor, was crucial in helping me keep things together during the final months. Many others, including Paul Marginson, Marianne Sorenson, Hugh Willmott, Stewart Clegg, Helen Newell, Albert Mills, Karen Dale, David Cooper and Leslie Oakes, most of whom I hardly saw while working on the book, helped in the intangible way that friends do. The practical service to the labour movement of Jim Selby and Winston Gereluk was a constant stimulant to what I have attempted here theoretically. Terry Morrison was kind enough to comment on an earlier draft of Chapter 6, and Don Whitehead helped long ago by giving me a copy of Tressell.

This book about capital and postmodernity was put together in the seclusion of a cabin, in the company of a family of beavers, on the edge of one of the last great boreal forests.

While I merely wrote, they raised two young and felled and ate twenty aspens and three willows. These Canadians: I tried to match their industry, but use more restraint. Stuart Morrish built the cabin, Joan Sherman helped me find it, and Evelyn and Harvey Scott gave me the time and space in which to think. The cabin sits amid 160 acres, a quarter-section, part of the geometric grid system of the North American West, so apparent from a plane. Ten yards away, but an age from me, stands the original homesteader's cabin, in which the Plante family, who first worked this land, raised eight children. Their relocated lives, and those of the other immigrants who built this country, were a constant reminder of life before linearity, a bridge between the old and the new worlds, a counterpoint to postmodernity's compression of space and time.

Given the book's argument about capacities to act, I should acknowledge my own 'material' cause, my mother Clarice, to whom I owe so much. There is a lot of her in here. My brother Geoff inspires me in his own way. I wrote about capital with an ear for the much-missed Elsie Townley, a great reader of books and, with Norman, a repository of experience of life where it all began, those valleys and towns surrounding Manchester. My biggest debt, however, is to another product of that experience, Barbara Townley, with whom I lived for the ten years I pursued these ideas. For the endless discussions, her incisive comments, intellectual and emotional companionship, my deepest thanks.

Richard Marsden
George Lake, Alberta
Fall 1998

Apologia

1 The core of this book's analysis of capital and postmodernity is a bibliographic-chronological reading of Marx. It draws, therefore, almost exclusively on the work of Marx himself, rather than his numerous interpreters and commentors. As far as I am aware, this type of reading has never before been attempted. If my arguments are persuasive, they will have implications for more conventional interpretations of his work. Developing this reading, however, is a job in itself and, so as not to make this an over-long book, these implications will be pursued separately. I am also mindful of a new generation of potential readers who are curious about the connection between capital and postmodernity, but are not interested in the classic debates of Marxist scholasticism. I write mainly for them.

2 This is an attempt to model capital, understood as a real, if nonempirical, structure of social relations, constraining and enabling people's actions, that is, a material cause. To be sure, these social relations are constituted by a variety of efficient and final causes, the actions and motives of men and women of different nationalities, races, religions, ages and sexualities. But capital, as a *sui generis* reality, is fixated on abstract labour, rather than the concrete characteristics of those who constitute these relations: in this book, so am I.

3 When reconstructing Marx's retroductive line of argument and model of capital I have used the present tense, to encourage readers to consider his ideas in the light of the present. I also leave unaltered his use of the personal pronoun 'man' because, writing in the middle of the last century, that is precisely who he meant.

4 There is opportunity for equivocation at every juncture in this book, but I have an argument to make and so I speak as clearly and boldly as the evidence permits.

Credits

Part of Chapter 1, ‘The postmodern market-place: the hyperreal mall’, appeared as part of Marsden, R. and Townley, B. (1995) ‘Power and Postmodernity: Reflections on the Pleasure Dome’, *Electronic Journal of Radical Organization Theory* 1 (1), http://tui.mngt.waikato.ac.nz/leader/journal/ejrot.htm

Much of Chapter 6, ‘The inner connection: production, distribution and circulation’, appeared as Marsden, R. (1998) ‘The Unknown Masterpiece: Marx’s Model of Capital’, *Cambridge Journal of Economics* 22 (3):297–324.

Chapter 8, ‘How labour is organized into a productive force: cost accounting, IR and HRM’, appeared as Marsden, R. (1998) ‘A Political Technology of the Body: How Labour is Organized into a Productive Force’, *Critical Perspectives on Accounting* 9 (1):99–136.

Part of Chapter 9, ‘Foucault: a realist reading’, appeared as part of Marsden, R. (1993) ‘The Politics of Organizational Analysis’, *Organization Studies* 14 (1):93–124.

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Part I
Discovering what is real

Hypothetico-deductive accounts [of scientific discovery] begin with the hypothesis as given, as cooking recipes begin with the trout as given. In an occasional ripple of culinary humour, however, recipes sometimes begin with ‘First catch your trout.’

N.R.Hanson, ‘The Logic of Discovery’ (1958:1083)

1
Marketing postmodernity

‘Just like reality, only better’

> somewhere, only not right here, not right now, perhaps just over there someplace, in another country, in another life-style, in another social class, perhaps, there is a *genuine* society.
>
> (MacCannell, cited in Shields 1989:151)

Introduction

Postmodernity and reengineerng were the buzzwords of academia and business during the 1990s. How are they connected?

The postmodern market-place: the hyperreal mall

The city in which I live contains the largest shopping mall and indoor leisure centre in the world, West Edmonton Mall, in Alberta: Canada’s Texas. It comprises around 800 stores, a seven-acre Waterpark with year-round tropical climate and fauna, a fifteen-acre amusement park with twenty-five of the most technologically-advanced rides, a 2.5 acre indoor lake equipped with four ‘seaworthy’ submarines where dolphins play and perform, a 360-room Fantasyland Hotel containing ‘themed’ rooms, a National-Hockey-League-size ice arena, a Casino, nineteen movie theatres and an eighteen-hole miniature golf course. All this is arranged along a two-mile long, two-level concourse, covering the equivalent of forty-eight city blocks, with fifty-eight entrances and parking space for 20,000 vehicles. With eleven major department stores, over 150 restaurants, fifty-five shoe shops and thirty-five jewellery stores, it is a place where almost every conceivable good and service can be bought. You can eat, walk and shop all day here without running out of choice. Truly, it is ‘one of the definitive shopping events of our age’ (Shields 1989:159).

West Edmonton Mall is an interesting allegory for the postmodern condition; a world in which everything can be simulated and where the copy is increasingly preferred to the original. The Mall contains a collage of simulacra that disturb conventional understanding of time and space. Wander along its labyrinthine layout and you come across replicas of a nineteenth-century Parisian street (Europa Boulevard) and of New

Orleans' Bourbon Street, where people sit out in 'open air' restaurants under artificial stars. Stroll to the end of the boulevard and look out over the lagoon in which stands an exact replica of the *Santa Maria*. Nearby is Fantasyland Hotel and its themed rooms, African, Arabian, Bridal, Hollywood, Igloo, Polynesian, Roman, Truck and Victorian, each of which 'promise to fulfill your quest for the ultimate in travel adventure'. To enjoy a fantasy about the North, sleep in an igloo 'surrounded by the tundra, your dogs awaiting their next journey'. Or travel to the Pacific in the Polynesian room, and rest before the 'waterfall emptying into a rock pool' before setting off on 'a warrior catamaran under full sail'. If time-travel is your desire, be swept away to the time of Anthony and Cleopatra and sleep on 'a round velvet covered bed with silk draperies' surrounded by 'white marble statues…and an authentic Roman bath'. In the Coach room 'your very own' home-drawn coach 'will transport you back to the 1880s'. Next to the Fantasyland Hotel is 'Waterworld' where you can enjoy the only permanent indoor bungee-jumping site in the world, body surf artificial waves, lie out on make-believe sand beneath an imaginary sun and luxuriate in tropical heat and humidity. And people do. Millions of shopper-tourists come to Edmonton specifically to visit the mall. It regards itself as a tourist destination, a paradise to shoppers around the world, and indeed it draws more visitors than the nearby Rocky Mountains and is reported to pump over one billion dollars a year into the Alberta economy. At one point, it was 'the third most popular leisure development after Walt Disney World and Disneyland' (Shields 1989:151).

The Mall's simulacra are offered not to stimulate local shoppers to visit more exotic destinations, but to dissuade them of the necessity of doing so and to seduce distant shopper-tourists with experiences of the world under one roof. These reproductions do not envy their originals: they aim to supplant them. 'We are giving you the reproduction so you will no longer feel any need for the original' (Eco, cited in Shields 1989:153). 'Now people in this area never need go to New York or Paris or Miami. They can come here' (Nader Ghermazian, one of the owners of West Edmonton Mall, cited in Shields 1989:150). Indeed, in a sense, the copies are superior to the original, for they are free of the unpredictable, troublesome and sometimes dangerous mixture of the social and the natural which helps to define human experiences as real. There are no beggars on the Bourbon Street of West Edmonton Mall; it is never too hot or too cold and it never, ever, rains or snows. The effect of this collage of simulacra of places remote in space and time—a Parisian boulevard here, a Spanish galleon there—is to create a 'spatiotemporal haze' (Shields 1989:152).

The external appearance of West Edmonton Mall is redolent of Coleridge's 'pleasure dome', a figment of his opium-induced visionary epic poem *Kubla Khan,* written in 1797–8. Wealthy eccentrics have always created private pleasure domes. The Xanadu of Orson Welles's *Citizen Kane* is modelled on William Randolph Hearst's San Simeon mansion, which was a repository of objects from around the world. West Edmonton Mall is a pleasure dome for the public, a fantasy world constructed of simulacra and offered for mass consumption. Millions of shopper-tourists, sovereign consumers exercising their right to shop, come for gratification, enjoyment, indulgence and play; to escape, forget and lose themselves. Amid all this falsehood it is the pleasure that is real, and the disturbing of spatial and temporal coordinates, which confuses our sense of who and

where we are, is a precondition of entering this collective fantasy. The Mall is practically windowless. Once inside, there is little way of knowing whether it is night or day, the day of the week, the season or even the country you are in. The effect 'is like living in a painting by Magritte where reality and representation merge, or like one of the impossible worlds of Escher' (Shields 1989:154). In this fashion, the fantastic representations within West Edmonton Mall acquire a reality of their own, a hyperreality (Baudrillard 1988, 1994).

Hyperrealities abound in postmodernity. They are created in malls, restaurants, hotels, theme parks; in self-contained fictional cities such as Disneyland, in California, Tokyo and Paris, and Disney World, in Florida; and in real cities such as Los Angeles and Miami. All are facades woven out of collective fantasy. The original for these is Disneyland, built in the mid-1960s, with its replica of Main Street, USA. What is interesting about Disneyland is that it is modelled, not on a real American town, but on its depiction in the Disney movies, especially those peopled by real actors grafted onto imaginary landscapes, which tell the story of the American Dream. Disneyland expresses a curious reversal: the fiction is made into a movie which is made into reality.

Within hyperreality, fact and fiction, past and present, intermingle. The simulacra of Fantasyland Hotel do not copy the reality of Cleopatra's Egypt or Queen 'Victoria's England, but their depiction in movies and TV dramas, in this case, Burton and Taylor's *Cleopatra* and the Public Broadcasting Service's *Sherlock Holmes*. Fact and fiction, past and present, come together nicely in the Mall's 'Sherlock Holmes' pub: a 'real' English pub. It is how North Americans imagine an English pub (complete with table service). Of course, most pubs in England, a country fast becoming a theme park of its own history, long since ceased to be authentic. But no matter, the intent of the simulacra is that you forget what they are substituting for.

Postmodernity is like a set of a movie about reality and here anything can be simulated, even sincerity. Consider the typical service encounter in which the salesperson adheres to a script, smiling on cue and giving rehearsed answers to customer inquiries. It is the sincerity of a performance. But, as Brown (1995) points out, hyper-realities can be more sincere in their inauthenticity than the real thing. West Edmonton Mall is located in a city that is a patchwork of anonymous designer landscapes, replete with artificial lakes and parks, in which every tree and flower is planted; neighborhoods doing their best to look as we think real communities ought to look. Further afield, what are thought to be genuine historical sites often lack authenticity. Santa Barbara, for example, is built in colonial Spanish style, but these quaint red-tiled homes were built after the earthquake in the 1930s. Ironically, given the Mall's replica of a New Orleans street, the restorers of that cities' historic Vieux Carré 'were not averse to replacing dilapidated wrought iron balustrades with plastic versions of the same, leading Relph to describe it as a "Creole Disneyland"' (Brown 1995:186). [1]

Just as sincerity can be simulated, so authenticity can be manufactured. Hyperrealities create an insatiable desire for the real—most basically, for real bread, butter and beer—and nearly always, the real is assumed to reside in the past. Hence its plundering by marketers, prompting the design and manufacture of 'retro-products' which combine nostalgic styling with the latest technology (Brown 1995:118). In Fantasyland Hotel,

witness the ‘authentic trucks that have been remodelled into truly unique beds’ and the ‘antique gas pumps’ as decor in the Truck room, and the ‘authentic Roman bath’ in the Roman room.

Underneath the stardust, West Edmonton Mall is just a market for commodities, a place where buyers and sellers meet. Traditionally, markets occupied a definite place (often in front of churches) and occurred at particular times (on market days) and gave rhythm to the flux of daily life (Zukin 1991). West Edmonton Mall, however, is not a replica of a traditional, medieval market; it is a model of how public spaces are privatized, internalized and organized on the principles of Bentham’s panopticon. Former shop-lined streets, full of the rough and tumble of public life, become aisles of department stores and concourses of malls, full of docile people who must always look as if they have bought or are about to buy, whose every move and transaction is monitored (Shields 1989:160). Accompanying this privatization of public spaces is a subtle shift away from human rights and freedoms and towards the rights of private property: try picketing in a mall. In this fashion, these much frequented, privately owned and controlled social spaces where commodities are bought and sold come to resemble the places where they are produced.

It is tempting to laugh off all this as an amusing curiosity, but there are three reasons why this is not possible.

First, shopping malls are the most frequented urban social spaces in North America. If Baudrillard is to believed, the hypermarket is ‘the model of all future forms of controlled socialization’ (Baudrillard 1994:76). They now play a pivotal position in the lives of several hundred million consumers and are a new focus of communities (Shields 1989:149). There are a diminishing number of truly public urban social spaces and we are left with only islands of privatized social spaces between which one travels in one’s own portable private space, an automobile. It is for this reason, as Bill Bryson recounts, going for a walk in urban American is becoming a ‘ridiculous and impossible undertaking’:

> I had to cross parking lots and gas station forecourts, and I kept coming up against little white-painted walls marking the boundaries between, say, Long John Silver’s Seafood Shoppe and Kentucky Fried Chicken. To get from one to the other, it was necessary to clamber over the wall, scramble up a grassy embankment and pick your way through a thicket of parked cars. That is, if you were on foot. But clearly from the looks people gave me as I lumbered breathlessly over the embankment, no one had ever tried to go from one of these places to another under his own motive power. What you were supposed to do was get in your car, drive twelve feet down the street to another parking lot, park the car and get out.
>
> (Bryson 1990:46–7)

Nor can malls be dismissed as a North American phenomenon. This product of urban planning is one of North America’s most popular exports. Malls are postmodern phenomena and, if they have not yet arrived, they are coming to a neighborhood near you.

Second, the culture of the simulacrum, actively constructed via the marketing of commodities, is at the core of postmodern identity. The 'new you' is shaped not by work roles but, for those with money to spend, by patterns of consumption. As such, it is fluid, adaptable and 'easily changed through the acquisition of new repertoires of products with the requisite marketing-implanted images' (Brown 1995:138). In this way, a unified identity given coherence by a sense of time and place gives way to an 'empty self' which can be 'refilled, decanted and replenished with whatever personae the occasion demands' (Brown 1995:80).

Third, this empirical disturbance of spatial and temporal coordinates, typical of hyperrealities, is at the root of that genre 'postmodernism', evident in an aesthetic of the 'here and now' permeating television shows, movies, architecture, music, fashion, novels and academic discourse. As cartographers of the changing contours of the culture of the market, postmodernists map the loosened moorings between words and the 'real world', the disturbed syntax and grammar of things, caused by their reorganization in time and space. While we might want to consider that some postmodernists have elevated obscurantism into a rhetorical strategy ('reality is difficult to understand, therefore, so too is my writing'), postmodernity abounds in paradox, illusion and double-meaning. Like the drawings of Escher, hyperrealities are visual non sequiturs which present us with an intellectual challenge.

These are grounds for concurring with Stephen Brown's assessment that postmodernity is too important to be left to postmodernists (Brown 1995:22).

The postmodern workplace: the virtual university

The university at which I work is a prototypical postmodern organization. It is Canada's open university and specialises in distance education. It is the workplace counterpart to the hyperreal marketplace of West Edmonton Mall. The university sits atop a wooded hill, overlooking the mighty Athabasca River as it flows north-east from the Rockies to the sub-Arctic, just outside the town of Athabasca, a small community serving the surrounding agricultural district, some ninety miles north of Edmonton, Alberta. Take the eastern fork in the road and you find yourself at Fort McMurray, a thriving city built almost exclusively to exploit the surrounding oil sands (the site of Alistair Maclean's novel, *Athabasca*). Beyond that, down the Mackenzie River, and you reach the Arctic. Take the western fork, and you pass through the rich farmland of Peace River. Beyond lie the Yukon and Alaska.

But it matters little where the university is because its students and most of its academics are elsewhere. Its students are scattered across the time zones of Canada, the United States and, increasingly, the rest of the world. The academics who write, organize and tutor these courses work mostly at home, and, given today's information technology, home can be almost anywhere. While the hyperreal West Edmonton Mall brings together in one place experiences of discrete spaces and times, making it unnecessary for tourist-shoppers to travel, this virtual university uses hypertexts, existing everywhere and nowhere, to facilitate instant communication among individuals remote in time and

space, making it unnecessary for them to meet. There are no classrooms in this university building, only offices, a visual-design studio, print shop, warehouse and a sophisticated computer network. On most days, the only people in the building are the support and professional staff, secretaries, editors and visual designers, the glue holding together the university.

The university is unusually lean and student-centred. It serves more than 15,000 students a year with around seventy-five core academic staff, twice that number of part-time tutors, and three hundred or so support, professional and managerial staff. It closes only for public holidays. It has no terms or semesters. Students, who are promised individualized, personal tuition, can register at any time, and proceed, within limits, at their own pace. The administration professes commitment to providing excellent service to students, and, to this end, publishes and monitors performance standards for every facet of its operation.

Distance universities, the world over, embody the pressures and potential of postmodernity because its defining characteristic—the compression of space and time (Harvey 1989)—is their *raison d'être*. Teaching at a distance is not analogous to giving a lecture, it is more like the production of a commodity. This commodity is now produced and sold globally in an increasingly crowded and competitive market; distance education was one of the most rapidly developing sectors of higher education in the 1990s. As government cut university budgets, their administrations came to see the value of distance education in providing cost-effective, student-centred, life-long learning.

Connecting people discrete in space and time is the business of distance universities. For the last decade, or so, it has been the business of business, where this time-space compression has passed under the name of business process reengineering (Hammer and Champy 1994). Reengineering entails using information technology to redesign work around horizontal work processes rather than vertical, functional departments, in the interests of consumers. If we reengineer cross-departmental processes, advocates argue, we can get rid of the bureaucracy that holds together these fragmented pieces. Information technology is the means of compressing processes in time and space. It mediates between reengineered processes and reshaped organizations by linking and integrating the knowledge held by individuals remote in space and time within and across organizations.

Reengineering was evangelized by Michael Hammer and James Champy's massively popular *Reengineering the Corporation: A Manifesto for Business Revolution* (1994). Reengineering's enormous fascination for some managers hardly proves that it is necessary or that it works, although its advocates claim dramatic improvements in service to customers, efficiency and lower costs. Indeed, one reaction is to regard it as yet another fad or flavour of the month, created by self-serving management consultants, that will go away if we ignore it. While there are grounds for skepticism towards reengineering, this reaction is a mistake. That two million people have paid the price of *Reengineering the Corporation* to learn of this idea, and that so many companies should attempt radical change in its name, suggest that we should take reengineering seriously and try to understand its significance.

Reengineering's aim is to create lean, nimble, flexible, responsive, competitive,

efficient, customer-focused and profitable corporations. The governing principle is to 'meet the contemporary demands of quality, service, flexibility, and low cost' (Hammer and Champy 1994:51). For this to happen the 'mass production paradigm' or the 'industrial model' (ibid.) must be turned on its head. The traditional model was well suited to mass markets dominated by sellers, but this condition no longer exists. We have experienced a shift 'from a stable, mass-production, goods economy to a turbulent, flexible-production, information economy' (ibid.: 2). The balance of power has shifted away from suppliers and towards customers who demand high quality products at a fair price and excellent service. It is the needs of customers, Hammer and Champy maintain, that drive reengineering. 'To reengineer means, fundamentally, to rebuild the company on the customer's behalf (Hammer and Stanton 1995:97).

'Reengineering tears apart an organization, producing a new and different enterprise top to bottom and destroying old notions of tasks, hierarchy and business functions… A company that has successfully reengineered itself is like a phoenix rising from the ashes' (Ettorre 1995:13–14). Reintegrating fragmented and specialized tasks into one process means that 'practically every aspect of the organization is transformed, often beyond recognition' (Hammer and Champy 1994:65). For reengineering to work, employees' values must change (ibid.: 76) and for values to change human resource management systems must change, that is, 'the ways in which people are paid, the measures by which their performance is evaluated'. Reengineering changes the nature of work, the organization of this work, the requirements of employees and their management. Reengineering changes the nature of positions: they become multi-dimensional as processes are compressed vertically and horizontally. Jobs must be re-analyzed, re-described and re-evaluated. 'Old job titles and old organizational arrangements…cease to matter. They are artifacts of another age' (Hammer and Champy 1994:2). Reengineering also changes demands on the people who occupy these positions. It calls for a new kind of worker. Multi-dimensional jobs require generalists not specialists. The traditional rule-following worker is no longer valued. Postmodern employees must be capable of challenging rules and creating their own. They need to be self-directed, responsible, motivated and equipped with the right values. For example, they should work for customers not bosses. The demand is for employees who will ask 'why?' and not simply 'how?'

Recruitment and selection, performance evaluation, compensation, training and development: all must change. The criteria for hiring change.

> It is no longer enough merely to look at prospective employees' education, training, and skills; their *character* becomes an issue as well. Are they self-starting? Do they have self-discipline? Are they motivated to do what it takes to please a customer?
>
> (Hammer and Champy 1994:71)

Present skills are less important than hiring people who have the right character and who know how to learn. The emphasis switches from training in specific job skills to education into the right set of values. Advancement criteria change. Personal

development ‘does not mean climbing up through the hierarchy but expanding one’s breadth’ (ibid.: 69). Employees are promoted only if they have the ability. Reengineering also ‘forces companies to reconsider some basic assumptions about compensation’ (ibid.: 73). What employees do is less important than the effectiveness of what they do, and so the criteria for compensation shifts from activity to results. Base salaries are flattened and employees are rewarded by bonuses only for outstanding performance. In short, ‘to make reengineering happen the “soft” human resource issues need to become hard—with clear goals, steps, measurements and outcomes’ (Stanton *et al.* 1993:24). But, as they go on to say, ‘the “soft” side of reengineering is, indeed, the hard side’ (ibid.: 27).

Reengineering modernity: marketing change

What have hyperreal marketplaces and reengineered workplaces to do with each other? They are connected by the logic of capital, as explained in David Harvey’s (1989) account of the condition of postmodernity.

Harvey construes postmodernity as an empirical condition, characterised by a compression of processes in space and time, driven by the imperative of capital accumulation. To resolve the crisis of over-accumulation during the 1970s, manifest in stagflation, he argues, the turnover of capital within markets (circulation) accelerated. Mass markets broke into niches and became more competitive. Public goods commodified and went to market. The shelf-life of commodities reduced through product innovation, brand proliferation and ‘accelerated decrepitude’. An aesthetic of the instantaneous, the disposable and the temporary developed, by which taste could be manipulated. Flexible consumption necessitated flexible production. A reduction in capital’s turnover time in circulation necessitated a reduction in its turnover time in production. This was achieved by making labour processes and labour markets more flexible. The ultimate in flexibility is the virtual organization, with short shelf-times, perfectly responsive to the changing needs of the market. The result was the break-up of the Fordist-Keynesian regime of accumulation, centred around the interests of industrial capital, and its replacement by a regime of flexible accumulation, centred around the interests of finance capital.

Herein lies an explanation of the genre ‘postmodernism’. Capital’s accelerated turnover, achieved by compressing processes in time and space, disturbed the relationship between words and things and necessitated their resignification. Postmodern discourse expresses this disturbance in spatial and temporal coordinates. Its account of the new aesthetic of the market (the fragmented, the immediate, the temporary) doubts the existence of a knowable objective reality beneath these shifting appearances. In short: ‘we have been experiencing, these last two decades, an intense phase of time-space compression that has had a disorienting and disruptive impact on political-economic practices, the balance of class power, as well as upon cultural and social life’ (Harvey 1989:284).

I introduce Harvey because his ‘flexible accumulation’ bears more than a passing resemblance to that which Hammer and Champy intend reengineering to create. There is

a definite connection between the prefixes ‘re-’ and ‘post-’. The word ‘postmodernity’ does not appear in their book, but almost certainly Hammer and Champy believe it is necessary to rethink, redesign and reengineer the organization and management of work only because we live in a postmodern world. If Hammer and Champy’s book is a toolkit of techniques linking postmodern market- and workplaces, then Harvey’s book is an account of why they are connected. Hammer and Champy explain what Harvey does not: *how* time and space are ‘compressed’. Let me explain.

Hammer and Champy did not invent reengineering. They did not peruse the declining fortunes of US corporations and deduce that what they now call reengineering was the only solution. As they recount, during the second half of the 1980s they noticed that a few companies dramatically improved their performance by radically changing the way they worked. According to their account, these companies looked across and beyond functional departments to processes. Successful companies used a common set of tools and tactics. Hammer and Champy claim to have discerned the rationale linking these developments in the organization and management of work. They certainly gave it a name—‘reengineering’—and marketed and popularized the idea with remarkable success.

Consider Hammer and Champy’s absolutism. Reengineering is ‘the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance, such as cost, quality, service, and speed’ (Hammer and Champy 1994:32). ‘Fundamental’, ‘radical’ and ‘dramatic’ have the same referent: they all point to a break with the past. The reengineer starts over, abandons, tosses aside, goes back to the beginning, reinvents, redesigns, throws away the old, disregards the present. Reengineering entails not simply doing things in a different way, but also ‘discontinuous thinking’. In this sense, reengineering resembles a corporate equivalent of the New Right in politics. Just as Margaret Thatcher and Ronald Reagan told us that ‘there is no alternative’, so Hammer and Champy present us with a stark choice: go out of business or re-invent, re-think and reengineer.

The ‘first step’ in reengineering is an educational and communication campaign, necessary to persuade people to embrace, or at least not to oppose, reengineering. This campaign is a selling job. Reengineers ‘are trying to sell something to a group of people who don’t want to buy. The commodity they are selling is *change*, and the reluctant buyers are the people in the company’ (Hammer and Stanton 1995:136). Reengineering is ‘the unabashed promotion and merchandising of a new way of working’ (ibid.). Hence, reengineers ‘can learn from the practice of consumer goods companies, America’s consummate marketers’ (ibid.: 142). There are two key messages to be formulated and articulated in this marketing campaign: the case for action and the vision statement (‘let’s change’, ‘to what?’). The vision statement should focus on operations, include measurable objectives and change the basis of competition in the industry. But more than anything else, the aim of the marketing campaign is to change the values of employee. That is, I ‘take the time to instill my values in you so that when you are on your own, you will behave as I would have told you to’ (ibid.: 159).

Two recurrent themes of *Reengineering the Corporation* are ‘leadership’ and ‘communication’. A leader is someone who makes other people want what he or she

wants (Hammer and Champy 1994:105), a visionary and motivator, the source of 'spiritual energy' (ibid.: 103). Communication and persuasion is a big part of leadership. The leader must 'persuade the barons running functional silos within the company to subordinate the interests of their functional areas to those of the processes that cross their boundaries' (ibid.: 107). He or she must also persuade employees that the organization should be turned 'inside out' and 'upside down' (ibid.: 103), that it is necessary to 'embark on a voyage into the unknown' (ibid.). Evidently leadership is critical for 'most reengineering failures stem from breakdowns in leadership'. '"If someone blocks your way"', the leader says, '"let me know who that person is, and I'll take care of it"' (ibid.: 104). A sign of weak leadership is to 'slap people's wrists instead of breaking their legs' (Hammer and Stanton 1995:50). Since reengineering is 'a terrifying leap into the unknown' (ibid.: 42), it is hardly surprising that it 'inspires fear and resistance' (ibid.: 93). But 'the real cause of reengineering failure is not the resistance itself but management's failure to deal with it' (ibid.: 121). To overcome resistance 'you must play on the two most basic human emotions: fear and greed' (ibid.: 52). Here we understand the significance of the marketing campaign, for the 'case for action' and the 'vision' statements speak to these human emotions, fear and greed, respectively. The point to note here is that the reverse side of the focus on leadership and communication is deference and obedience.

Notably, Hammer and Champy's book deals only with 'embarking' on reengineering. With remarkable success they sold and marketed the idea of reengineering by setting out the 'case for action' and a vision of the future. Whether in doing so they played on those two basic human emotions, fear and greed, is a moot point. It is the conception of the work organization implicit in the idea of reengineering that has captured the imagination of so many people. The underlying values of reengineering reinforce an ideology which has strong appeal among managers. By stressing the characteristics which supposedly made America great, 'individualism, self-reliance, a willingness to accept risk and a propensity to change' (Hammer and Champy 1994:3), reengineering can be considered as another incarnation of the American Dream. But where American capitalism once confronted the wild west, with this 'voyage into the unknown' (ibid.: 103), the adversary is the future. And like the wild west, reengineering is encased in anecdotes and legend, only this time they take the form of case studies, evidence of successful applications which ensure that reengineering remains a potentially attainable, if elusive, goal.

The political implications of reengineering for workers (and middle management) have already been revealed. [2] In a revealing departure from team metaphors, Hammer and Champy tell us that reengineering 'is not a war won in a single battle' (1994:148). My interest here is in its connection to postmodernity. When Hammer and Champy tell us that we have entered 'a new world for business', 'the postindustrial age', a 'future that is already here', a world 'in which the only predictable constant has already become rapid and relentless change' and that 'suddenly the world is a different place', they are describing the condition of postmodernity analysed at length by David Harvey. Those companies Hammer and Champy observed during the 1980s 'radically changing the ways in which they worked' (Hammer and Champy 1994:3), I suggest, were attempting to come to grips with what Harvey calls 'another fierce round in that process of annihilation

of space through time that has always lain at the center of capitalism's dynamic' (Harvey 1989:293).

Postmodernity and reengineering, the buzz words of academia and business during the 1990s, have the same cause, but what is the nature of this cause?

2
Postmodernity and capital

A personal retrospective

It is the beginnings of a work that the writer throws away.
(Dillard 1990:5)

Introduction

One realises what one has been looking for only when it has been discovered. Beginnings are thrown away. Introductions are written last. This book explains the mechanisms linking market- and work-places, postmodernity and capital, but this is not what I set out to explain. I began trying to resolve the problem of industrial relations theory (Marsden 1982; Marsden 1993a). This proved to be a Pandora's box of problems. Unpacking them led me to the arguments of this book. One of them is that discovery follows a definite logic which is usually hidden in its results, that is, that which is discovered. It is appropriate, then, before setting out my arguments in subsequent chapters, that I reconstruct the development of the thinking which led to them.

Beyond 'control': reading Marx retroductively

When I began the research which culminated in this book, the central explanatory device of the academic left was 'control of the labour process'; a veritable organon around which coalesced a cluster of discourses of production, from industrial relations and organization studies to critical accounting. Notwithstanding the progress in thought which 'control' represented, a consensus developed that it long ago reached the limits of its possibilities. In particular, it seemed unable to explain the dual nature of production relations: the coexistence of creation and alienation, empowerment and repression, cooperation and resistance (Littler and Salaman 1982; Edwards 1986; Knights and Willmott 1990). Burawoy sums up the situation:

> If there is a single concept that has served to generate ahistorical accounts of organizations and to mystify their operation, it is the concept of control. By virtue of its use as a general concept and by incorporating an imprecision as to

> whom or what is being controlled, for what ends, and by whom, modern social science has successfully obfuscated the working of capitalism.
>
> (Burawoy 1985:26)

This was the initial problem I set out to tackle: going beyond 'control'.

It seemed reasonable to look to the roots of 'control of the labour process'. It took shape as a theoretical object during the mid-1970s, the product of the intersecting critiques of pluralism and of empiricism, both driven by a renaissance of Marxist scholarship. These complementary critiques were condensed in Lukes's radical concept of power: 'A exercises power over B when A affects B in a manner contrary to B's interests' (Lukes 1974:34). The notion of 'real' or 'objective' interests, the innovation of the radical concept of power, entailed moral and political judgements of what these interests are, what people 'would want and prefer, were they able to make the choice' (ibid.: 34). It widened the scope of inquiry into power beyond the actual or threatened use of observable sanctions to latent, unobservable conflict and to the shaping of preferences and perceptions contrary to people's interests.

The connection between the radical concept of power and Marxist thought is contingent, but strong. Lukes was read in conjunction with interpretations of Marx based on the base/superstructure metaphor, made famous by what is normally regarded as the definitive summary of historical materialism, the 1859 *Preface* (Marx 1859a). According to this view, real interests correspond to objective class position in the economic base, but subjective perception of those interests is typically obscured by an ideological superstructure. For this reason the radical concept of power, false consciousness and ideology tend to go hand in hand. Marxist analysis construed the real interests of employers and employees as conflicting, imputed to employers the motive to *control* the behaviour and performance of employees, and imputed a corresponding motive for employees to *resist* this control. In this fashion, Marxism became the measure of real interests, its moral absolutism settling the relativism at the heart of Lukes's radical concept of power. These developments coincided with publication of Braverman's *Labor and Monopoly Capital* (1974) which drew attention to Marx's analysis of the 'labour process' in Volume One of *Capital*. Such was the strength of association between 'control' and 'labour process' that 'control of the labour process' became construed as the *modus vivendi* of the organization of work for a generation of radical academics.

The idea took hold that moving beyond 'control' entailed moving beyond the radical concept of power and the tradition of reading Marx through the 1859 *Preface*. Since this concept of power grew out of a critique of how we know things (epistemology), I explored how power could better be understood by extending this critique to what we think exists (ontology). To this end, I renewed my interest in the ontology of realism, a philosophy which argues for the possible existence of nonempirical things.

Jeffrey Isaac's use of realism to develop the concept of power, *Power and Marxist Theory: A Realist View* (1987a), was a big step forward. Power now became 'those capacities to act possessed by social agents in virtue of the enduring relations in which they participate' (ibid.: 80). Much depends, by this account, on the nature of those 'enduring relations' and the analysis by which we know them. While Isaac argued that

‘contemporary Marxian social theory represents a realist approach to the analysis of social power’ (ibid.: 109), he drew the line at defending ‘the substantive validity of Marxism’ (ibid.: 109). I turned to the work of Roy Bhaskar, the most influential contemporary realist philosopher, and followed his use of realism as an underlabourer for the social sciences. I was persuaded by his arguments about the merits of a realist ontology, but noted that the effect, if not the intention, of his constant use of Marx as an exemplar was to validate the Marxist tradition as science, rather than to suggest a way of rethinking Marx. There was a tension between the capacity of realism to move us beyond the radical concept of power and its apparent endorsement of its companion, traditional Marxism. [1]

Within this context, I came across Derek Sayer’s account of Marx’s conception of explanation (Sayer 1979a, 1979b) and his demonstration of the analytical foundations of historical materialism, which critiques Cohen’s defence of Marx constructed around the 1859 *Preface* (Sayer 1987). Tucked away in a footnote, Sayer states that Marx practised ‘a retroductive mode of theory construction’ (Sayer 1979a:174). Retroduction is a mode of inference by which theories are developed in reverse, by reasoning from a problem to a proposed explanation. Every car mechanic and doctor infers thus. Indeed, retroduction, it seemed to me, is a corollary of realist ontology: it is the only way in which to discover the existence of nonempirical things. Yet, strangely, retroduction warrants scarcely a mention in the literature working critical realism through the social sciences. I cannot be sure, but I suspect that the widespread use of Marx as an exemplar of realism encouraged a tendency to eclipse the uncomplicated retroduction with the mysterious dialectic. For, if Marx inferred retroductively, how could he reason dialectically? But if Marx was a realist (let us assume, for now, that he was), he must have reasoned retroductively, from problem to explanation.

The imaginary experiments of retroduction use a variety of conceptual tools, from mathematics to computer graphics. Crick and Watson discovered the structure of the DNA molecule using models ‘superficially resembling the toys of preschool children’ (Watson 1968:50). Marx, however, formulated his problem and discovered its putative explanation using pen and paper to fashion words; by writing, editing and revising; probing, searching out, using the line of words like a fibre optic, illuminating the path just before its fragile tip (Dillard 1990:7). Why else would he write so much solely for his own eyes? The format of Marx’s notebooks is revealing. Typically, he copied excerpts from the books he read, attached a critical commentary and developed these criticisms into his own independent thoughts (Oakley 1983:10). In other words, retroduction in Marx’s hands took the form of textual exegeses or critique (Sayer 1979a and b). The numerous crossings-out, modifications and deletions so characteristic of Marx’s handwritten notebooks and manuscripts testify to theorizing as a process of editing, by which good ideas are sifted from bad, interesting from fruitless lines of enquiry. In short, Marx theorized by invoking the principle articulated by E.M.Forster: ‘How do I know what I think, until I see what I say?’

It occured to me that running through his mountain of words there might be a line of retroductive logic along which are thread the beads of an argument yet to be heard. My understanding of retroduction and Marx’s working practices suggested that, to

reconstruct this line of argument, one would have to read Marx chronologically-bibliographically. Only that way could one reconstruct the problem with which he began, whatever that might be, and follow his retroductive reasoning to his putative explanation, presumably, 'capital'. A key part of this would be figuring out to which problem capital was the supposed explanation: a surprisingly difficult question to answer. If he regarded capital as a real, albeit nonempirical, object, this retroductive line of argument should lead to a model of this object, which we might yet reconstruct, evaluate and develop in the light of the initial problem.

With these conjectures in mind, and not knowing any better, I sat down with the *Marx-Engels Collected Works* and read everything Marx wrote between the mid-1830s and the mid-1870s, in the order in which it was written, following the bibliographic connections among his notebooks, draft manuscripts, letters and published articles and books. This entirely changed my understanding of Marx.

After following the twists and turns in his work between his doctoral dissertation and the *Communist Manifesto*, I formed the view that his initial *explicandum* was the monad of modernity, constituted by the separation between civil society and political state. I read his subsequent work in this light, to see how it might explain this monad, this separation, the modern.

After tracing the bibliographic connections among his 'rough draft' and first economics book, together with their respective introduction and preface, I formed the view that the famous 1859 *Preface* (Marx 1859a), canonized by generations of Marxists for containing the definitive summary of Marx's analytic, was a sham.

After tracing the connections between his rought draft and the various manuscripts that went into the making of the three volumes of *Capital*, I formed the view that these were but fragments of Marx's attempt to model something which he believed to be as real as anything in the natural world.

As I to-ed and fro-ed between 'modernity' and 'capital', those tourist-shoppers of West Edmonton Mall, and colleagues with whom I worked but whom I seldom saw, seemed to bear more than a passing resemblance to those monads Marx began to understand in the 1840s, and I began to relate capital to the condition of postmodernity.

The modernist Marx versus the postmodern Foucault

As I re-read Marx, the society built in his name disintegrated, any lingering confidence in his ideas collapsed and the postmodern became ascendent. The collapse of Marxism and ascendency of postmodernism proved to be sides of the same process, for the pervasive belief that Marx was wrong and socialism does not work is often taken to mark the end of modernity. As Drucker puts it: 'Only with the collapse of Marxism as an ideology and of Communism as a system…did it become completely clear that we have already moved into a new and different society' (Drucker 1993:7). It is unnecessary to agree with this assessment to appreciate its salience, for Drucker's advocacy of customer-driven management lay behind the attempt to blast the foundations of modern organizations by reengineering business processes during the 1990s. Consumer sovereignty and

postmodern marketing are the driving forces behind the manifesto for business revolution, overhauling both public and private sectors and 'rapidly colonising the erstwhile command economies of Eastern Europe where the market is supplanting Marxism as the societal touchstone' (Brown 1995:42; Peck and Richardson 1991; Yakovlev 1993).

The crisis of Marxism and the onset of the postmodern created two poles of reaction among radicals. The first was to abandon 'control' and embrace postmodernism. This reflects a belief that the recent 'rapid and disjunctive change' necessitates the development of new modes of thought and analysis to map new ways of organizing, managing and governing. Gellner summarises this argument:

> The events which took place in 1989, two centuries after the French Revolution, did more than merely terminate the bipolar balance of terror which had kept the peace for nearly half a century; they also brought to an end the older ideological equilibrium and the habit-encrusted formulation of issues which went with it. *The concepts we use to describe the world now urgently need to be reformulated.* Our current intellectual predicament springs not, as it has been fashionable to say, from the death of God, but from the demise of 19th-century God-surrogates. We are facing a new situation in which the old polarities of thought can no longer apply, or at the very least require scrutiny. This clearly will be the central task of social thought during the coming years.
>
> (Gellner, cited in Burrell *et al.* 1994:5, my emphasis)

This sort of argument lay behind the conviction that Marx's 'metanarrative' is too authoritarian to grasp the diversity of the postmodern world, and so must be rejected in favour of a more iconoclastic postmodern discourse which is capable of celebrating the authenticity of difference. From Baudrillard on, many postmodern theorists were ex-Marxists, who recognized that something had changed and that we have to let go of Marxism's fixation with production to understand what it is.

The second pole of response is to defend Marxism and attack postmodernism. Callinicos's *Against Postmodernism: A Marxist Critique* (1989) is classic. The fundamental issue posed by postmodernism 'is whether classical Marxism—which most left-wing intellectuals now, like the New Right, regard as terribly old fashioned—can illuminate and contribute to improving our present condition' (Callinicos 1989:ix). Much depends on what is meant by 'classical Marxism', but ordinarily it refers to readings of Marx centred around the base-superstructure model which lies at the heart of 'control of the labour process', which I identified as a problem earlier. The difficulty of this strategy is that Marxists have long regarded this metaphor as a liability and have struggled (so far) in vain to develop a coherent alternative reading. All attempts to do so must come up against Cohen's (1978) formidable demonstration that Marx did indeed provide ample justification for classical interpretations of his work. It is much criticised, but has yet to be superseded. In the meantime, postmodernism is written off by Marxists as self-indulgent and unintelligible idealism, and its widespread acceptance among erstwhile radicals is explained in terms of the political odyssey of the 1968 generation, which

stands accused of allowing itself to be incorporated into the new middle class. Postmodernism, from this standpoint, is best understood as 'a symptom of political frustration and social mobility rather than as a significant intellectual or cultural phenomenon in its own right'. [2]

As I re-read Marx, I read Foucault for the first time, for his ideas on power now permeated critical analysis of the organization of work. I expected his work to jar because it was widely assumed that Marxian and Foucauldian social theory are fundamentally incompatible (Callinicos 1989:85). My reading of Marx and Foucault caused me to question this assumption, and so I set about trying to understand it.

I found that Foucault himself gives mixed messages regarding his stance toward Marx. He quotes from Marx 'without feeling obliged to add that authenticating label of a footnote with a laudatory phrase'; he asks, 'when a physicist writes a work of physics, does he feel it necessary to quote Newton and Einstein?' and he wonders, 'what difference there could ultimately be between being a historian and being a Marxist' (cited in Cohen 1985:10). Elsewhere, there are clear signs of Foucault's hostility towards Marx:

> Don't talk to me about Marx any more! I never want to hear anything about that man again. Ask someone whose job it is. Someone paid to do it. Ask the Marxist functionaries. Me, I've had enough of Marx.
>
> (Foucault, cited in Eribon 1991:266)

> As far as I'm concerned, Marx doesn't exist. I mean, the sort of entity constructed around a proper name, signifying at once a certain individual, the totality of his writings, and an immense historical process deriving from him.
>
> (Foucault 1980a:76)

The first sign of Marxists' hostility towards Foucault emerged in response to the publication of *The Order of Things* (Foucault 1973). This hostility was provoked by two sentences in which Foucault says, 'Marxism exists in nineteenth century thought in the same way a fish exists in water; that is, it stops breathing anywhere else' (Foucault 1973:262); and the controversies between Marxism and bourgeois economics 'may have stirred up a few waves and caused a few surface ripples; but they are no more than storms in a children's paddling pool' (ibid.). According to one of Foucault's biographers, Eribon (1991:162), 'the Marxists went on the counteroffensive and excommunicated Foucault's book'. *The Order of Things* was interpreted as a rejection of praxis and history and, along with these, Marxism itself. As Sartre, whom Foucault labelled 'the last Marxist' (Foucault, cited in Eribon 1991:161), puts it: 'Marxism is the target. It is a matter of establishing a new ideology, the final dam that the bourgeoisie can erect against Marx' (Sartre, cited in Eribon 1991:164). For these reasons, *The Order of Things* 'was initially seen by many as a "right-wing" book' and Foucault was construed as anti-Marxist (Eribon 1991:164). This label has proven difficult to remove.

These observations tell us something of the context within which Foucault's work was initially read, which was one of hostility between Marxists and Foucault. This hostility, however, was not caused solely by a misunderstanding over a few careless words. While

Foucault seldom directly criticises Marx in his books, his interviews make clear that his work is an implicit critique of the traditional understanding of the main categories of Marxism: ideology, class, the state, and its economistic, 'descending' analysis of power (Foucault 1980a, 1981, 1988). Foucault criticises Marxism's tendencies to be preoccupied with defining class at the expense of understanding the nature of the struggle, to focus on the 'head' or ideology and to neglect the rest of the body, and to deduce an understanding of power from a motive ('why') rather than from empirical investigation ('how'). 'The way power was exercised—concretely and in detail—with its specificity, its techniques and tactics, was something that no one attempted to ascertain' (Foucault 1980a:115–16). Foucault also opposes the political strategy of 'smashing' the state and advocates, in its stead, the cultivation and enhancement of localised resistance to organized repression: 'Nothing in society will be changed if the mechanisms of power that function outside, below and alongside the State apparatus, on a much more minute and everyday level, are not also changed' (ibid.: 60). There is little doubt that Foucault's work opposes Marxism—as traditionally understood—and that Foucault himself was 'violently anti-communist' (Eribon 1991:136). Foucault's critique, combined with the revolts in Eastern Europe during 1989 and the subsequent disintegration of the Soviet Union, did much to contribute to the crumbling intellectual credibility of Marxism (Remnick 1994).

Foucault's criticisms of Marxism provoked a predictable response. I came across Palmer's 'The Eclipse of Materialism: Marxism and the Writing of Social History in the 1980s' (1990), and it proved representative. Palmer is a Marxist historian of international repute. He notes with concern that 'many historians who once considered themselves historical materialist have been distancing themselves from Marxism for a number of years' (ibid.: 111). He identifies two main reasons for this. First is 'the collapse of the degenerate and deformed worker states in which socialism/communism had supposedly been constructed' (ibid.). Second is French 'poststructuralism', which, 'more than any other body of theory', has 'influenced the writing of social history in the 1980s' and 'challenged historical materialism directly' (ibid.: 120). While Palmer's polemic is targeted at postmodernism/poststructuralism (he uses the terms interchangeably) , Foucault is identified as an important representative of this genre and is singled out for special odium. The key word in the designation of Foucault is the prefix 'post-' (the suffix is less important). Foucault is firmly identified with an approach in the social sciences which is unified by the belief that society has moved to a post-capitalist stage, which calls for a different—post-Marxist—type of analysis and politics.

Palmer opposes Foucault's poststructuralism for two principal reasons. First, it questions 'the very concept of class' (Palmer 1990:115). His emotive language is revealing: 'poststructuralists', such as Gareth Stedman-Jones and Michael Ignatieff, are accused of 'breaking with class' and 'running scared from class' (ibid.: 116). This characterisation echoes Meiksins Wood's 'retreat from class', and the title of the volume in which Palmer's essay appears, *The Retreat of the Intellectuals* (Meiksins Wood 1986; Miliband and Panitch 1990). The message is clear: to question 'class' is evidence of an academic's lack of courage and solidarity with the working class.

Second, it is idealistic. It elevates language as 'a determining materiality' and

constructs a politics ‘detached from the anchor of history…whose rhetoric and discourse are the agencies of social change’ (Palmer 1990:116, 138). Foucault’s ‘poststructuralism’ is construed as a descendent of Althusser’s ‘idealism’ and ‘theoretical academicism’ (Meiksins Wood 1986:19). Within the Foucauldian framework, ‘power can never be located, and resides always in the determination of discourse, which spins itself in a never-ending and analytically and politically impenetrable Lacanian circularity’ (Palmer 1990:131).

Against the ‘self-indulgent unintelligibility’ of postmodernism, Palmer presents ‘an orthodox Marxist appreciation’ of ‘some elementary categories of historical materialism: class, consciousness, struggle’, and defends ‘historical materialism and its insistence on material determination and the importance of class’ (Palmer 1990:119, 128). More specifically, Palmer defends the work of E.P.Thompson and ‘a wide array of writing associated with the British Marxist historian’ (ibid.: 115): in a word, ‘Thompsonianism’. But there is a contradiction in Palmer’s argument here.

Palmer’s dismissal of ‘poststructuralism’ as a form of idealism and his defence and advocacy of ‘material determination and the importance of class’ (Palmer 1990:128) reveals a particular understanding of the relationship between the ideal and the material: that Marx simply reversed the direction of causality between them. There are two arguments against this traditional interpretation of Marx. First, as Sayer has argued, what Marx opposes is not simply ‘idealism’: it is the validity of the very distinction between the material and the ideal. The inversion metaphor misleads because it leaves the distinction intact (Sayer 1987:85–8). Second, as I will show, the important distinction in Marx is not between the material and the ideal, but between social relations of production and their ideal and material forms. The material and the ideal can be separated from the social world only at the cost of their fetishism and reification (Sayer 1987:88).

Palmer’s depiction of Foucault as a descendent of Althusser’s ‘idealism’ raises the question of the relationship between them. It is well-known that Foucault was a student of Althusser, that they remained on good terms throughout their lives and that Althusser favourably refers to Foucault in *For Marx* (1970). As I read *Discipline and Punish* (Foucault 1977), it became clear that, whatever else he inherited from Althusser, Foucault got from him what might be called a nonfetishistic concept of productive ‘forces’, that is, forces are construed as collective powers rather than things. This proved important because, as I will later explain, only a reader with a nonfetishistic conception of ‘forces’ can see the significance for Marx of what Foucault achieves in that book. I also noted Bhaskar’s assessment that Althusser was the ‘foremost Marxist influence’ on realism (Bhaskar 1991:183) and it occured to me that some of Althusser’s implicit realism might have rubbed off on Foucault.

Regarding Palmer’s ‘orthodox Marxist appreciation’, the blunt truth is that orthodox Marxism is indefensible. Meiksins Wood, who condemns the ‘retreat from class’ and is Palmer’s ally in his defence of orthodox Marxism and his rebuttal of ‘postmodernism’, long ago complained of:

> orthodox base/superstructure theories which, in one form or another and in varying degrees, adapt ‘modes of analysis’ which, explicitly or implicitly, treat

> the economic 'base' and the legal, political, and ideological 'superstructure' which 'reflect' or 'correspond' to it as qualitatively different, more or less enclosed and 'regionally' separated spheres.
>
> (Meiksins Wood 1981:68)

As Jessop (1990:49) explains, according to the base/superstructure model, the state is 'an essentially repressive instrument whose control enables the economically dominant class to exercise its dictatorship over subordinate classes'. The categories 'state', 'class', 'struggle' and 'consciousness', then, which Palmer wishes to defend, are integral components of the base/super-structure model that he—along with other critics of Foucault and 'postmodernism'—otherwise rejects. [3] As Meiksins Wood acknowledges: there is 'no explicit and systematic' theoretical alternative to the 'vulgar economics' of the base/superstructure approach, although, she adds, intriguingly, 'something like it is implicit in the work of certain Marxist historians'.

Simultaneously to defend 'orthodox Marxism' and 'Thompsonianism' is a contradiction, for, as Palmer knows more than anyone: 'Theoretically, his [E.P.Thompson's] exit from the Communist Party of Great Britain was posed in terms of his political and conceptual reading of the deficiencies of the orthodox metaphor of a determining economic base and a derivative superstructural realm' (Palmer 1990:113, also 114). I noted two points concerning Thompson. First, his historical narratives contain an implicit critique of and alternative to orthodox Marxism. Thompson's alternative is a broad conception of 'relations of production' and a distinction between social being/consciousness and agency/structure. These distinctions are fused in 'experience', his central explanatory device, which he regards as the missing 'genetics' of Marx's account of social change (Thompson 1978:170). Second, Thompson's theoretical alternative, embedded in his narratives, remains unexplicated in large part because his (1978) polemic against Althusser stigmatised explicit theorizing and discouraged scrutiny of the theory of his historical practice (Sewell 1990:54).

The antipathy of 'Thompsonians' towards Foucault, and Thompson's own disdain for 'theory' has hindered recognition that Foucault and Thompson share an opposition to traditional Marxism. There is a striking similarity, for example, between their criticisms of 'class'. Thompson (1978:295) complains, 'these classes which are marshalled, sent on manoeuvres, and marched up and down whole centuries bear so little relation to the actual people disclosed in the archives—or, for that matter, in the streets around us.' For Thompson, 'class itself is not a thing', to be measured, but 'a happening', 'the way the machine works…the friction of interests—the movement itself (ibid.). Similarly, Foucault complains that Marxists focus mainly on defining class, its boundaries, its membership, but never concretely on the nature of the struggle' (Foucault 1988:123). When Marxists 'talk of the "class struggle" as the mainspring of history, they're above all concerned to find out what the class is, where it is situated, whom it includes, and never what the "struggle" is in concrete terms' (Foucault 1980a, 1314). [4] Foucault's concern with 'the nature of the struggle' complements Thompson's concern with 'the movement itself.

For these reasons, Marxists' attacks on Foucault struck me as unconvincing. To attack him, they had to defend the indefensible.

A third way: Marx <— realism —> Foucault

Marxists loathe the postmodern, relativist, discourse-analysing Foucault. Foucauldians scorn the modern, economistic, state-centred Marx. David Harvey's (1989) book transformed the terms of the debate over modernity and postmodernity and seemed to offer an alternative to this mutual antipathy. Harvey construes postmodern academic discourse as a manifestation of a compression of processes in space and time, driven by the imperative of capital accumulation to resolve crises by accelerating its turnover. The belief that an objective reality has gone and the rules of argument have changed, with which we associate postmodernism, is wrong, but it is explicable in terms of this disturbance in the spatial and temporal coordinates of social life. In effect, Harvey uses Marx to explain a condition that professes his obsolescence.

If I am not mistaken, Harvey arrived at his explanation of the break-up of Keynesian-Fordism by interpreting Marx's 'capital accumulation' in the light of Marshall Berman's conception of modernity (Berman 1982) and Stephen Kern's (1983) thoughts on the transformation of experience of space and time between 1880 and 1918. The title of Berman's book, *All That Is Solid Melts Into Air,* is taken from Marx and Engels' (1848) *Communist Manifesto,* where they use it to capture the creative destruction of capital accumulation. By Harvey's account, the same forces which compressed space and time to shape modernity, compressed them still further to form postmodernity. The experience of time and space has certainly changed, but 'the underlying logic of capitalist accumulation and its crisis-tendencies remain the same' (Harvey 1989:189). Far from marking the end of Marxian analysis, postmodernity is a creation of a new wave of commodification and of the hyper-mobility of the purest form of capital, finance capital, all of which is explicable by developing 'the geographic dimension of Marx's theory of the accumulation of capital' (Harvey 1985:32). Harvey made it possible to accept the empirical condition of postmodernity, in terms of 'flexible accumulation', without abandoning Marx's law of motion of society.

Without going into the reaction to Harvey's book (Massey 1991; Dear 1991), I must note Dear's observation that 'in taking an axe to postmodernism, Harvey leaves his own historical materialism almost totally unexamined' (Dear, cited in Gregory 1994:325). Gregory comments similarly that Harvey is seemingly disinterested in 'much of post-classical Western Marxism' (Gregory 1994:95). What Gregory intends as a criticism seems to me one of Harvey's strengths, for its counterpart is his belief 'that Marx's own writings remain the most important source for clarifying the relations between human agency and social structure' (ibid.: 367). The lesson here is that Harvey saw in 'capital' a capacity to explain the condition of postmodernity by reading Marx's own writings, rather than his many commentators. In so doing, I believe, he picked up the realist ontology which surely lies behind his account of postmodernity.

While Harvey makes few references to realism, it is difficult to see how one can sustain without it an explanation of postmodern images and representations in terms of mechanisms connecting people discrete in space and time. Indeed, in construing

modernity and postmodernity as faces of the same internal relations, Harvey (1989:339) unknowingly invokes Bhaskar's advice that when considering the relationship between incommensurate paradigms it is sensible to inquire into that over which they disagree. In effect, Harvey uses realism to counter the decline in the influence of its exemplar, Marx, and to undermine the ascendency of a discourse which shot holes in the notion of an objective reality.

I pursued the idea that if Bhaskar was correct about Althusser's latent realism, it was possible this influenced his student. Perhaps there were traces of this ontology in Foucault. Why would he tell us that mechanisms of power 'really exist' if he opposed a realist ontology (Foucault 1980a: 164)? Why would he attach 'disciplinary power' to one of Marx's central concepts, 'productive forces', if he was so opposed to his ideas? Foucault was certainly critical of 'traditional' interpretations of Marx, but my chronological-bibliographic reading of his work made clear to me that Marx would have made a poor Marxist. The more I read of Marx and Foucault, the more they seemed to explore a common problem, albeit in very different ways. There was an unspoken dialogue between them. Essentially, I used critical realism to give voice to this dialogue, to mediate between them.

This argument emerged: Marx explains the 'why' of power and the law of motion of society and Foucault explains the 'how' of power and the microphysics of society. To marry the 'why' and the 'how' of power, it proved necessary to explicate the 'what': to reconstruct and synthesize Marx and Foucault's respective objects, which I took to be 'relations of production' and 'disciplinary power'. That is what I attempt in this book. Together, I submit, they form capital, society's genetic code, currently active in shaping what we recognize as the postmodern.

3
Retroduction and realism

How to theorize

> Reality is that which, when you stop believing it, doesn't go away.
> (Philip K.Dick, author of the novel on which *Blade Runner* was based, cited in Wakefield 1990:127)

Introduction

The ontology of realism exemplifies that which the hyper- and virtual-realities of postmodernism seek to overturn. Having described them, let me now describe it. I do so by contrasting this ontology and its corollary, the retroductive mode of inference, with that which they oppose, empiricism and positivism, and by distinguishing between retroduction as a logic of discovery and retro- and pre-diction as logics of proof. I explain how the process of scientific discovery is stimulated by interest and guided by analogy within 'imaginary experiments'. Via a discussion of the problem of 'naturalism', the chapter examines the nature of social objects. I draw mainly on the work of Roy Bhaskar, the leading contemporary exponent of critical realism.

Bhaskar maintains that the emergence of critical realism was akin to 'a Copernican/Darwinian revolution which stood the world back on its feet' (Bhaskar 1993:299). It is 'inexorable', irrepressible and 'will stand the test of time' (ibid.). Perhaps. But realism is not without its critics. I am one of them. I accept the main arguments in favour of a realist ontology, but believe many of its epistemological claims are misguided and others are underdeveloped. I am skeptical of Bhaskar's qualifications of his argument in favour of naturalism. I am particularly critical of the mutual admiration between realism and Marxism. I aim to use realism, not as an underlabourer, but as a midwife: to cut the umbilical cord connecting us to traditional Marxism and to develop an alternative.

What is real?

At realism's core is the belief that the ultimate objects of scientific investigation—for example quarks, magnetic and gravitational fields—are not merely convenient fictions: they really exist and act independently of our knowledge of them. During the course of

this book, I shall argue that capital is one such object.

Realists distinguish between three ontologically-distinct levels of reality: first, real, nonempirical networks of organically-connected *structures* ('the real'); second, which take the form of *events* ('the actual'); third, some of which are conceptually-mediated in *experience* ('the empirical'). Hence, 'the empirical is only a subset of the actual, which is itself a subset of the real' (Bhaskar 1989a:190). Bhaskar's use of 'real' in this context is unfortunate because he is 'not saying that experiences are less real than events, or events less real than structures' (Bhaskar 1978a:58).

The ultimate objects of scientific enquiry are not patterns of events, but the structures and mechanisms that generate the flux of empirical phenomena. These objects are real, but rarely manifest and more rarely still empirically identified. They are intransitive and structured: intransitive, in that they exist independent of human activity; structured, in that mechanisms, events and experiences are interrelated, but distinct and irreducible. Structures can exist but counteract and so produce no actual events, and events can occur without being experienced (Bhaskar 1989a: 16). It is normally only in the laboratory, argues Bhaskar, where the scientist intervenes to trigger the mechanism under study and prevent interference with its operation, that causal mechanisms, whose operation is described in laws, become manifest and empirically accessible (Bhaskar 1978a:46). Only when the ontological stratification of reality is recognized can we understand the effort involved—'in experimental design and scientific education'—to make human experience epistemically significant in science (ibid.: 35).

Realism developed as a critique of, and an alternative to, the positivist understanding of explanation and the empiricist understanding of causation. I develop this acount of realism, therefore, by describing these. [1]

Positivism is a theory of knowledge or epistemology. It is based on the belief, among positivist philosophers, if not scientists, that the ideal form of explanation is a deductive-nomological argument (henceforth, 'D-N'). In such an argument, the event to be explained or predicted is deduced from a universal, covering law and a set of conditions. To use Outhwaite's (1987:7) example, the freezing of a car radiator is explained by the general law governing the behaviour of water plus the low temperature last night. The relationship between the *explicans* (premises) and the *explicandum* (conclusions) of a D-N argument is one of logical necessity. [2] Thus:

Explicans (premises)	Water freezes at 0° C (law) It was freezing last night (condition)
Explicandum (conclusion)	Therefore, the water in the car radiator froze

The positivist concept of the D-N form of inference has the following corollaries:

1 Scientific method entails observing regularities between types of events, formulating hypotheses about these conjunctions, testing them by observation and experiment, and presenting results as proven laws from which further deductions

can be made.

2 Explanation and prediction are symmetrical: the premises of a D-N argument, laws and antecedent conditions, are a basis both for predicting an event yet to occur and for explaining that event after its occurrence.
3 The logic of discovery, one's reasons for proposing an hypothesis, and the logic of proof, one's reasons for accepting it as true, once suggested, are identical.

Any theory of knowledge presupposes a theory of being or ontology. Positivism presupposes an empiricist ontology. Empiricism is based on, one, the belief that the real objects of scientific investigation are objects of actual or possible experience, and two, a Humean, constant-conjunction understanding of causality, according to which causation is a relationship between discrete events, cause and effect. The positivist understanding of explanation is rooted in a Humean understanding of causality, 'according to which all we can ever observe is the constant conjunction of events, such as freezing temperatures and burst radiators' (Outhwaite 1987:7). Laws, which form one part of the *explicans* in a D-N argument, are statements about Humean regularities. 'We observe that water freezes when its temperature falls to O°C and formulate a law that when the latter happens, so does the former' (ibid.: 21). This understanding of causation and explanation is important, for it is the centre around which has revolved the debate between accounts of natural and social science, to which I will later turn, and it is the target of the realist critique.

The ontological stratification of the world, into the real, the actual, and the empirical, is the basis for realism's rejection of positivism and empiricism. The objection to the positivist account of explanation rests on a rejection of its basis, the Humean understanding of causation. Realism substitutes a 'natural necessity' understanding of causation, according to which an object's capacity to act, or power, is intrinsic to its internal structure and mechanisms (Harré and Madden 1975). The nature or constitution of an object and its causal powers are interrelated:

> A plane can fly by virtue of its aerodynamic form, engines, etc., gunpowder can explode by virtue of its unstable chemical structure… If the nature of an object changes then its causal power will change too; engines lose their power as they wear out.
>
> (Sayer 1984:96)

Given the stratification of reality, this capacity to act—or power—exists independently of its exercise, and of experience of the conjunctions of its phenomenal forms. Causal powers may exist unexercised, be exercised unrealised, and realised unperceived or undetected (Bhaskar 1989a). The structure of an object (which bestows its capacity to act or power) is the material cause of the events it generates. But for powers to be exercised there must be intervention by some causal agent, some efficient cause, and a given set of conditions. The chemical structure of gunpowder, for example, is a material cause. But for this capacity to be exercised, for gunpowder to explode, it must be dry and ignited. The generative mechanism of a structure will operate only when suitably triggered. The

activation of a material cause requires an efficient cause.

It is important to understand that the positivist concept of the D-N form of inference is founded on the Humean concept of a causal law. If this constant-conjunction understanding of causality is invalid, then events cannot be deduced from covering laws of the type, 'if A, then B', and the positivist concept of the D-N form of argument is invalid. This type of inference, the realist argues, confuses reasons for expecting an event to occur with an explanation of *why* that event has occurred. Discovery of a regular relationship between two kinds of phenomena certainly gives us reason to believe that they are causally connected, but the realist also wants to know the intervening mechanisms which generate the phenomena we are trying to explain (Keat and Urry 1975).

A D-N argument establishes relations of logical necessity between *explicans* (premises) and *explicandum* (conclusions). It provides a way of logically deriving the *explicandum* statement from the *explicans* statement, but it does not tell us what determines or produces the *explicandum* event. A realist argument attempts to discover the relations of natural necessity that exist in the physical world, that is, to explain the real underlying mechanisms, and their conditions of operation, which generate the phenomena we are trying to explain. For realism, therefore, constant conjunctions are neither a necessary nor a sufficient condition for the existence of a causal law (Bhaskar 1978a). It is because of these objections to the empiricist concept of causation and the positivist concept of explanation that realism rejects the D-N form of inference.

I want, however, to add a note of qualification. I have two objections to the positivist concept of the D-N form of inference. First, it assumes that it is adequate for both the discovery of laws and their empirical testing. Second, it operationalizes an erroneous concept of law. I shall later argue that, provided we distinguish between discovery and proof and substitute a realist for an empiricist concept of law, the D-N argument is a valid form of inference which can be invoked to elaborate and test theories, but not to create them.

How do we know what exists?

Realism is not a theory of knowledge (of how we know); it is a theory of being (of what exists). We can expect it to have epistemological consequences, but it is questionable whether these have been developed as much as we might have hoped. Realism's success in undermining the ontological foundations of positivism has not been matched by success in developing an alternative epistemology and method. I want to piece together such an alternative by establishing a connection among the following disparate elements: the realist concept of natural necessity (Bhaskar 1978a; Harré and Madden 1975), the retroductive mode of inference (Hanson 1958, 1961, 1969a and b), analogical reasoning (Tsoukas 1991), the criterion of 'interest' (Davis 1971), the D-N form of inference, and retrodiction and prediction. An understanding of their interrelationship, I shall argue, clarifies the nature of theory and theorizing. This understanding will shape my reading of Marx and Foucault.

For the moment, I am concerned with the process of *creating* hypotheses or theories, not with their subsequent empirical application and testing. The positivist account of the D-N mode of reasoning, it should be noted, assumes discovery and proof are sides of the same process, because it assumes that the only logical reason for proposing a hypothesis is that certain considerations lead one to think it is true (Hanson 1958:1076). But these assumptions are wrong. Typically, a hypothesis is proven long after its creation, by different people. D-N accounts begin with the hypothesis as given; they say nothing about the process of discovery in science. Indeed, as I shall show, for the realist, the D-N form is logically incapable of explaining the creation of hypotheses about causal laws, for two reasons. First, a law cannot be inferred by reasoning from the particular to the general, because a law is not a summary of data: it is an explanation of data (Hanson 1958:1082). Second, scientists do not create laws by reasoning from hypothesis to observation statements: they create them by reasoning from problem to putative explanation. It is because of the mistaken assumption that discovery and proof are different ways of looking at the same process that little is known about the actual process of theory construction. This neglect leaves the impression that discovery is an inexplicable process attributable only to individual inspiration. To understand the nature of theorizing, so that it might be better practised, it is important to rectify this impression.

I want to make a start by establishing a connection between realist ontology and 'retroduction': an additional type of inference, first identified by Aristotle and developed by Peirce and Hanson, 'that develops from some commonly accepted proposition until reasons are found that may alter the acceptance or understanding of the original proposition' (OED). [3] To understand retroduction, it is necessary to distinguish between the logic of inquiry or discovery, that is, one's reasons for entertaining an hypothesis as plausible; and the logic of proof, that is, one's reasons for believing that the referent of the hypothesis actually exists and acts in the postulated way. Not only may these reasons differ, they typically have a different logical form: retroduction, and retro- and prediction (Hanson 1958). I examine them in turn. I concentrate on the first because my primary concern in this book is the logic of discovery. I will later use this understanding to reconstruct Marx's logic of discovery and its creation, his model of capital.

Retroduction: the logic of discovery

What are the characteristics of reasoning behind the original suggestion of an hypothesis, this theory-laden conjecture? Hanson notes that all important scientific reasoning is *a posteriori*. Scientists do not reason from *explicans* to *explicanda*, but from *explicanda* to *explicans*. A theory is built up 'in reverse': retroductively; it is 'a cluster of conclusions in search of a premiss' (Hanson 1958:90). A retroductive inference takes this form:

1 Some surprising phenomena, P_{123}, are observed.
2 P_{123} would be explicable if H were true.
3 Hence, there is reason to think H is true. [4]

The surprise may be the fact that the phenomena are at variance with existing theories.

The realist ascribes cause by invoking real, and sometimes invisible, entities whose characteristics, properties and powers are capable of explaining the problematic phenomena. For the realist, then, retroduction is a mode of inference by which empirical things are explained by postulating (and, subsequently, demonstrating) the existence of real generative mechanisms. A realist retroductive argument takes this form:

1 Some surprising phenomena, P_{123}, are observed.
2 P_{123} would be explained if H were to exist and act in the postulated way.
3 Hence, there is reason to think H exists and acts in this way.

This inference is not a deduction, since H is not contained in P_{123}. Nor is it an induction, since H will not emerge from any number of repetitions of P_{123}. H is not an empirical generalization at all: it is a putative *explicans* (Sayer 1979a:116). Although there is no logical necessity between P and H, retroduction is none the less a form of logical inference, 'asserting its conclusions only problematically, or conjecturally, it is true, but nevertheless having a perfectly definite logical form' (Peirce, cited in Hanson 1958:1087). Hanson distinguishes among the three forms of inference in this way: 'deduction proves that something *must* be; Induction shows that something *actually is* operative; [Retroduction] merely suggests that something *may be*' (Hanson 1961:85).

To sustain the connection between realism and retroduction, I shall argue that the last is a mode of inference consistent with the natural-necessity understanding of causation of the first: the logic of the retroductive argument attempts to replicate or model the logic of the object under investigation. The connection I wish to establish rests on the following realist requirement of an explanation:

> answers to why-questions (that is, to requests for causal explanations) require answers to how- and what-questions. Thus, if asked *why* something occurs, we must show *how* some event or change brings about a new state of affairs…. To do this, it is necessary to discover *what* the entities involved are: to discover their nature or essences.
>
> (Keat and Urry 1975:31)

Knowledge of *what things are* is produced by modelling; knowledge of *how things act* is produced by devising laws. I consider the nature of models and laws, then the process of modelling or theorizing.

Models and laws

A model attempts to represent the nature of the object postulated in explanation of the initial problem (the *explicandum*). Realists refers to modelling as epistemic or 'object constitution' (Outhwaite 1983): 'to conceptualise in opposition to the empirical *mélange*, a nonempirical but real (stratified) subject of enquiry, designating the proper focus of

scientific thought' (Bhaskar 1986:105, n.4). Modelling is done by making 'real' (as opposed to positivism's nominal) definitions, that is, statements which attempt to describe the constitution of the postulated object, the basis of its causal powers. For example, 'a real definition of water would be that its molecules are composed of two atoms of hydrogen and one of oxygen' (Outhwaite 1987:45). The abstractions of modelling (or 'object constitution') are not generalizations from the empirical, nor are they concepts under which similar categories of events are grouped: they are attempts to designate the necessary connections between internally- or organically-related elements of an object. A theory is a model with existential commitments, in which the posited entities and described mechanisms, which may well be nonempirical, are conceived as real. On this basis, the theory/model distinction collapses, for both attempt to describe the internal structure of objects.

Once we know an object's constitution, that is, what it is, we can hypothesize about its capacity to act or power, that is, what it has done, can do, and may do. Knowledge of an object's capacity to act is expressed in laws. A law is a statement which makes a claim about the capacity to act of some mechanism. It does not make any claims regarding the exercise of that capacity on any particular occasion (Bhaskar 1978a:95). It is because knowledge of 'how' is based on knowledge of 'what' that modelling or object constitution is a vital part of scientific discovery.

Henceforth, I shall use 'theory' and 'model' interchangeably. The important distinction is between a theory or a model and a law.

The disciplined imagination

According to this juxtaposition of realism and the retroductive mode of inference, when faced with a problem, the theorist conjectures about objects which, *if* they were to exist and act in the postulated way, would explain the *explicandum*. How does this help us understand the process of theorizing? Any number of things *could* exist, so how are theoretical conjectures created and by what criteria do we choose among competing conjectures? I want to answer these questions by establishing a connection between retroduction, analogical reasoning and the criterion of 'interest'. This connection is based on recognition that a prerequisite of knowing a nonempirical object, and how it can act, is the ability to envisage the possibility of its existence, literally, to *imagine* it: 'form a mental image or concept of, picture to oneself (something nonexistent or not present to the senses' (COD). Imagination is stimulated and guided by interest and analogy.

Interest signals a tension between 'previous experience summarized into an assumption and a current experience summarized into a conjecture which questions that summary' (Weick 1989:529). Interest is a stimulus to uncover the conditions of existence of the questioned assumption and to work through the implications of the newly awakened doubt by explaining the tension. This works at successive levels of reality. As knowledge deepens and a new stratum of reality is discovered, it becomes the phenomenon to be explained, *ad infinitum*, as explanations are sought at increasingly deeper strata. If we construe the empirical as the observable and observation as conceptually mediated, then we must recognize that the empirical world is fuzzy,

changing with our theoretical knowledge.

This understanding of 'interest' helps explain two characteristics of theorizing. First, theorists are usually pleased and non-theorists are usually worried when their assumptions are questioned (Weick 1989:525). Second, the impact of a theory has little to do with its truthfulness:

> It has long been thought that a theorist is considered great because his theories are true, but this is false. A theorist is considered great, not because his theories are true, but because they are *interesting*…a theory can continue to be found interesting even though its truth is disputed—even refuted!
>
> (Davis 1971:309)

Since the referent of H typically cannot directly be observed, initial insights into the nature of objects are generated by analogy, that is, by reasoning from the known, the empirical or the source, to the unknown, the theoretical or the target. A model is typically created via analogical reasoning, which aids the imagination by bestowing objects with 'existential plausibility' (Tsoukas 1991; Bhaskar 1986:55 and 68). The theorist models by designing, conducting and interpreting 'imaginary experiments', in which the model is a surrogate for the imagined object (Weick 1989:519).

The aim of theorizing is to ensure that relations between the concepts constituting the model correspond to relations between elements constituting the postulated object. Theorizing or modelling is the creation of those real definitions which refer most accurately to their presumed ontological referents. A model is plausible when its logical structure mirrors that of the imagined object: modelling is a search for symmetry between object and model. For this reason, the criteria invoked most often in the imaginary experiments of theoretical work are aesthetic: a model is plausible when it is beautiful (Weinberg 1992).

Finally, the interrelationship between the realist conception of causality and the retroductive conception of explanation has two implications for concept formation. First, the internally-related nature of objects dictates that our concepts of them be flexible and interdefined, rather than mutually exclusive or externally related. Second, because theory maps real relations, rather than simply providing a framework for ordering observation, and because an understanding of what a thing is, is a prerequisite to understanding what that thing can do, conceptual precision and careful description are critical.

Retrodiction and prediction: the logic of proof

Let us assume we have retroduced the existence of an object and, via imaginary experiments, developed a plausible and aesthetically pleasing model of its causal mechanisms. That which makes it reasonable to propose H is analogical. Analogy, however, cannot establish the truth of a model: whether the postulated real object is like our model can be decided only by empirical testing (Bhaskar 1989a:20). Though imagined for theory construction, the reality of hypothetical entities must be demonstrated as the *explicandum* is explained. Only then can we know they are not

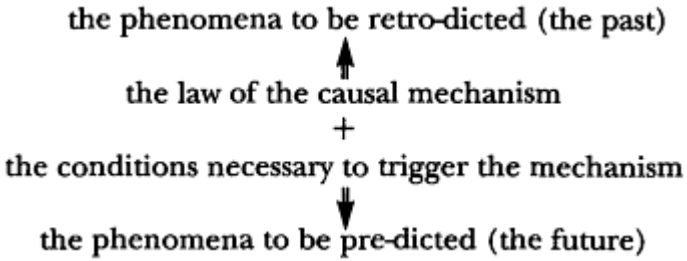
imaginary.

There are two ways by which retroduced theories can be empirically applied and tested: first, retrodiction, 'the explanation or interpretation of *past* action or events inferred from the laws that are assumed to have governed them' (OED, my emphasis), and second, prediction, 'the action of predicting or foretelling *future* events' inferred from the laws that are assumed to govern them (OED, my emphasis). Let me develop the meaning of these terms by examining the root of these prefixes: *dicta* or *dictum*. A *dictum* is a statement in a modal proposition. A modal proposition is an expression of modal logic, and modal logic is a logic of necessity and contingency, of 'must be' and 'may be', between a hypothetical premise and a hypothetical conclusion (OED). Retro- and predictions are modal propositions: they make claims about the relationship between a causal law and past and future events.

Remarkably little is said about retrodiction in the literature on realism. Considerably more is said in criticism of the D-N form of inference and its more obvious corollary, pre-diction. This imbalance has left the impression that prediction should be rejected as a test of the veracity of a theory, and an ambiguity as to the nature of its replacement. I suggest that this imbalance is one reason for the difficulty in recognizing the practical utility of realism. To correct it, I want to make these points. First, it is notable that Hanson, on whom I have relied to separate the logics of discovery and proof, rejects the D-N form of inference *only* as an explanation of discovery in science. This form continues to be helpful, he insists, in elaborating a theoretician's retroduced hypothesis or theory (Hanson 1958:1081). I agree with him.

Second, I see no reason why the elaboration of a retroduced theory by D-N arguments should not generate predictions, nor why these predictions should not be used to test the theory's veracity: provided we substitute a realist for an empiricist concept of law. A prediction is a deduction, from a law, of what will logically follow if both the mechanisms referred to by a law, and the conditions necessary to activate or trigger the mechanisms, exist. The experiment is designed to test the law by creating the conditions which trigger the mechanisms to which it refers. If the prediction fails to materialise then either the conditions were not successfully created or some part of the law must be erroneous. In the last case, since the law encapsulates the theory, the theory itself must be revised to explain the unfulfilled prediction, or, failing this, it must be rejected.

Third, it is important to understand that prediction and retrodiction have the same—deductive-nomological—form. What matters is the logical necessity between the law, its necessary conditions and the pre- or retrodiction: 'the temporal issue is irrelevant' (Sayer 1979a:140). Thus:



Causal laws have governed the past, just as they will govern the future; and past and future events are equally admissible as evidence of the veracity of a (realist-type) law. A D-N argument, based on a retroduced law, is equally capable of predicting the future and retrodicting the past, and both are acceptable tests of the veracity of the operationalized law.

Regardless of whether we use a theory to retrodict the past or to predict the future behaviour of an object, it will be accepted as true to the extent that it satisfies these criteria: [5]

1 *Consistency:* the propositions which constitute the theory must not contradict each other. Having retroduced the existence of the object, therefore, its model must be systematically elaborated and the model's inner consistency examined for logical contradictions.
2 *Exhaustiveness:* to be a plausible conjecture, a theory must explain at least some of the phenomena posing the initial difficulty. To be accepted as true, the *explicans* must be developed until the residuum resisting explanation is accounted for and the *explicandum* is fully explained.
3 *Independence:* the *explicans* must be tested in explanation of phenomena independent of those which constitute the original *explicandum*. 'If H is meant to explain P, then H cannot itself rest on the features in P which required explanation' (Hanson 1961:88). To use Hanson's example, a hypothesis about the colour and odour of atoms of chlorine (H) cannot be tested by reference to the peculiar colour and odour of chlorine (P) (Hanson 1961:88).

Interpretation and application of these criteria will vary according to the science and its object. No science can demand more precision than its objects allow (Isaac 1987a:12). The test of a theory must be constructed so that the result is causally dependent on the nature of the object, rather than by following a preordained 'scientific method' (Bhaskar 1993:35).

Discovery and proof: some rules of theorizing

I distinguish between discovery and proof because 'we cannot improve the theorizing process until we describe it more explicitly, operate it more self-consciously and

decouple it from validation more deliberately' (Weick 1989:516). Retroduction, generating theoretical knowledge of the necessary power of structures, and retrodiction and prediction, generating concrete knowledge of their contingent modes of operation, are distinct explanatory tasks which are usually conducted by distinct groups of people, pure and applied scientists, who possess different dispositions and skills. [6]

Placed together, however, discovery and proof comprise a continuous process consisting of these stages:

1 Identify and describe the *explicandum,* that is, formulate the problem to be explained.
2 Retroduce the existence of an imagined object and develop a plausible model of its capacity to act or power.
3 Check the reality of the postulated object and its causal mechanisms via retro- and pre-diction, whereupon…
4 It becomes the phenomenon to be explained.

This process can be repeated *ad infinitum*.

Conflating discovery with verification, construing discovery as an inexplicable psychological-behavioural process rather than—what it is—*an analogical-retroductive process of imaginative thought,* hinders an understanding of the dialectic between thinking and its expression (in words, symbols, images) in the retroductive process of discovery. This is especially debilitating to an understanding of theorizing in the social sciences, where the internal relations of an object are expressed mainly in words and where modelling takes the form of conceptual writing, editing and revision. To foster an understanding of the connection between writing and discovery and to maintain the distinction between discovery and verification, I shall condense the preceding discussion of analogical-retroductive and deductive-nomological reasoning into the following realist rules of theorizing, to be operationalized in this book:

1 A theory is a model with existential commitments, not simply a framework for ordering observation.
2 Modelling is the creation of those real definitions that refer most accurately to their presumed ontological referents. It is a process of mentally sifting and selecting the pieces that fit the model. Modelling is editing.
3 Theorizing is driven by the desire to discover plausible explanations to interesting problems.
4 The logic of discovery, reasons for suggesting H as a plausible hypothesis, and the logic of proof, reasons for accepting H as a true explanation, may differ.
5 The logic of discovery is not deductive-nomological, but analogical-retroductive.
6 The analogical-retroductive process of discovery is a dialectic between thinking and its expression in words, symbols and images. It operates according to the principle: 'How do I know what I think, until I see what I say?' (E.M.Forster, cited in Cheney 1983).
7 The logic of proof is deductive-nomological. Prediction and retrodiction share this logical form.

8 The retroductive mode of inference is not an inexplicable 'psychological-behavioural' process, but 'proceeds according to definite and formulable rules, within which the hunch, the insight, the flash of Archimedean inspiration have to operate' (Sayer 1979a:115). It can therefore be reconstructed and evaluated.
9 Theorizing is stimulated and guided by interest and analogy and adjudicated by aesthetic criteria.
10 Creating conjectures, via imaginary experiments, is as important as testing them, via empirical experiments.
11 An interesting, but false, theory may be as valuable as a dull, but true, theory.
12 'Interest' signals a tension between theoretical knowledge, distilled into a conjecture, and empirical knowledge, distilled into an assumption.
13 That which makes it reasonable to propose H is analogical in character. But the truth of H can be esablished only by empirical testing.
14 A theory will be accepted as true to the extent that it satisfies the criteria of consistency, exhaustiveness and independence.
15 The result into which the logic of discovery disappears is not the conclusion of a D-N argument, it is a conceptual model depicting the causal mechanism of some object.

This completes my account of the ontology of scientific realism and its epistemological and methodological implications. I now go on to consider the implications of realism and retroduction for the study of social objects.

The nature of social objects

Thus far, this chapter has been concerned with natural objects; reasonably so, for the ontology of realism was inferred (retroduced) from the practices of natural scientists. The validity of this scientific knowledge is a premise of realist ontology. If this ontology is sound, these practices must be correct. We should not be surprised, then, that realism's influence on natural scientists has been negligible. It has been most influential among those interested in creating a science of the human and social, especially among those who accept the realist argument that these sciences have modelled themselves on an erroneous understanding of natural science. This section examines realism's impact on the social and human sciences and its contention that social objects are as real as their natural counterparts.

Realists argue that discussion over the possibility of a social science has been based on positivist misconceptions about the nature of natural science. These misconceptions can be traced to the emergence, towards the end of the nineteenth century, of an erroneous philosophy of the natural sciences. Realists contend that, at this point, a gap developed between the actual practices of scientists and the ideology of science. The (then developing) social sciences were constituted in terms of these false positivist beliefs about what science entails. The effect was to fragment the social sciences, separate them from history, distort their conception of the human and the social. These characteristics,

Bhaskar argues, warrant describing their current condition as a crisis (Bhaskar 1989b:2).

It was within this mistaken philosophical framework that the question, 'Can society be studied in the same way as nature?' was answered. The debate stimulated by this question was dominated by a disagreement between two positions: naturalism, a belief that there is a unity of method between natural and social science, and anti-naturalism, a belief that they have very different methods because of the contrasting nature of their objects, nature and society (Bhaskar 1989b:2). In assessing this debate, realists argue, it is important to note that both sides have accepted the positivist account of natural science, together with its implicit ontology. Anti-naturalists have been less concerned with developing an alternative to empiricist theories of existence and causality, than with limiting positivism's intrusions into social science and developing an alternative (hermeneutic) method. They have ceded natural science to positivism (Bhaskar 1989b).

The realist reconception of the nature of natural science changes the terms of the debate and opens up the possibility of a third position: a qualified critical naturalism, underpinned by a realist theory of science and a tranformational conception of society (Bhaskar 1991:89–90). The realist, anti-positivist, naturalist argument rests on the belief that there is not one criterion for the ascription of reality to postulated objects, but two, perceptual and causal (Bhaskar 1989b:194 n. 16). Social structures, it is contended, are as real as natural structures, not because we can perceive them, but because they have causal powers (Isaac 1987a). [7] I want to concentrate on what we mean by 'social structure' and 'power', for much depends on the meaning of these terms.

Social structure

A social structure is a matrix of internal relations among people (Bhaskar 1989a and b). These structures comprise relations among people who are causally connected but not necessarily physically copresent. Bhaskar contends that 'these structures are not spontaneously apparent in the observable pattern of events; they can only be identified through the practical and theoretical work of the social sciences' (Bhaskar 1989a:2).

How are social structure and human agency related? Understanding of this relationship has been bedevilled by voluntarism, that is, a belief that individuals create social structure, and reification, that is, a belief that social structure determines the actions of individuals. A realist conception of social structure entails this alternative to voluntarism and reification: individuals do not create social structure (the error of voluntarism), because it pre-exists them, having been established by the long-since dead. Rather, they reproduce and occasionally transform this structure. Social structure does not determine the actions of individuals (the error of reification), because it is both the medium and effect of that action. Rather, social structure both facilitates and constrains human action. Structure is the condition of agency, and agency is the condition of structure (Bhaskar 1989a, 1989b). Agency and structure are indivisible aspects of the same social reality.

The important point about this realist conception of social structure is that it is construed as a real, if nonempirical, entitity, analogous to many natural objects, such as magnetic and gravitational fields. These structures are real, not because we can see them, but because they have causal powers.

Power

'Power' is a concept of causation. The realist conception of the relationship between social structure and human agency entails a distinction between three types of cause or power:

1 material: the elements or matter from which an action is produced
2 efficient: the agency initiating the process by which an action is produced
3 final: the end or purpose for which a thing is done. [8]

The material cause of social action is the social structure which determines the capacity to act of the people who comprise it. Its efficient cause is the agency by which it is produced, as this capacity to act is exercised. Its final cause is the reason prompting the action. These types of cause are interdependent, components of a process. Bhaskar points out that 'some material causes exist only in virtue of the "efficient causality" of the human agency which reproduces or transforms them' (Bhaskar 1991:92). Material causes may be unacknowledged; final causes may be unconsciously known; and efficient causes may have unintended consequences (Bhaskar 1991:95).

The relationship among these three types of power, or cause, is best explained by elucidating the distinctions they entail: between the capacity to act and its exercise, power and domination, and behaviour and agency. I examine then in turn.

1 *The capacity to act and its exercise.* The capacity of individuals to act is a necessary property of the social structure they constitute. The exercise of that capacity is a contingent property of their deployment of this capacity. Both are causes: material and efficient. For example, the internal relation between employer and employee is the *material* cause of the behaviour of both the employer *and* the employee; the specific way in which the employer and the employee choose to act out this relationship is the *efficient* cause (Isaac 1987a:85–6). Power's actual exercise, of course, depends on political will and skill and is contingent on the circumstances of its deployment. A capacity to act may not be exercised, or it may be exercised without producing an empirical effect, for example because of a countervailing power or the ineptitude of the actor.
2 *Power and domination.* As and Bs both have a capacity to act by virtue of the internal relations they constitute, but it does not follow that they have equal capacities. Internal relations may bestow asymmetrical capacities which allow As to dominate Bs. The actions of both employer and employees, for example, are constrained and facilitated by the same internal relations among them, but these relations bestow very different capacities to act. Power is a necessary and ubiquitous feature of social existence: domination is not.
3 *Behaviour and agency.* The concept of final cause, that is, the end or purpose for which a thing is done, demarcates physical behaviour from human action (or agency). Agency, unlike behaviour, is purposeful or intentional. The intent or purpose of the agent is one cause (the final cause) of the act or agency. To

> understand how and why the capacity to act is exercised, therefore, we must understand individuals' purpose, for example, their motives, understandings and reasons. The activation of the power of social structures (material causes) requires human agency (efficient causes) and this agency is itself ignited by reasons which are causes in their own right (final causes). Causes have causes.

Power, then, is a capacity to act, bestowed by real, if nonempirical, social structures and mechanisms, exercised by people, contingent on their motives, political skills and circumstances. It is not the agency of A that causes the agency of B. Rather, the relationship R^{AB} is the material cause of both A and B. The way in which they act out this relationship is the efficient cause, and the subjective meanings through which each actively constructs, interprets and assesses this action are the final cause. 'Power' embraces the three types of cause, material, efficient and final; it is the point of intersection of agency and structure. This realist conception of the relationship between agency and structure enables us to accept both the subjective and objective aspects of social existence without conflating them (Bhaskar 1989b:133; Isaac 1987a:56). The essential point is that, for realism, material causes or capacities to act are a property of the nature of the social relations among people, and these relations are construed as nonempirical structures analogous to the atomic structures that account for conductivity (Isaac 1987a:75).

Bhaskar's Achilles' Heel: realism and Marxism

Like many, I am indebted to Roy Bhaskar for his work in developing and popularizing critical realism. However, I think there is a serious problem with his realist solution to the problem of naturalism. Towards the end of *Dialectic*, he introduces an 'Achilles' Heel critique', which 'pinpoints the blindspot in a theory, characteristically at what appears to be its strongest point' (Bhaskar 1993:396). I am going to argue that the Achilles' heel of Bhaskar's realism is his stance towards what is ordinarily regarded as the exemplar of realism, the implicit social theory of his critical naturalism: Marxism. Having posed this problem, I suggest a solution.

Bhaskar retroduced his realist ontology from the practices of natural scientists, especially those centred on the experiment. The validity of those sciences, and the reality of the objects they study, is not in dispute, for they are a premise of Bhaskar's ontology. It is the nature of *social* objects and the means by which they can be known which is at issue. In developing his social ontology, Bhaskar draws many helpful analogies between natural and social objects. But there is a big difference between saying that social structures are analogous to natural structures, and saying that they are ontologically and causally equivalent.

Realism is an ontology, employing *a priori* arguments, not an empirical science. It tells us that social objects *may* exist in the same way as natural objects, not that they do; it establishes that a science of the social is *possible*, not that it exists. We might agree on this possibility, but want to reserve judgement until such an object has been discovered and proven to exist. In fact, realist philosophers are hard-pressed to identify these social

objects, and social scientists—with one notable exception, which I discuss next—and to describe, in practical terms, what a realist social science would look like. It is one thing to critique a negative (positivist) influence, quite another to develop an alternative.

It is common for realists to deny that this ontology favours any particular substantive analysis or prescribes any particular methods. These denials are disingenuous. If, as Bhaskar contends, the social sciences are in crisis in large part because they have been constituted by a false model of scientific practice, it behoves realists to tell us something of the correct model of such practice. Otherwise what would be the point of it? While realist ontology does not formally endorse any particular social theory, in practice, 'realists concerned with the social sciences have mostly been very sympathetic to Marxist social theory' (Outhwaite 1987:4). This is because Marx's social theory is thought to contain an implicit realist ontology (Keat and Urry 1975; Sayer 1979a; Bhaskar 1989a; Isaac 1987a). Indeed, Marx is presented as an exemplar of Bhaskar's critical naturalism, and is the source of many of the quotations used to support his arguments.

While Bhaskar is well aware of the many failings of the various variants of Marxism, he accepts the basic truth of Marx's analysis of capitalism. This analysis is one of the few bodies of thought of which Bhaskar's realism is not critical. Bhaskar portrays realism as an underlabourer for science, 'clearing the ground a little, and removing some of the rubbish that lies in the way to knowledge' (Locke, cited in Bhaskar 1989a:vii). There can be little doubt that critical realism is 'an ongoing research programme within the human sciences' (Collier 1994:36) based on Marxism. Bhaskar's critical realism underlabours for Marx.

The cumulative effect of the numerous quotations from Marx to illustrate Bhaskar's critical naturalism is that this philosophy comes to underwrite and legitimize the social theory. If realism is an accurate account of science, and Marx is a realist, then his work must be scientific and if it is scientific, the implication is that it must be true. Only if one understands critical realism will one understand Marx's meaning; and to understand critical realism one should look to its exemplar, the work of Marx itself. With few exceptions, realists use Marx to illustrate and legitimize the philosophy, rather than use the philosophy to rethink and further the work Marx began. Realism's effect, if not its intention, has not been to produce a viable alternative to traditional Marxism, but to legitimize it as science. In this roundabout way, realist ontology, infered from the practices of natural sciences, the validity of which Bhaskar takes as given, is used to underwrite the practices of a particular social science, Marxism, the validity of which is very much contested. It is not the social and human sciences that are in crisis (they proliferate and thrive): it is the supposed exemplar of critical realism, Marxism.

Cutting the umbilical cord to 'Marxism'

I do not doubt that Marx was a realist, although I will provide grounds for qualifying this assessment and will draw from it different conclusions to those of Bhaskar. I also accept that much of Marx's analysis of capitalism is true. But the mutual admiration between realism and Marxism is wrong. Marx's analytic may or may not be a science, in the realist sense, but even if it is, it does not follow that it is a valid science. Realist

interpretations of Marx's concept of *science* must confront the problems of Marx's discredited concept of *society*. On what grounds can we say Marx is right and others wrong? To what extent have Marx's theoretical entities and processes, 'initially imaginatively posited as plausible explanations of observed phenomena', come to be established as real? (Bhaskar 1993:225).

What is it, exactly, that has been discredited? 'Marxism' spawned several variants, Soviet, Western, Chinese, Cuban, Latin American, and so on. These Marxisms are united by that over which they disagree: the interpretation and relative weight given to Marx's texts, for example, the 1857 *Introduction* or the 1859 *Preface*, the *Grundrisse* or *Capital*, the relationship between 'base' and 'superstructure', 'individuals' and 'structure', between the subjective and the objective, or between Marx's humanism and his science. Many, if not all, of these doctrinal differences focus attention on the tradition of distinguishing between the 'early' and the 'mature' Marx. Since different interpretations of his work give rise to different notions of what might constitute a Marxist politics, 'from at least the Second International on (1889–1914), these differences have had genuinely monumental practical consequences' (Manicas 1988:97). Nuances of interpretation were quickly translated into practical politics. Marxism was never an issue of mere academic debate, until now.

This book may be but a footnote to the discrediting of Marx's ideas. But, freed from the obligation of defending Marx by the end of the Cold War, as many have realised, this is a propitious moment to rethink Marx. As a means to this end, having briefly considered realism as an underlabourer, I want to explore Bhaskar's other metaphor for realism, that of a potential *midwife*.

Why do we cling to ideas? Annie Dillard's reflections on the writing life offer some clues. Good writers possess the courage to throw away work, to sever the umbilical cord tying them to those false beginnings, bold leaps to nowhere, blind alleys. I suggest that we cling to 'traditional Marxism' for reasons similar to those which weaken the writer's resolve to throw away work. It has a familiar, necessary quality. We are grateful to it, for it was better than the alternatives, and better than nothing at all. We come to understand Marx's concepts 'without demur, in particular ways', because of the 'authority of the long tradition of "orthodox Marxism"' (Sayer 1987:17). But most of all, we cling to these concepts because so much was sacrificed in their making: the privations of Marx, his wife Jenny and their family (Peters 1986), and the very real suffering of those who lived and died building and contesting Marxism.

I consider the case for a realist ontology to have been made. But I am proposing to use it, not to endorse or explicate traditional understandings of Marx's work, but as midwife: to cut the umbilical cord that ties us to these conceptions. I am going to challenge 'traditional' Marxism—specifically, that shaped by the 1859 *Preface*—and fashion an alternative. Here is the essence of my argument. Let us grant that Marx is a realist, without presupposing the validity of either the ontology or the substance of his science. If Marx was a realist, he must have used the retroductive mode of inference. It is this insight I want to build on, by arguing as follows.

1 In the light of my earlier account of the logic of discovery and modelling, let us construe Marx's method, less grandly and more prosaically than is customary, as

how he did it: a serendipitous process of thinking, writing, editing and revising, sitting up into the middle of the night scrutinizing the logical structure of other people's work and writing and revising his own. This is conceptual writing or modelling.

2 There is nothing exceptional about Marx's method, I will argue. It is a dialectic between thinking and writing, with which every theorist, in every science, must grapple. Very little is known about theorizing because most writers' enquiries, their drafts, disappear in their results, the presentation or 'writing up' of these results. What *is* exceptional about Marx's work is that both kinds of his writing are available for public scrutiny, and therefore the sequential formulation and development of his thought is plainly visible to those who care to look.

3 Let us consider that work in the light of my account of modelling. These points follow,

a An understanding of Marx's retroductive method ('how') changes our understanding of its creation ('what'): a model,
b An understanding of Marx's retroductive method suggests that his work be read chronologically-bibliographically, from beginning to end, so that we can trace (and reconstruct) the cumulative development of this model,
c Reading Marx in this way, enables us to identify the *explicandum* from which he retroduced.
d Having identified his *explicandum,* we can identify his putative *explicans*.
e Having identified Marx's *explicandum* and *explicans* we can:

i assess the last by its ability to explain the first
ii identify deficiencies in his model and contemplate their means of resolution
iii recognize the unfinished nature of his work. A model can be reconstructed, developed and applied. An understanding of his *explicandum, explicans* and the retroductive mode of inference suggests how this might be done.

f An understanding of the relationship between his *explicandum* and *explicans* requires and facilitates a reappraisal of the relationship between the young, 'philosophical', and the later, 'economic', Marx. It establishes continuity where traditional Marxism sees rupture.

I shall show how a realist, chronological-bibliographic reading of Marx entirely changes our understanding of his work, resolving the problematic relationship between the 'early' and the 'mature' Marx, and how this understanding transforms his relationship to his supposed *bête noire,* Michel Foucault, and can be used to makes sense of that which is all around us, the postmodern.

Part II
Conclusions in search of a premise

Formulating the problem of modernity

A theory is not pieced together from observed phenomena; it is rather what makes it possible to observe phenomena as being of certain sort, and as related to other phenomena. Theories put phenomena into systems. They are built up ‘in reverse’—retroductively. A theory is a cluster of conclusions in search of a premiss.

N.R.Hanson, *Patterns of Discovery* (1961:90)

4
Beyond good and evil

The modern Manicheism

> But there is something else that bothers me about this notion: it's that the reference to this antagonistic couple is never exempt from a sort of Manichaeism that afflicts the notion of 'state' with a pejorative connotation while idealizing society as a good, living, warm whole.
>
> (Foucault 1988:167–8)

Introduction

Marx was a realist. (I will demonstrate this in Chapter 6, but, for now, let us assume it.) He must, then, have inferred retroductively, that is, he must have built up his theory 'in reverse', reasoning from problem (or *explicandum*) to explanation (or *explicans*). The first stage of the retroductive logic of discovery is formulating the problem to be explained; to borrow from Hanson, 'some surprising phenomena, P_{123}, are observed'. It may well be a discrepancy between the phenomena and our existing theories and their assumptions which causes our surprise. This stage is critical to the discoverer, for usually only the correct formulation of a problem contains the means of its resolution. It is critical to those wanting to appreciate the discovery too, for we cannot understand and evaluate an explanation until we know that which it aims to explain.

The history of scientific discovery reveals that it usually takes some time for the necessary observations to be made and their impact to register. Kepler studied Mars' orbit for many years before being able to formulate the problem of planetary motion. Newton observed similarities between the movement of planets and apples, but it was years before he wondered if they had a common explanation, gravity. It took Lavoisier the best part of five years to realise the significance of the surprising fact that phosphorus and sulphur gained weight in combustion, and another ten to discover its cause, the addition of oxygen. It took the five years' voyage of the *Beagle* and the eighteen months spent writing his *Journal of Researches* (Darwin 1989), during which time he mulled over the conflict between his observations and the view that each species had been individually created, for Darwin to formulate the problem to which his theory of natural selection is the explanation, the problem of variation.

Darwin was a historian of nature. Marx was a historian of society. The counterpart of Darwin's formative experience as a naturalist on board the *Beagle*, I shall argue in this

and the next chapter, was Marx's experience as a journalist and editor for the *Rheinische Zeitung* (or *Rheinishe Gazette*), in Cologne, between 1842 and 1843, shortly after graduating from university, and his written reflections on that experience as he moved between Kreuznach, Paris, and Brussels, up to the eve of the 1848 revolutions. These writings define his initial *explicandum* and contain his early excavations. I believe this to be the problem of modernity. He begins, in 1843, with its hallmark: the separation between civil society and political state, and its corollaries, the separation between economics and politics, private and public. By 1848, this *explicandum* had broadened to include the creative destruction of capital accumulation, manifest in the changing experience of time and space, made concrete in the built environment. This chapter and the next reconstruct Marx's formulation of, and exploratory excavations around, this *explicandum*. If David Harvey is correct about modernity and postmodernity being caused by the same mechanism, then how Marx formulates the problem of modernity is of continuing, pressing contemporary relevance.

At this point, I am not concerned with the validity of Marx's 'H' (capital), but with what it was about modernity ('P_{123}') that led him to suggest this H in the first place, that is, with its plausibility.

The modern Prometheus

First, some necessary preliminaries. Marx was born on 5 May 1818, in Trier, a small and ancient German market town, founded by Caesar Augustus, on the Moselle. Trier was a crossroads of Roman, German, French and Catholic influences. Germany was a confederation of thirty-nine states held together by a 'Holy Alliance' between Greek Orthodox Russia, Catholic Austria and Protestant Prussia, bound to govern in a Christian spirit 'in accordance with the Holy Writ'. There was no separation between church and state here, but an alliance of throne and altar. The French captured Trier in 1794, bringing with them the ideas of the Revolution. Prussia took back the territory in 1815, but the French influence persisted. Marx, then, grew up amid Roman remains, Catholic churches, the German language and new French ideas.

The defining revolution in Marx's early life was the three-day Parisian insurrection in July 1830, which deposed the aristocractic monarchy of Charles X and replaced it with the bourgeois, constitutional monarchy of Louis Philippe. This July Revolution gave momentum to bourgeois liberalism throughout Europe and politicized public life by inspiring the Left and stiffening the resistance of ruling parties. Since Marx is now thoroughly identified with proletarian revolution, let us note that Germany at that time had yet to experience a bourgeois revolution. Its only modern characteristic was its Hegelian philosophy of the state. This advocated a constitutional monarchy. Hegel's philosophy was ascendant during the 1820s (his *Philosophy of Right* (Hegel 1991) was published in 1821), but in the shadow of this July Revolution it was criticised by the Left for its conservatism and by the Right for its liberalism.

Hegel was consumed by cholera in 1831. To answer the question, who would follow Hegel, Marx turned to a comparable period in history, the post-Aristotelian philosophy of

Epicurus. His thoughts are left to us in seven notebooks, written during 1839, and entided by their Soviet editors ‘Notebooks on Epicurean Philosophy’ (Marx 1839). Tucked away on the last five pages of the sixth notebook are three versions of a schema developed by Marx from his reading of Hegel’s *Encyclopaedia* (1990), those paragraphs dealing with the philosophy of nature, hence the ‘Plan of Hegel’s Philosophy of Nature’ (Marx 1839:510–11). [1] Marx’s thoughts on his reading of post-Aristotelian philosophy and Hegel’s philosophy of nature are developed in his Ph.D. dissertation, ‘Difference Between the Democritean and Epicurean Philosophy of Nature’, completed in March 1841 (Marx 1840).

One might think that these notebooks and this dissertation (both published in full in English for the first time in 1975) contain thoughts on obscure, long-since-dead philosophical ideas, but they do not. They are full of thoughts on space and time, mechanics, matter and motion, gravity, magnetism and light. The Greek word for nature is ‘physis’, the root of ‘physics’. ‘Philosophy of nature’ translates into today’s ‘natural sciences’. Marx examines what was to become the dominant view of nature, the theory of atoms. In the Foreward to his dissertation, he claims to have reconciled the atomic theories of Epicurus and Democritus and thereby resolved ‘a heretofore unresolved problem in the history of Greek philosophy’ (Marx 1840:29). This claim is instructive. These two philosophers ‘teach exactly the same science, in exactly the same way’ (ibid.: 38), Marx argues, but ‘stand diametrically opposed’ on ‘the relationship between thought and reality’ (ibid.).

The relationship between Epicurus and Democritus expresses a tension between matter and form, the ‘world of essence’ and the ‘world of appearance’, which is ‘inherent in the concept of the atom’ (Marx 1840:61). Here Marx identifies the problematic relationship between what we see and what we know, between the world of our senses and the artificially constructed theoretical world, which characterised investigation into the atom for 2,300 years, and continues to this day. This problematic relationship is also central to recent literature on critical realism. The atom is a good example of how some imagined entities come to be accepted as real. For Democritus, the atom was a useful heuristic device. It took until 1900 for hypothetical atoms to be accepted as actual bits of matter. Now we can see them (von Baeyer 1992).

It is customary to interpret Marx’s doctoral dissertation as his first encounter with ‘materialism’. I will argue, to the contrary, that its value to Marx was in providing an analogue, atomic theory, by which to develop his theory of capital. Shortly we will see how Marx considers individuals of civil society to be atomistic monads. In a later chapter, I will show how he attempts to explain their behaviour in terms of the motion of society and the moments of this motion, gravity and poles: ideas which figure prominently in the work of the ‘late’ Marx but which first appear here. But now I want to show how Marx’s thoughts on the atom, and the distinction between its essence and appearance, are relevant to understanding his relationship to Hegel.

His first extant recorded thought on Hegel is found at the beginning of the sixth of his ‘Notebooks on Epicurean Philosophy’ where he discusses the ‘storm which follows a great philosophy’:

> as Prometheus, having stolen fire from heaven, begins to build houses and to settle upon the earth, so philosophy, expanded to be the whole world, turns against the world of appearance. *The same now with the philosophy of Hegel.*
>
> (Marx 1839:491, my emphasis)

Consider this analogy in the light of Hegel's remark that the French Revolution 'brings heaven down to earth' and interpret it thus: just as Prometheus brought fire from heaven to earth, so the Young Hegelians will bring the heaven of equality down to earth in Germany by transforming civil society with the ideals of the state. Their means is a free press: 'It is the spirit of the state, which can be delivered into every cottage, cheaper than coal gas' (Marx 1842a:165). Via a free press, the Young Hegelians will discover the essence of the new world by critiquing the appearance of the old, dragging it into the daylight. To this end, to agitate for civil rights, to further understanding of 'our epoch's struggles and desires' (Marx to Ruge, September 1843), Marx became a political journalist.

'The doubts which assailed me': the *Rheinische Zeitung*

A voice for Young Hegelians was the *Rheinische Zeitung*, a daily published in Cologne, then the most progressive city in Germany. [2] As the paper's subtitle, 'For Politics, Commerce, and Industry', suggests, it articulated the interests of the Rheinische bourgeoise in its struggle for liberal reform against a reactionary Berlin government. Marx became a regular contributor to the paper in May 1842, while still living in Bonn; in October, he become its chief editor and moved to Cologne.

Prussia was an authoritarian Christian monarchial state. It was because Christianity was one of the chief pillars of the Prussian state that press attacks on religion were banned and Marx thought this pillar had to be knocked away before any fundamental political change could be contemplated (Marx to Ruge, September and 13 March, 1843). Marx viewed the world through the conceptual lens of Hegel's ideal, harmonious, rational state; it provided criteria by which to judge the actual Prussian, Christian state. He was no communist at this time. [3] His radicalism consisted of attempting to place constitutional limits on the power of the sovereign by means of a free press; this shaped public opinion and brought the people's needs 'to the steps of the throne' (Marx 1843a:349). [4] Hegel's philosophy of law provided the theory to substantiate these attempts. It was to bring Hegel's ideal down from heaven to earth that Marx so assiduously defended the freedom of the press from state censorship. Six of his ten principal articles for the *Rheinsche Zeitung*, and many of his shorter pieces, focus on the problem of the free press.

But what Marx saw while working on this paper caused the scales to fall from his eyes. He was forced to confront the contradiction between ideal conceptions (the rational state) and 'what is known as material interests' (Marx 1859a:19) (people's actual social situation in 'civil society'), the divergence between the public and the private man. Two issues undermined his conception of the rational state.

The first was a conflict between human needs and private rights. It was the custom of

Mosel peasants to collect fallen wood for their fires. The owners of the land on which it fell construed this collection as theft. The issue was important enough to concern the Rhine Provincial Assembly (the 'Diet'). It viewed it as a threat to property rights and voted for strict sanctions. Marx formed the view that members of the Diet behaved like domestic servants of the forest owners, making the state a mechanism for defending their private interests. 'The wood thief has robbed the forest owner of wood, but the forest owner has made use of the wood thief to purloin the state itself' (Marx 1842c:253).

The second issue was the plight of viticulturists, also in the Mosel region where Marx was born, who were badly affected by a customs union with Germany. In a series of articles published in January 1843 (Marx 1843a), Marx criticises the 'one-sided' point of view of the state 'frame of mind' for blaming the peasants, rather than the customs union. He detects a private and a public aspect to the distress and explains it in terms of the 'mutual relation' between these two aspects. 'Even with the best intentions, the most zealous humanity and the most powerful intellect' the administrative authorities can find no solution to the plight of vine-growers because they are blinkered by the state frame of mind and are unable to perceive the 'essential relation' (Marx 1843a:348) between the private and public aspects. Noting the contradiction between actual, empirical reality and that depicted in state dossiers, Marx begins to doubt the salience of the state 'point of view'. Reflecting on these experiences nine months later, he writes: 'the political state… contains the demands of reason in all its modern forms…[But]… Everywhere it subordinates reason to reality. ..everywhere…it falls into the contradiction between its ideal destiny and its presuppositions' (Marx to Ruge, September 1843).

The Promethean strategy behind the *Rheinische Zeitung* was defeated when it was ordered to cease publishing by the very state it was criticising. [5] Marx put a positive spin on its closure, on 1 April 1843, regarding it as 'a progress in political consciousness' and welcomed back his freedom to criticise untrammelled by the censor (Marx to Ruge, 25 January 1843). He discussed with Ruge the possibility of establishing a new journal which would combine a German head and French heart: the *Deutsche-Französische Jahrbücker (Franco-German Yearbook)*. As its title suggests, their aim was to combine German philosophy with French political theory so as to guide the revolution they believed to be necessary and imminent in Germany.

To reflect on his journalistic experience in Cologne and prepare his thoughts for the intended journal, Marx withdrew to Kreuznach, a spa some fifty miles east of Trier, where he spent the summer of 1843.

The modern Manicheism: civil society and political state

To resolve the doubts about his Young Hegelian position, created by his experience on the *Rheinische Gazette*—the contradiction between the state's 'ideal destiny' and its 'presuppositions'—Marx turns to Hegel's last major work, *Elements of the Philosophy of Right or Natural Law and Political Science in Outline* (Hegel 1991). [6] Marx's thoughts remain in the form of unfinished notes in self-clarification, entitled by their Soviet editors 'A Contribution to the Critique of Hegel's Philosophy of Law' (Marx 1843c). Having

wrestled unsuccessfully with the Prussian state, then, but convinced that a new world could be created by criticism of the old, Marx returns once more for guidance to his 'master'.

Marx's critique of Hegel

Hegel's book consists of 360 numbered paragraphs, to be explained and expanded in his lectures; they are details for oral delivery, a guide for his listeners. Marx's notes (Marx 1843c) comment only on paragraphs 261–313, those in which Hegel sets out his conception of the state. [7] Marx immediately focuses on Hegel's innovation of regarding civil society and the state as distinct and notes, 'The relation between these spheres has now to be more precisely defined' (Marx 1843c:5). This separation existed then only in France, where it was created by the revolution of 1789. It is now the very hallmark of modernity, the source of the familiar distinctions between economic and political, private and public life. With this note, Marx declares his interest in the cause of these dualisms. What he has to say is of continuing interest.

Traditional interpretations have it that Marx simply 'materialised' Hegel's idealist concept of the state, by reversing the direction of causality between the material and the ideal, civil society and the state. This interpretation imbues this relationship with a Manicheism 'that afflicts the notion of "state" with a pejorative connotation while idealizing "society" as a good, living warm whole' (Foucault 1988:167–8). Manicheism is a dualistic theory (theology) according to which good and evil, God and Satan, while antagonistic, coexist. It was a heresy during the Middle Ages, exciting much fear and loathing within a Church founded on belief in an all-wise and beneficient God, and was exorcised by the Inquisition. I believe the traditional Marxist stance towards civil society and the state to be mistaken. In the light of Marx's actual position, it is equally heretical. These notes reveal that Marx regards 'civil society' and 'political state' as *equally* problematic categories, ideas or abstractions (Marx 1843c:40). The problem for Marx is not a malevolent state over a benign civil society: it is the very idea of their separability. Hegel takes this as a given; Marx regards it as the problem to be explained (ibid.: 45). Nor did Marx regard civil society as more real than the political state. They are twin illusions, 'allegorical spheres', which he contrasts with one's 'own, actual, empirical reality' (ibid.: 77–8).

Let us be clear what Marx has in mind by 'civil society' and 'political state'.

As Marx was in his study in Kreuznach, scrutinizing Hegel's concept of the state, Engels, whom he had met but once at this time, was out and about in England, observing civil society. Engels's concrete description of the multitudes in the streets of London and the 'great towns' captures Marx's abstraction 'civil society' precisely:

> they crowd by one another as though they had nothing in common, nothing to do with one another, and their only agreement is the tacit one, that each keeps to his own side of the pavement, so as not to delay the opposing streams of the crowd, while it occurs to no man to honour another with so much as a glance. The brutal indifference, the unfeeling isolation of each in his private interest

> becomes the more repellant and offensive, the more these individuals are crowded together, within a limited space. And, however much one may be aware that this isolation of the individual, *this narrow self-seeking is the fundamental principle of our society everywhere,* it is nowhere so shamelessly barefaced, so self-conscious as just here in the crowding of the great city. This dissolution of mankind into monads of which each one has a separate principle and a separate purpose, the world of atoms, is here carried out to its utmost extreme.
>
> (Engels 1969:58, my emphasis)

'Civil society' is not a synonym for 'society'. The first is a society of atoms, the second, as I later show, refers to the 'internal relations' among them which cause their atomization. This atom or monad, whose 'narrow self-seeking', according to Engels, is 'the fundamental principle of our society everywhere' is no fiction or philosophical nicety, but a palpable reality on the streets, then and now.

What does Marx mean by 'the state'? Despite the intervening century and a half, this is a surprisingly difficult question, to which recent theory has no answer. 'We have come to take the state for granted as an object of political practice and political analysis while remaining quite spectacularly unclear as to what the state is' (Abrams 1988:59). It is tempting to dismiss Marx's use of the 'idea of the state' as part of Hegel's idealism which Marx supposedly stood right way up. But consider this 'idea' in the light of Benedict Anderson's argument that the nation-state is an 'imagined political community' (Anderson 1991:6).

> It is *imagined* because the members of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives the image of their communion.
>
> (Anderson 1991:6)

> It is imagined as a *community,* because, regardless of the actual inequality and exploitation that may prevail in each, the nation is always conceived as a deep, horizontal comradeship.
>
> (Anderson 1991:7)

We cannot be surprised that Marx would regard the state as an imagined political community because as editor of the *Rheinische Zeitung* he was concerned with little else. To use his Promethean analogy, the idea of a state is the heaven of a collective mind. The *Rheinische Zeitung* was one of many new mass-circulation newspapers which did much to create this imagined community.

Reading the newspaper, Hegel noted, is a substitute for morning prayers: a mass communion performed by millions, at different times, in different places, in silent privacy, connecting each to others they will never meet or even hear about (Anderson 1991:35). We also find this abstraction 'the state' in one of the first mass-produced

commodities, the modern novel. The idea of the French state, of French-ness, for example, was propogated in the novels of Balzac and Hugo. Testimony to this is Hugo's funeral, in 1885, itself a celebration of this imagined community. Witnessed by more people than lived in Paris, it 'was one of the commonest shared memories of people all over France' (Robb 1997:532): 'Hugo's hearse had been hijacked by the State' (ibid.: 529). Newspapers and novels both facilitate simultaneous dissemination of the idea of the state to readers discrete in homogeneous space and time. By shaping their perceptions, and so their actions, the idea is reified and the state assumes a tangible presence. The monads on the streets of the great towns, described by Engels, crowd by each other without 'so much of a glance', I suggest, because they share silent membership of an imagined community, a nation-state.

'The state' is an extraordinarily powerful idea. Over the past two centuries, millions have killed and, more remarkably still, willingly died for their imagined communities (Anderson 1991:7). We should take seriously, then, Marx's idea that the state is an 'abstraction' and try to understand its significance. Let us note, for now, that the 'essence of the state' is the 'abstract private person' of civil society (Marx 1843c:40). These notes suggest that the same process generates the 'idea of the state' and atomizes society into monads. They do not reveal the nature of this process, other than that it 'belongs only to modern times' (ibid.: 32). 'The relation between these spheres' remains 'to be more precisely defined' (ibid.: 5).

So be it to Paris: capital of modernity

Let me remind you of Marx and Ruge's new journal, the *Deutsche-Französische Jahrbücher*. The original plan was to publish in Strasbourg, but this was abandoned in favour of Paris. 'We are going to France, the threshold of a new world… Paris, the cradle of the new Europe, the great laboratory where world history is formed and has its ever fresh source' (Ruge, cited in McLellan 1973:62). Marx moved to Paris late in October 1843, taking with him his notes on Hegel and, no doubt, working drafts of articles intended for publication in the new journal. Marx went to Paris because he was looking for something. The subtext of his work of this period is the distinction between the old and the new, past and future (Marx to Ruge, September 1843). He moved to Paris, I suggest, because he was looking for the future of Germany, because it was 'the new capital of the new world' (Marx to Ruge, September 1843).

On the eve of his departure from Kreuznach, Marx comments to Ruge on the point of the *Deutsche-Französische Jahrbücher:* 'we want to have an effect on our contemporaries, and especially our German contemporaries' (Marx to Ruge, September 1843). To this end, upon arrival in Paris, Marx dusts off his notes on Hegel and uses them to fuel two commentaries on the political situation back home. They were published in the first (and only) issue of the *Deutsche-Französische Jahrbücher*, as 'On the Jewish Question' (Marx 1843d) and 'Contribution to the Critique of Hegel's Philosophy of Law: Introduction' (Marx 1843e). In the first, Marx reworks his notes on Hegel to make sense of the call for the political emancipation of Jews. In the last, he reworks them to assess the possibility of Germany's 'emancipation from the Middle Ages' (Marx 1843e:187).

They tell us much about the relationship between civil society and the state.

'On The Jewish Question'

The question of civil rights for Jews was an important political issue in Germany at that time; it crystallized the problem defined in his notes on Hegel. 'On the Jewish Question' is the collective name for two essays. One reviews Bruno Bauer's book *Die Judenfrage*. The other reviews Bauer's response to its critics. These essays develop the idea, lodged in these notes (Marx 1843a:77–8), that the external dualism, between the state and civil society, is internalized as a 'division of the human being into a public man and a private man' (Marx 1843d:155):

> man—not only in thought, in consciousness, but *in reality*, in life—*leads a twofold life, a heavenly and an earthly life:* life in the political community, in which he considers himself a communal being, and life in civil society, in which he acts as a private individual, regards other men as a means, degrades himself into a means, and becomes the plaything of alien powers. *The relation of the political state to civil society is just as spiritual as the relation of heaven to earth.* The political state stands in the same opposition to civil society, and it prevails over the latter in the same way as religion prevails over the narrowness of the secular world, that is, by likewise having always to acknowledge it, to restore it, and allow itself to be dominated by it. In his most immediate reality, in civil society, man is a secular being. Here, where he regards himself as a real individual, and is so regarded by others, *he is a fictitious phenomenon*. In the state, on the other hand, where man is regarded as a species-being, *he is the imaginary member of an illusory sovereignty*, is deprived of his real individual life and endowed with an unreal universality. [8]
>
> (Marx 1843d:154, my emphasis)

These words highlight a deep inner dichotomy, present within each of us, a sense of living simultaneously in two worlds, private and public. The religious analogy between civil society and the state, and earth and heaven, which recurs throughout these 1840s essays, warrants caution. One might think that life on earth, in civil society, is more real that life in heaven, in the state. But this misunderstands Marx's point and encourages the Manicheism of which Foucault complains. Life on earth and in heaven are *equally* illusory. [9] Man of civil society, 'where he regards himself as a real individual', is a 'fictitious phenomenon', an isolated monad. Man of the state is an 'imaginary member of an illusory sovereignty', 'an allegorical, juridical person' (Marx 1843d:167). The monads of civil society 'are religious because men treat the political life of the state, an arena beyond their real individuality, as if it were their true life' (ibid.: 159).

Marx develops this analysis in criticism of the achievements of the American and French Revolutions. The 'rights of man'—to liberty, equality and property—'are nothing but the rights of a member of civil society, that is, the rights of egotistic man, of man separated from other men and from the community' (Marx 1843d:162). 'Liberty' is that

of an isolated monad, the right of the separation of man from man, 'the right of the restricted individual, withdrawn into himself' (ibid.: 162–3). 'Equality' means 'each man is to the same extent regarded as such a self-sufficient monad' (ibid.: 163). The right of man to property is the right of self-interest, 'the right to enjoy one's property and to dispose of it at one's discretion, without regard to other men, independently of society.' These three 'rights of man…form the basis of civil society', a society of individuals withdrawn into the confines of their private interests and private caprice and separated from their community (ibid.: 164). These rights make 'every man see in other men not the realisation of his own freedom, but the barrier to it' (ibid.: 163).

Marx contrasts this modern dualism with feudalism, when life was directly, visibly, political; when 'the general power of the state… [appeared]…as the particular affair of a ruler isolated from the people, and of his servants' (Marx 1843d:165–6), rather than as a sphere of general interests constituted by the rights of citizens isolated from their own community. But then:

> the political revolution…abolished the political character of civil society. It broke up civil society into its simplest component parts; on the one hand, the individuals; on the other hand, the material and spiritual elements constituting the content of the life and social position of these individuals. It set free the political spirit, which had been, as it were, split up, partitioned and dispersed in the various blind alleys of feudal society. It gathered the dispersed parts of the political spirit, freed it from its inter-mixture with civil life, and established it as the sphere of the community, the general concern of the nation, ideally independent of these particular elements of civil life. A person's distinct activity and distinct situation in life were reduced to merely individual significance. They no longer constituted the general relation of the individual to the state as a whole. Public affairs as such, on the other hand, became the general affair of each individual, and the political function became the individual's general function.
>
> (Marx 1843d:167)

The 'political revolution' Marx has in mind is that of 1789. It began the separation between civil society and the state, identified as a problem by Marx's critique of Hegel. 'The establishment of the political state and the dissolution of civil society into independent individuals…is accomplished by *one and the same act*' (Marx 1843d:167). This revolution separated the 'spiritual' or ideal and the 'material' elements of social life. Civil society is the material component. The state is the ideal component. Hence, 'the completion of the idealism of the state was at the same time the completion of the materialism of civil society' (Marx 1843c:166).

Marx distinguishes between merely 'political' emancipation, which is what the Jews seek, and 'human' or 'real, practical emancipation', which is what Marx seeks. Political emancipation, says Marx, sarcastically, is 'the emancipation of civil society from politics', the decomposition of man into private and public man, the right to be an isolated monad. Man will achieve 'real, practical emancipation' (Marx 1843d:155), only

when the real, individual man reabsorbs the abstract citizen and once more becomes a species-being, that is, when he recognizes the distinction between his own, social, power and political power: 'only then will human emancipation have been accomplished' (ibid.: 168). Even before a bourgeois revolution had been achieved in Germany, then, Marx had moved beyond the analysis sustaining it.

The 'Introduction'

In the other essay published in the *Deutsche-Französische Jahrbücher*, 'Contribution to the Critique of Hegel's Philosophy of Right: Introduction', Marx (1843e) attempts to make his critique of Hegel 'comprehensible to the general public' (Marx to Feuerbach, 11 August 1844). Having exposed the limitations of achieving civil rights for Jews, Marx takes aim at one of the chief pillars of Prussia's monarchial state, religion itself: 'the sigh of the oppressed creature, the heart of a heartless world…the opium of the people' (Marx 1843e:175). In criticising religion Marx aims to dis-illusion man, to make him act and think, to create a world which needs no illusions. Germany must not be allowed a minute for self-deception and resignation. Its shame is that it lacks the courage for a bourgeois revolution. It is not a modern society, it is a 'modern ancien régime' (ibid.: 179). But, argues Marx, Germany can 'somersault' not only over its own limitations, but at the same time over those of modern nations (ibid.: 183). In 'On the Jewish Question', Marx distinguishes between 'merely political' and human emancipation. Here he distinguishes between 'merely political' revolution, 'which leaves the pillars of the house standing' (ibid.: 184), and radical revolution. The class of individuals necessary to perform this somersault, that is, to completely overturn society, does not yet exist in Germany. But, says Marx, looking into the future, it is 'coming into being…as a result of the rising industrial development' (ibid.: 186), 'one of the major problems of modern times' (ibid.: 179). This class is the proletariat (ibid.: 186).

Marx's initial* explicandum *in brief

Let me review this reconstruction of Marx's initial *explicandum*, the relationship between civil society and political state. Reflecting on his journalistic experience by critiquing Hegel, Marx discovers 'civil society' and 'political state' to be equally problematic 'abstractions'. The problem is not one or the other but the 'essential relations' between them, the contradiction between the state's 'ideal destiny and its presuppositions' (Marx to Ruge, September 1843). He wants to move beyond the Manicheist conception of civil society and political state to discover the process generating the assorted conceptual dualisms of modernity (civil society/political state, private/public, economic/political). This is entirely in line with his view of the state formed at the *Rheinische Zeitung:*

> In investigating a situation concerning the state one is all too easily tempted to overlook *the objective nature of the circumstances* and to explain everything by the will of the persons concerned. However, there are circumstances which

> determine the actions of private persons and individual authorities, and which are as independent of them as the method of breathing. If from the outset we adopt this objective standpoint, *we shall not assume good or evil will*, exclusively on one side or on the other, but we shall see the effect of circumstances where at first glance only individuals seem to be acting.
>
> (Marx 1843a: my emphasis)

Marx is interested in these 'objective circumstances' which determine 'the actions of private persons and individual authorities'. During this formative period, Marx never wavers from his belief that (a) civil society and state are coeval phenomena, (b) they are connected by one set of social relations and (c) these relations are created by *one*—albeit ill-defined—process. It is the connections between these modern dualisms, these social relations and this modernizing process that interests Marx. He wants to discover the new world beneath the crust of the old. If one could find the causal mechanism generating these problematic dualisms, one could eradicate them by changing it.

Marx's early excavations

The *Deutsche-Französische Jahrbücher* folded after only one issue, in February 1844. Sales were poor. The French did not read it because, despite its title, it contained no French contributors. But the Prussian authorities read it and issued warrants for the arrest of Ruge, Marx, and their collaborators, should they return home. Since most copies of the journal were confiscated at the border, very few people in Prussia knew about Marx's essays. Like his notes on Hegel, they were to remain largely unknown until the end of the nineteenth century, by which time traditional Marxism had already taken shape.

His work for the *Deutsche-Französische Jahrbücher* ended, still in Paris, Marx makes some exploratory excavations into these 'essential relations' between civil society and political state. He reads avidly in political economy and records his thoughts in excerpts and commentaries in nine notebooks. In April 1844 he begins drafting manuscripts based on this reading (Marx 1844a). Much of their text is lost. Three manuscripts remain. Of the second, only the last four pages survive. The Soviet editors organized the text for publication and gave it headings (which the original lacks), and a title. The manuscripts were published for the first time in German in 1932, and in English in 1959.

Much depends on how these manuscripts are read. Their usual title 'Economic and Philosophical Manuscripts' was bestowed by their editors and reflects the way in which traditional Marxism construes this work of the 'early' Marx. They are seen as transitional between Marx's interest in Hegel's philosophy and his interest in economics; the point at which he turned Hegel's dialectical method right way up and applied it in the critique of political economy. I read them differently. They are the point of transition between his critique of the 'German philosophy of state and law' (Marx 1843e:176), and his emerging critique of civil society, the anatomy of which he discerned in political economy. Let me first reconstruct his retroductive line of argument in these manuscripts, then comment on its significance.

The retroductive line of argument in the 'Paris Manuscripts'

Manuscript One begins with that which binds together these monads of civil society—money—and specifically, with the mode of its distribution, Wages of Labour, Profit of Capital and Rent of Land. [10] Under these headings, Marx divides the broad printer's sheet into three columns and develops his understanding of these three forms of money side by side. [11] This columnar format, which allows simultaneity, is lost when Marx's handwritten thoughts are transfered to the printed page, which allows only consecutiveness. Where Marx envisages depth, a movement from surface effects to underlying causes, we see only linearity.

Towards the end of Manuscript One, Marx disregards the three headings and writes across the three columns, suggesting that he is considering a common cause. Here, he resolves 'the whole of society' into two classes, 'the property-owners and the propertyless workers' (Marx 1844a: 270), and retroduces the cause of private property in 'alienated labour'. This suggests that 'private property' and 'alienated labour' are internally related. Indeed, appropriation and alienation are 'but different expressions of one and the same relationship' (ibid.: 281). Marx contends that *every* category of political economy can be developed with the help of 'private property' and 'alienated labour': all categories are 'only a particular and developed expression of these first elements' (ibid.). Theoretically, we have to grasp the 'intrinsic connection' between the elements of 'this whole estrangement connected with the money-system' (ibid.: 271). Practically, 'it follows', argues Marx, 'that the emancipation of society from private property, etc. …is expressed in the political form of the emancipation of the workers' (ibid.: 280). Manuscript One breaks off unfinished with 'Let us look more closely at these [three] relations' (ibid.: 282).

In what little remains of the original Manuscript Two, Marx explores how 'the relations of private property contain latent within them the relation of private property as *labour*, the relation of private property as *capital*, and the mutual relation of these two to one another' (Marx 1844a:285). [12]

Manuscript Two breaks off with 'Clash of mutual contradictions' (ibid.: 289). Manuscript Three begins by refering back to missing parts of Manuscript Two, which suggests that Marx is developing his earlier thoughts on private property. He declares that the antithesis between the propertied and the propertyless manifests the 'active connection' or 'internal relation' and contradiction between labour and capital (Marx 1844a:293–4). He then moves on to the 'logical expression' of private property, its negation or abolition through communism (ibid.: 295). We may take this to be the theory which, the 'Introduction' tells us, will become a practical force in the hands of the proletariat. Marx then works out that once (alienated) labour is recognized as the essence of private property, labour's division becomes of prime importance as 'a major driving force' (ibid.: 317). In a few pages of extensive quotations from Smith, Say, Skarbek and Mill, he criticises political economy's 'vague and self-contradictory' views on the division of labour. These thoughts are followed by a section (pp. 322–6) on that which binds man to man ('the truly creative power' (ibid.: 325): money, the topic with which he

began in Manuscript One. The connection between start and finish, surface and interior, is the 'necessary relationship' between exchange and the division of labour.

Scattered on various pages of Manuscript Three are Marx's thoughts on the superiority of the Feuerbachian to the Hegelian dialectic. On the basis of the preface, they were arranged in one section and put at the end by their editors, giving them an air of coherence which they do not warrant. [13] In the light of Marx's earlier declaration that 'we must avoid opposing "society" and the "individual", for the individual is a "social being"' (Marx 1844a:299), one fragment stands out: Feuerbach overthrew the 'old dialectic' and established a 'real science', according to Marx, 'by making the social relationship of "man to man" the basic principle of the theory' (ibid.: 328).

Let us pause to gauge the development in Marx's thought to this point. In the summer of 1843, he poses the problem of the 'essential relations' between civil society and the state (Marx 1843c). Now, in the summer of 1844, he works out that alienated labour is the essence of private property: and private property, let us note, mediates between civil society and the state. The 'alienated man' of these manuscripts is the monad of 'civil society', the citizen of the state, observed by Engels on the streets of London. The *Concise Oxford Dictionary* lists two definitions of 'alienate': one, cause a person to feel isolated or estranged from (friends, society, etc); and two, transfer ownership of property to another person. These two meanings are found in the two German words Marx uses to express his idea of alienation: 'Entfremdung'—estrangement, and 'Entäusserung'—dispossession. This double meaning links 'man' to 'property'. Man is isolated from his community (that is, alienated in the first sense) because the product of his labour is transferred from his ownership to someone else (that is, alienated in the second sense). Thus, within the space of a year, Marx retroduces from 'man' (Marx 1843a) to the social relations between labour and capital (Marx 1844a).

The preface and the intended 'connected whole'

The 'Paris Manuscripts' are usually understood as a work in self-clarification, but his tone suggests that Marx regards this as a draft of a work for public consumption. He writes in the first person singular, 'I', for a third party, 'you', 'the reader', and Manuscript One, in particular, embraces the reader by frequent usuage of 'we' and 'us'. It is likely that Marx began work on these manuscripts intending to develop and clarify his thoughts recorded in the notebooks in the hope that these would take the shape of a book. Mid-way through Manuscript Three, he decided they did and so, at that point, he drafted a preface to give him an idea of its scope. The Soviet editors moved the preface to the front of the manuscripts. While this is where one would expect to find the preface of a published work, this editorial license disguises how and why this draft was written.

This preface gives us some idea of how Marx saw these manuscripts in terms of his past and future work. He refers to the 'Introduction', just published in the *Deutsche-Französische Jahrbücher* (Marx 1843e), and rationalizes the non-appearance of that which it was intended to introduce, the 'critique of jurisprudence and political science'. This suggests that the 'Introduction' was intended as an introduction to an intended, but never accomplished, re-writing of his notes on Hegel. 'While preparing it for

publication', he discovered that his thoughts could not be compressed into one work, but were better suited to a series of 'distinct, independent pamphlets'. Later, in a 'special work', he would attempt to represent them as a 'connected whole' by showing 'the interconnection between political economy and the state, law, ethics, civil life, etc.' (Marx 1844a:231).

It is probable that this 'connected whole' is the two-volume book, *Critique of Politics and Political Economy*, which Marx contracted to write on 1 February 1845, some six months following this statement. This envisaged, but never written, book has two sides. It seems likely that the economic side would have entailed reworking these 'Paris Manuscripts'. The proposed political half was sketched in a 'draft plan for a work on the modern state' (Marx 1844b). This plan suggests that Marx intended to continue the theme of his notebooks on Hegel and the two published essays they generated. This intended *Critique of Politics and Political Economy*, then, would have synthesized the ideas in his notebooks on Hegel and these Paris notebooks. These bibliographic details indicate that what Marx had in mind by this 'connected whole' was a synthesis between 'political state', the essence of which Marx discovered via his critique of law, and 'civil society', whose 'anatomy' he 'sought in political economy' (Marx 1859a: 20): an examination, perhaps, of their 'essential relations'.

The 'Paris Manuscripts' mark Marx's transition from his actual critique of politics, law and state and his emerging critique of political economy. This change of direction was stimulated by Engels's 'Outlines of a Critique of Political Economy', which was also published in the *Deutsche-Französische Jahrbücher* (Engels 1975) and which Marx read as editor (Claeys 1984). One point stands out from Engels's essay: 'In politics no one dreamt of examining the premises of the state as such. It did not occur to economics to question the *validity of private property*'. Private property is of critical importance: it is 'the entire content of the law and the state' (Marx 1843c:31) and also the 'basis of civil society' (Marx 1843d:163). Property mediates between 'the state' and 'civil society' and marks the point of convergence between the critique of law and the critique of political economy. It is the *pivot* about which Marx's change of direction turns, from the first, to the last. He turns to the critique of political economy to explain the 'alien powers' (Marx 1843d:154) controlling modern 'man', this 'essence of the state'. It marks a switch from one side of the dichotomy, the state, to the other, civil society.

5
Everything pregnant with its contrary

Nothing constant but change

> production relations…have not a simple, uniform character, but a *dual character*, that in the selfsame relations in which wealth is produced, poverty is produced also; that in the selfsame relations in which there is a development of the productive forces, there is also a force producing repression.
>
> (Marx 1847a:176, my emphasis)

Introduction

The *Critique of Politics and Political Economy* was to be finished by the summer of 1845. The contract was secured after much difficulty. This was his promised 'special work', the 'connected whole', which, I maintain, would excavate the 'essential relations' between civil society and political state. Marx never wrote it. Why not?

He experienced a litany of practical problems which would impede the progress of the most determined writer. Most immediately, he was expelled from Paris the day after he signed the contract and relocated to Brussels. But there is a *logical* reason why Marx made so little headway on the book. A retroductive inference about what might be changes one's perceptual judgement of what is. Retroduction is a constant to-ing and fro-ing, via imaginary experiments, between P and H which develops one's understanding of each. As he excavates, while working on the book, Marx keeps looking back, from the vantage point of his developing understanding, towards the surface of society, where he observes the Young Hegelians' reflections on the unfolding political situation in Germany. What he sees, he finds lacking; finding it lacking, he feels compelled to attack it.

Over the next two years, one by one, in a series of essays, some published, others not, Marx takes his former Young Hegelian allies to task: Ruge, Edgar and Bruno Bauer, Stirner and Heinzen. For good measure, he throws in a review of Proudhon. [1] These essays are not excavations. They are return journeys, from the depths of abstraction, to the surface of contemporary, empirical reality. Their tone is aggressive and vituperative. They are sudden attacks, raids or incursions, literally, 'forays', on the ideas of his former colleagues and allies. And, note this, they say little about what is happening in Germany; for the most part they are purely textual analyses, literary criticism.

These counter-critiques aim at different targets, but they are fuelled by the same core of analysis, that is, the problem formulated via his critique of Hegel, made public in 'On the Jewish Question' and 'Introduction', and explored in his ongoing research for the contracted book. This common analysis is one reason there is so much self-plagiarism in these essays. For example, parts of the 'Paris Manuscripts', together with the two review essays that form 'On the Jewish Question', are rewritten in *The Holy Family;* and parts of *The Holy Family* and the 'Paris Manuscripts' are rewritten in *The German Ideology*. There is a common core of ideas in these essays, articulated in response to different stimuli.

Marx's motive in making these attacks is to influence the political situation in Germany by undermining the credibility of these Young Hegelians and thereby enhancing his own. But they also allow him to try out his analysis, to see what works and what does not. He always counterposes his own views to those he criticises. In the process he adds to, refines and develops his thinking. These counter-critiques, then, contain various theoretical digressions in which he develops his own conceptions. It is these digressions I am particularly interested in, for they offer clues to the nature of these 'essential relations'. The following section draws out these digressions by tracing the bibliographic connections among these essays. Rather than read them in the light of the 'late' Marx, let us read these essays in the light of this contracted, but never completed, 'connected whole', and use it as the measure of Marx's subsequent work.

Forays to the surface: the counter-critiques

'Critical Marginal Notes'

When the *Deutsche-Französische Jahrbücher* folded, in February 1844, Marx broke with Ruge acrimoniously. Still in Paris, he worked at his economic manuscripts. In July, looking for a fresh outlet for his ideas, he took up with *Vortwärts! Pariser Deutsche Zeitschrift*, a semi-weekly German-language publication. Later that month, it published 'The King of Prussia and Social Reform'. The article was signed anonymously by 'A Prussian', but Marx knew that this Prussian was Ruge.

The article comments on the revolt and suppression of the Silesian cotton weavers, whose economic circumstances had deteriorated because of mechanisation and foreign competition. The Prussian King, Frederick William IV, who had sent in the troops, promised social reform. The article represents the uprising as a futile revolt of the helpless poor; Germany was a backward 'unpolitical' country, lacking the 'political soul' necessary to cure the social evil at the root of the poor's plight. Marx sees the revolt as the first big battle of the German proletariat against the bourgeoisie, the manifestation of the growth of consciousness of German workers foretold in his 'Introduction'. He construes Ruge's article as an unhelpful comment on the potential of German society and a contemptuous judgement on German workers. On 31 July he felt compelled to interrupt his writing on the 'Paris Manuscripts' to respond with'Critical Marginal Notes on the Article "The King of Prussia and Social Reform. By a Prussian"' (Marx 1844c). It was

first published in English in 1926.

It is not the ‘unpolitical condition of Germany’ which is the problem, argues Marx, but the ‘political point of view’ of the Prussian king. But this viewpoint is not a result of Germany’s backwardness: it is a very ‘modern condition’. The state, whose head is the king, cannot understand the cause of social ills because it is based on the very contradiction which generates them, that is, that between private and public life. Blind to this contradiction, the state tends to blame social problems on private life, especially the bad will of the poor. This contradiction is expressed in man’s isolation from his community, like a bee from its hive (Marx 1844c:204). [2] The Silesian weavers’ uprising was a partial reaction against this isolation, but contained within it a ‘universal soul’ in that it represents the situation of all workers. This uprising has ‘a theoretical and conscious character’ (ibid.: 201), for it proclaims its opposition to private property, the ultimate cause of social problems. It is within this context that Marx declares that ‘the German proletariat is the theoretician of the European proletariat, just as the English proletariat is its economist, and the French proletariat its politician’ (ibid.: 202).

Marx distinguishes between the form and the content of the state. Political parties see the root of social evils in the fact that a party other than themselves stands at ‘the helm of the state’. ‘Even radical and revolutionary politicians seek the root of the evil not in the essential nature of the state, but in a definite state form, which they wish to replace by a different state form’ (Marx 1844c:197). The danger facing the German proletariat, which is ‘just beginning’ (ibid.: 201), is of being seduced by ‘political understanding’, for it is incapable of ‘discovering the source of social distress’, and sees ‘the cause of all evils in the will, and all means of remedy in violence and in the overthrow of a particular form of state’. It is to guard against this danger that Marx develops his critique of political economy, and this is why he is compelled to rebut Ruge’s defeatism.

For the ‘first rudiments’ of an understanding of the relationship of the proletariat to social revolution, Marx refers Ruge—who, note this, was imprisoned for five years, when a young man, for his political activities—to ‘Einleitung zur Kritik der Hegelschen Rechtsphilosophie’, in the *Deutsche-Französische Jahrbücher*, which Marx co-edited with this very Prussian not six months earlier. [3]

‘The Holy Family’

Shortly after Marx took Ruge to task, during August 1844, he met Engels for the second time. Discovering they agreed on Young Hegelianism, they decided to critique it in a ‘small brochure’ (Marx to Feuerbach, 11 August 1844). Their target was the monthly *Allgemeine Literatur-Zeitung*, published in Berlin and edited by the Bauer brothers, Bruno and Edgar. It cannot have escaped their notice that Bruno had criticised Marx’s ‘On the Jewish Question’ in this very journal, and Edgar had translated and commented on Proudhon’s *What is Property?*, an issue dear to Engels. Engels wrote his part during the ten days he was in Paris. Marx wrote into the winter of 1844–5 until he had a book, *The Holy Family or Critique of Critical Criticism: Against Bruno Bauer and Company*, substantially complete in the fall of 1844 and published in Frankfurt in February 1845 (Marx 1844d). It was published in English in 1956. The ‘Holy Family’ refers to the Bauer

brothers and their followers. The religious metaphor alludes to the pillar of the state and the holy religious alliance between Prussia, Russia and Austria. 'Critical criticism' refers to the Young Hegelian belief that criticism in itself is a potent weapon.

Marx and Engels rework their earlier ideas in *The Holy Family*. Engels draws on his article in the *Deutsche-Französische Jahrbücher* to rebut Edgar Bauer's translation and review of Proudhon. Marx rebuts Bruno Bauer's review of 'On the Jewish Question', by repeating its very arguments. He aims at Bauer's understanding of the state, focusing on his belief that 'the general state system must hold together the individual self-seeking atoms' (Bauer, cited in Marx and Engels 1844d:120). Marx argues to the contrary: it is not the state that holds together civil society, the state is held together by civil life: 'by the fact that they are atoms only in imagination, in the heaven of their fancy' (Marx and Engels 1844d:120–1).

What *is* new is Marx's use of Feuerbach to critique the idealism of the Young Hegelians. This takes the form of a commentary on a Young Hegelian's review of Eugene Sue's novel *The Mysteries of Paris*, the city in which Marx was then living. Using this, he criticises Young Hegelians for committing what in modern philosophical terms we would call the fallacy of reification or misplaced concreteness: mistaking abstract concepts for real entities. An abstraction is made from a thing, then it is declared that the thing is based on the abstraction. It is as if the real incarnates the concept, when the concept should capture the essence of the real. Marx, reasoning retroductively, was observing facts and then attempting to discover what it was that gave rise to those facts. The idealism of these Young Hegelians is similar to the Christian religion at the heart of the German state. In Christian religion, Marx argues, man is the incarnation of God. But in speculative philosophy there are as many incarnations as there are things. Critical criticism is but a caricature of Hegel's conception of history, which in turn is nothing but an expression of the Christian dogma at the heart of the German state (Marx and Engels 1844d:85). This is why 'real humanism' in Germany has 'no more dangerous enemy' than critical criticism (ibid.: 7), and why Marx and Engels are compelled to attack it.

Around this very time, in a letter to Feuerbach (11 August 1844), Marx refers to 'my friend of many years—but now somewhat estranged—Bruno Bauer'. Bauer was friend enough to read a draft of Marx's doctoral dissertation in 1841, and to advise him to drop the reference to Prometheus at the conclusion to its Foreward because it could jeopardize his academic career. Here Marx returns the favour by throwing at the Bauer brothers Feuerbach's barbed assessment that 'Philosophy must come down from the heaven of speculation to the depth of human misery' (Marx 1844d:39).

Whatever its philosophical merits, the bulk of *The Holy Family* remains a review of a review of a book. It appeared in Frankfurt because no one in Paris would publish it. The 'broad public', for whom it was written, did not read it.

Shortly before *The Holy Family* was published, at the beginning of February 1845, Marx and other contributors to *Vorwärts* were expelled from Paris, under pressure from the Prussian authorities who were alarmed at their activities among its German exiles. Marx headed for Brussels, his home for the next three years. Engels followed in April. Marx arrived in Brussels very much committed to completing the contracted book. Certainly he had opportunity to do so, for he obtained permission to stay only after

promising to abstain from all political activity. During the first few months he buried himself in the municipal library, reading books in French on political economy and economic history and recording his studies in a further series of notebooks.

'Theses on Feuerbach'

In April 1845, Marx jotted down some brief thoughts, as was his practice, under the heading '1) *ad* Feuerbach'. He numbers them 1 to 11 (Marx 1845). [4] Marx had read Feuerbach's *Theses on the Hegelian Philosophy* when it was published in 1843. In the 'Paris Manuscripts', Marx concludes that Feuerbach overthrew the 'old dialectic' and established 'true materialism', a 'real science', 'by making the social relationship of "man to man" the basic principle of the theory' (Marx 1844a:328). We may speculate that Marx was attempting to clarify his relationship to Feuerbach in response to being labelled his 'disciple' by Stirner. These notes were found in his 1844–7 notebook after his death, edited by Engels and published as 'Theses on Feuerbach' in an Appendix to his *Ludwig Feuerbach*, in 1888 (Engels 1941). They were translated into English in 1903. Marx's original version was published in German and Russian in 1924, in Moscow.

These brief, private notes became imbued with imagined significance and acquired a disproportionate importance. Engels describes the 'Theses' as 'the first document in which is deposited the brilliant germ of the new world outlook' (Engels 1941:8). The editors of the *Collected Works* tell us that the 'Theses' are the 'basic principles of the new scientific world outlook', an initial draft of the first chapter of *The German Ideology* (which I consider next). No doubt the interpretation of the 'Theses' as forward- looking encouraged Althusser to believe that an epistemological break, between the early and the late Marx, occurred during 1845. (The 'Theses' and *The German Ideology* are the principal 'Works of the Break'.) Althusser describes the 'Theses' as 'those few lightning flashes which break the night of philosophical anthropology with the fleeting snap of a new world glimpsed through the retinal image of the old' (Althusser and Balibar 1977:30). To the contrary, these 'Theses'—propositions 'to be maintained or proved'—condense Marx's arguments to date and establish continuity between his preceding and subsequent work. Let me explain.

When Marx says, 'the highest point reached by contemplative materialism, that is, materialism which does not comprehend sensuousness as practical activity, is the contemplation of single individuals in "civil society"' (Thesis 9, Marx 1845:5), he alludes to the problem with which he began (Marx 1843c). [5] When he says reality must be understood as 'sensuous human activity, practice' (Thesis 1), he condenses his move from 'man'—this pregiven datum that political economy just 'finds in existence' (Marx 1843d)—to 'labour' (Marx 1844a). When he says, 'the standpoint of the old materialism is civil society; the standpoint of the new is human society or social humanity' (Thesis 10, Marx 1845:5) he condenses first, his distinction between merely 'political' emancipation—that is, the right to remain an 'isolated monad' of 'civil society'—and truly 'human' emancipation, and second, his criticism of 'civil society': 'Above all we must avoid postulating "society" again as an abstraction *vis-à-vis* the individual. [6] The individual *is the social being*' (Marx 1844a:299).

Marx objects to ‘civil society’ because it refers to only external or contingent relations between monads. He objects to the empiricism of ‘hitherto materialism’ (‘that of Feuerbach included’: Thesis 1) because it accepts ‘man’ as a given and does not conceive of the practice which creates this pregiven fact. Over the next fifteen years, as we shall see, Marx gradually replaces this ‘civil society’ of external relations between contingently connected individuals with a ‘society’ constituted by internal and necessary relations and practices. When he says, ‘the essence of man is no abstraction inherent in each individual. In its reality it is the ensemble of the social relations’ (Thesis 6, Marx 1845:4), he condenses his movement from ‘man’ to ‘labour’, from the ‘essential relations’ between civil society and political state to the ‘essence of private property, the essential relationship of the worker (‘alienated man’) to production and to the ‘social relations of property’. Marx devoted the remainder of his life to capturing the ‘law of motion’ of capitalist society, to understanding the ‘alien forces’ of which ‘man’ is a ‘plaything’.

What Feuerbach does for religion, Marx does for the state. Just as ‘Feuerbach resolves the essence of religion into the essence of man’ (Thesis 6, Marx 1845:4), Marx resolves the essence of the state into the abstract man of civil society. The link between religion and the state is the heaven/earth metaphor pervading these essays. We might reason thus: if ‘man’ is the essence of the state (Marx 1843c) and the ensemble of social relations is the essence of man (Thesis 6), then the ensemble of social relations is the essence of the state.

The German Ideology

Marx continued his research for the book throughout the spring of 1845. In July, he and Engels went to England for six weeks, where Marx spent much of his time reading economics in a Manchester library. Back in Paris, Marx’s work on the book was again interrupted, at the end of September, by his decision to resume his collaboration with Engels in attacking the Young Hegelians (Marx and Engels 1846). In a letter to his publisher, a year later, excusing the non-appearance of his book, Marx explains that this was ‘necessary to prepare the public for the point of view of my *Economics [Critique of Politics and Political Economy]* which is diametrically opposed to the previous German intellectual approach’ (Marx to Leske, 1 August, 1846, cited in McLellan 1973:143). More likely, it was necessary because Bauer had published a reply to *The Holy Family*, in which Marx and Engels were described as Feuerbachian dogmatists’, and in November 1844, another Young Hegelian, Max Stirner published *The Ego and its Own*, which strongly criticised Marx and Engels as ‘communist disciples of Feuerbach’ (McLellan 1973:143). Marx, not wanting to be seen as anyone’s disciple, could not resist a counter-attack.

Marx and Engels worked on the manuscript between the autumn of 1845 and August 1846, at which point, with them unable to find a publisher, it was abandoned. While sorting out Marx’s papers after his death in 1883, Engels found the manuscript among them. Upon Engels’ death, in 1895, it fell into the hands of his literary executor Eduard Bernstein, one of the leaders of the German Social-Democratic Party, before being taken

into the custody of the Institute of Marxism-Leninism of the Central Committee of the Communist Party of the Soviet Union, which first published it in full in 1932. The first English translation of the entire work appeared in 1964.

The manuscript is in poor shape. It is damaged in places. Some words and passages are unreadable. Some pages are missing. Chapters 2 and 3 of 'Volume' Two are missing. The manuscript contains neither a title nor headings. Those of the published version are the creations of their editors. They decided on *The German Ideology: Critique of Modern German Philosophy According to its Representatives Feuerbach, B.Bauer and Stirner* (Volume One), *and of German Socialism According to its Various Prophets* (Volume Two). As such it is now known.

There is some doubt who wrote the manuscript. As a rule, the pages are divided into two parts: the main text is on the left and additions and changes are on the right. The bulk of the main text is in Engels' hand. Most of the additions and changes are in Marx's hand. (Some passages were also crossed out by Eduard Bernstein.) But some passages in Chapter 3 of Volume One, and all of Chapter 5 of Volume Two, are in Joseph Weydemeyer's hand. 'M.Hess' appears at the end of this last chapter, suggesting that it was written by Hess, copied by Weydemeyer and edited by Marx and Engels. Chapter 4 of Volume Two was published separately under Marx's name, suggesting that, although it is in Engels' hand, Marx was its author (see CW 5:586 n. 7).

T*he German Ideology* draws on and develops arguments found in *The Holy Family* and the 'Paris Manuscripts'. The manuscript for Volume One contains a brief rebuttal of Bruno Bauer's criticism of Feuerbach, makes comments on the 'struggle' between Bauer and Stirner, rebuts Bauer's criticism of *The Holy Family*, and comments on Bauer's assessment of Moses Hess (who, apparently, contributed to the manuscript.) The bulk of Volume One, however, is a detailed textual analysis of Stirner's book *The Ego and Its Own*. [7] The manuscript for Volume Two is considerably briefer and critiques Germany's 'true socialists'.

McLellan describes *The German Ideology* as a masterpiece of cogency and clarity in its account of the materialist conception of history (McLellan 1973:151). Oakley (1983:33) regards much of it as 'simply turgid polemic of little lasting significance'. Such conflicting assessments suggest that this text allows the reader much discretion. Due to its non-publication until 1932, it played no active part in the formulation of Marxist thought, but was itself formulated according to traditional Marxism. This has it that, in *The German Ideology*, Marx and Engels establish the materialist conception of history by reversing the direction of causality between the ideal and the material. And so it came to be regarded as 'the first mature work of Marxism' (CW 5:xiii).

This interpretation is based largely on its first chapter. This chapter is a creation of the Soviet editors, formed by gathering together the various rough drafted and scattered theoretical sections of the manuscript, written at different times, in different circumstances. They discerned in this creation a coherent outline of the 'principles of historical materialism'. The chapter's title 'I.Feuerbach. Opposition of the materialist and idealist outlooks' is a creation of Engels, who re-read the manuscript after Marx's death. The chapter's sub-divisions and most of its headings were also created by the editors. The reader will find no reference to a materialist conception of history in anything but the

later imposed sub-headings.

I do not believe *The German Ideology* attempts to establish the 'principles of historical materialism'. Nor do I believe it is the 'first mature work of Marxism'. To the contrary, there is a clear line of continuity linking this 'Work of the Break', as Althusser (Althusser and Balibar 1977) would have it, with Marx's previous work. [8] This is evident in the very terminology used to describe their conception of history. For example:

1. Unlike German philosophy, Marx and Engels (1846:36) 'ascend from earth to heaven': a metaphor Marx uses to refer to the relationship between civil society and political state.
2. They do not set out 'from what men say, imagine or conceive, nor from men as narrated, thought of, imagined, conceived, in order to arrive at men in the flesh' (Marx and Engels 1846:36). This is a reference to citizens of the state who imagine themselves free and equal.
3. Their 'premises are men, not in any fantastic isolation and fixity, but in their actual, empirically perceptible process of development under definite conditions' (Marx and Engels 1846:37). Here we are reminded of the 'fantastic isolation' of the 'atom' of 'civil society'.

The ideal/material inversion metaphor is redolent of the religious metaphor Marx uses to characterise the relationship between civil society and the state. Indeed, they are parallel pairs of concepts, hence the 'idealism of the state' and the 'materialism of civil society' (Marx 1843c): expressions Marx first uses in his critique of Hegel in 1843 and which recur in this manuscript written three years later. Both metaphors are misunderstood. Marx opposes the very idea of the separation between the ideal and the material; the inversion metaphor misleads because reversing the direction of causality leaves their separation intact (Sayer 1987). This is true also of that other Hegelian inheritance, civil society/the state. Marx (and Engels) continue to critique the *very idea* of the separation of civil society from the state, and construe the idealism of the state and the materialism of civil society as real social processes, falsely understood.

Idealism arises when ideas become separated from their empirical basis in social relations and acquire a 'semblance of independence' (Marx and Engels 1846:36–7). This is a general feature of social consciousness, but it is 'the *specific* illusion of lawyers and politicians' (ibid.: 330, my emphasis), who elaborate and give special significance to 'the cult of these concepts, and who see in them, and not in relations of production, the true basis of all real property relations' (ibid.: 363). Idealism is not simply a philosophical error, it is a—yet to be explained—real everyday process. Thus, Marx and Engels criticise not only Hegel's philosophical idealism *but also the juridic understanding people have of themselves*, an understanding propagated by 'statesmen in general', 'ideologists' or idealists of the state. Hegel's philosophy is not the source of the problem, rather 'Hegel idealises the conception of the state held by the political ideologists *who still took separate individuals as their point of departure*' (ibid.: 348, my emphasis).

The dissolution of civil society into isolated individuals (the essence of this juridic understanding) is explained in terms of the relationship between forces of production, the division of labour and private property. The 'abstract individuals' who constitute civil

society (Marx and Engels 1846:87) are no more a misconception than the 'idealists of the state': they are *real* abstractions. The development of productive forces and the dissolution of civil society into isolated individuals are sides of the same—unexplained—process (ibid.: 89). Whatever explains how individuals are organized into a productive force will explain what robs them of 'all real life-content' and makes them *abstract* individuals. This process—which I will later explain—creates the abstract individuals who constitute civil society and creates the idea of the state. These twin products are mutually supportive. This dichotomous 'man' is the essence of both civil society and the state. So what is the 'essence' or 'substance' of man? Marx and Engels retroduce that it is the 'sum of productive forces' (ibid.: 54). We can reason thus: if 'forces' are the essence or substance of man they are also the essence or substance of the relationship between civil society and the state.

But a tension between two conceptions of the state emerges in these manuscripts. 'The state' is both an idea (an illusory community of common interests) and the name given to a form of organization, 'alongside and outside civil society' (Marx and Engels 1846:90) which deals with concepts and rights (fused in law) which have acquired the 'semblance of independence' (ibid.: 36–7). What needs explaining is how—by what process—this 'imagined community' becomes the institutional nexus recognized as 'the state', 'alongside and outside civil society'.

Marx abandoned work on the manuscript of *The German Ideology* in the summer of 1846, and resumed work on his major book. There will be some delay, he explains to his publisher, because Volume One 'has been lying around for such a long time' it must be revised. He promises this volume 'at the end of November' (Marx to Leske, 1 August 1846). The second volume, 'which is more historical', 'will follow quickly'. To convince Leske of the likely sales, Marx closes this letter with 'If necessary, I could prove to you with numerous letters from Germany and France that the public awaits the book with great excitement'. But Marx failed to produce the manuscript, prefering instead to take up the cudgels against his fellow socialist and rival, Pierre-Joseph Proudhon.

The Poverty of Philosophy

Marx admired Proudhon's 1840 book *What is Property?*, for it challenged the very premise of political economy. Indeed, *The Holy Family* defends Proudhon against Edgar Bauer's criticisms. But Proudhon, then the most influential socialist in Paris, had been unwise enough to decline Marx's invitation, in May 1846, to act as the Paris correspondent for the Communist Correspondence Committee, which he was helping to establish. In December 1846, while still in Brussels, Marx acquired Proudhon's *System of Economic Contradictions or the Philosophy of Poverty* (1846), 'skimmed through it in two days', then wrote his impressions in a long letter to Pavel Annenkov, dated 28 December (Rubin and Manale 1975:64; see CW 38:95–106).

In the New Year he began work on a book-length critique. *The Poverty of Philosophy: Answer to the 'Philosophy of Poverty' by M.Proudhon* was published in Brussels and Paris in early July 1847 (Marx 1847a). Marx must have regarded it highly, for he recommended it as an introduction to *Capital* (ibid.: 165). Proudhon regarded it as 'a

tissue of abuse, falsification and plagiarism' and called its author 'the tapeworm of socialism' (ibid.: 166). The book consists of two chapters, 'A scientific discovery' and 'The meta-physics of political economy'. The first deals with the opposition between exchange-value and use-value, during which Marx declares 'money is not a thing, it is a social relation' (ibid.: 145); the second is a critique of Proudhon "s use of dialectics and sets out Marx's own understanding of production relations.

It has been suggested that Proudhon attempted to apply Hegel's method to political economy under Marx's encouragement, even, perhaps, his tutelage (Oakley 1983:34; see also Marx's letter to J.B.Schweitzer, 24 January 1865). In *The Holy Family*, Engels notes 'Not only does Proudhon write in the interest of the proletarians, he is himself a proletarian, a worker' (Marx and Engels 1844d:41). Now Marx mocks this proletarian's attempt to apply dialectics to political economy (Marx 1847a:119). For Marx, ideas, principles and categories are 'but the theoretical expression' of 'the movement of production relations' (ibid.: 166) and, for this reason, they are 'historical and transitory products…as little eternal as the relations they express' (ibid.: 166). While political economy recognizes that production occurs within social relations, it does not explain 'how these relations themselves are produced, that is, the historical movement which gave them birth" (ibid.: 162). A failure to grasp the historical movement of production relations leads to the attribution of the origins of thought to the movement of 'pure reason'. Just so with Proudhon. 'What Hegel has done for religion, law, etc., M.Proudhon seeks to do for political economy' (ibid.: 164). Just as Hegel sees civil society as the incarnation of the idea of the state, Proudhon holds things 'upside down', 'like a true philosopher', and sees in actual relations nothing but the incarnation of economic categories. Proudhon's 'dialectics' is among categories and not—as it is for Marx—among production relations. Marx concludes that 'M.Proudhon has nothing of Hegel's dialectics but the language' (ibid.: 168).

'Civil society', which pervades the earlier essays, appears only twice in *The Poverty of Philosophy*, on the very last page (Marx 1847a:212), because, I suggest, Marx has reconceptualised the 'civil society' of atomistic individuals into a 'society' of 'social relations based on class antagonism'. Thus, 'These relations are not relations between individual and individual [as in 'civil society'], but between worker and capitalist, between farmer and landlord, etc. Wipe out these relations and you annihilate all society' (Marx 1847a:159). This is a conception of a society of internal relations between the elements that comprise social relations of production. Because these relations are between antagonistic parties:

> production relations…have not a simple, uniform character, but a *dual character*, that in the selfsame relations in which wealth is produced, poverty is produced also; that *in the selfsame relations* in which there is a development of the productive forces, there is also a force producing repression.
>
> (Marx 1847a:176, my emphasis)

Marx's conception of production relations as dual-sided will prove critical to my use of Foucault to explain the relationship between the organization of production, the

materialism of civil society and the idealism of the state.

Between 1843 and 1847, then, Marx progressed from 'man' to 'social relations' ('man' is the ensemble of social relations) to the historical *movement* of those relations. 'The only immutable thing is the abstraction of movement—*mors immortalis'* (Marx 1847a:166). Marx subsequently claims to have discovered the law of motion of modern society (Marx 1867b).

A month after Marx started work on *The Poverty of Philosophy,* in February 1847, Leske cancelled the contract for the *Critique of Politics and Political Economy* book. Since signing it, in February 1845, all Marx had to show was a manuscript abandoned to the mice *(The German Ideology)* and *The Poverty of Philosophy,* which few read. Since no manuscript for the *Critique of Politics and Political Economy* has been found, we can only speculate on his actual progress. Marx's life-long tendency to promise more than he could deliver casts doubt on whether he wrote anything worth publishing.

Redefining P_{123}: how to explain modernization

Before examining the culmination of Marx's work in this period, let me return to the form of a retroductive argument:

1 Some surprising phenomena, P_{123}, are observed.
2 P_{123} would be explained if H were to exist and act in the postulated way.
3 Hence, there is reason to think H exists and acts in this way.

A hypothesis (H) is a theory-loaded conjecture (Hanson 1969b:227). Since perception is conceptually mediated, the conjecture causes us to see P_{123} in a different way. We see connections among the phenomena, where none previously existed. It is this which makes P_{123} intelligible and H plausible. Reproduction is a constant shuttling back and forth between P_{123} and H, transforming the nature of each. The hypothesis mediates between what we already know and what we are about to learn (ibid.). As one excavates, the original problem is recast. It is broadened as one discovers further, connected problems requiring explanation, and this guides the trajectory of future excavations.

The initial P_{123}, for Marx, is the separation between civil society and political state. Let us call it CS-PS. Through his provisional excavations, in the Paris notebooks and manuscripts, Marx retroduces that the cause of CS-PS is capital. So H is C. He embellishes this hypothesis in his theoretical digressions contained in his 'forays to the surface'. But, at that point, just as his sketchy understanding of capital allowed him to see a pattern in surface phenomena, a very interesting thing happened: the very nature of P_{123} began to change. One of those periodic crises of capital over-accumulation began in Britain during 1847, and worked its way through France and the rest of the capitalist world. Let me pick up the narrative.

The Manifesto of the Communist Party

With the contract for the *Critique* cancelled and the book on Proudhon published, if little read, during 1847 Marx invested his energy in founding the first communist international organization of workers, the Communist League. At its second congress, held in London at the end of November 1847, he was asked to draft a manifesto to publicize the League, in anticipation of the revolutions which, indeed, spread across Europe, beginning in Paris in February 1848. After some delay, and much pressure, Marx finished the manifesto in early February 1848, and it was published in London that month, by the Working Men's Educational Association, as the *Manifesto of the Communist Party* (Marx and Engels 1848). [9] It bears both their names. Engels acknowledged that it is 'essentially Marx's work' (cited in McLellan 1973:180), but actually it is based on a version written by Moses Hess, three drafts written by London communists, and Engels's 'Principles of Communism', which consists of twenty-five questions and answers about communism. The *Manifesto* is an amalgam of these ingredients, pulled together by Marx.

In the *Manifesto*, Marx works his concept of capital to the surface and uses it to make sense of the political situation across Europe. In effect, he redefines P_{123}. It begins with a short preamble and consists of four main sections: I, Bourgeois and Proletarian, II, Proletarians and Communists, III, Socialist and Communist Literature, and IV, Attitude of the Communists towards the Various Opposition Parties. A common impression, encouraged by the opening sentence of its Preamble, 'A spectre haunts Europe—the spectre of communism', is that the *Manifesto* is simply a call to arms to the working class. This impression is reinforced by the first sentence of the first section, 'The history of all human society, past and present, has been the history of class struggles', and the closing sentence of the last, 'Proletarians of all Lands, Unite!' Between these opening and closing rhetorical flourishes, however, lies another story.

A spectre is 'a visible disembodied spirit', 'something that haunts or perturbs the mind'. Knowing its reputation, one might think that the purpose of the *Manifesto* is to celebrate the proletariat and condemn the bourgeoisie. But no. Its purpose is to 'confront the old wives' tale of a communist spectre', to address 'bourgeois objections to communism' (Marx and Engels 1848:52) by making an 'open proclamation of the communist outlook'. It celebrates, rather than condemns, the bourgeoisie, its work, ideas and achievements. Indeed, its choice of words suggests that it is written for the bourgeoisie, which is addressed directly as 'you', rather than the proletariat, which is referred to as 'they'. [10] The *Manifesto* certainly reflects the views of 'communists of various nationalities', but it *speaks* to the bourgeoisie. It aims to distinguish between what is real and what is imagined about communism, to ease the perturbed mind of the bourgeoisie. In particular, it addresses the fears of those who believe that communists would abolish private property, the family, and nationality. On each count, the *Manifesto* argues that capital has already abolished what most people hold dear and that communists want to abolish only the privileges of a minority. Private property has 'been abolished for nine-tenths of the population'. As for the privileged one-tenth: 'you accuse us of wanting to abolish *your* property. Well, we do!' (ibid.: 46).

The *Manifesto* is often remembered for its assessment that 'the modern State authority is nothing more than a committee for the administration of the consolidated affairs of the bourgeois class as a whole' (Marx and Engels 1848:28). This oft-repeated quotation has fuelled an instrumental conception of the state, as something to be seized or smashed. This interpretation reflects the Manicheism which construes 'society' as good and 'state' as evil, which I believe Marx tried to move beyond. Since the *Manifesto* is Marx's most widely read text, this conception has prevailed over the complex of interconnections between civil society and political state that Marx had painstakingly analysed up to this point, in those late-published and little-read notes and essays, and which I have attempted to reconstruct.

We should note, then, that some of the measures advocated in the *Manifesto,* far from entailing smashing the state, actually entail its further centralization and growth. The proletariat will 'wrest all capital from the bourgeoisie' and 'centralise the means of production into the hands of the State'. We should note also that Marx and Engels later corrected the *Manifesto's* conception of the state and distanced themselves from its political programme in the 'Preface to the German Edition of 1872', written in the light of the Paris Commune of 1871. Regarding the state, 'one thing especially was proved by the Commune, viz., that "the working class cannot simply lay hold of the ready-made State machinery, and wield it for its own purposes"' (Marx and Engels 1872:22). They add that the practical application of the *Manifesto's* principles depends on historical conditions 'and, for that reason, no special stress is laid on the revolutionary measures proposed at the end of Section II. That passage would, in many respects, be very differently worded today'. [11]

In this context, note too, that when the *Manifesto* speaks of the 'modern' bourgeoisie, it means primarily the *French* bourgeoisie. The *Manifesto's* criticism of German or 'true' socialists, who overlooked the fact 'that French social conditions had not been implanted into Germany side by side with French socialist literature' (Marx and Engels 1848:58), and who forgot that 'French criticism…presupposed the existence of modern bourgeois society' (ibid.: 60)—which 'still had to be fought for in Germany' (ibid.)—is a criticism that can be levelled at Marx and Engels too. Fifty years later, Engels acknowledged that 'history has proved us, and all who thought like us wrong' (Engels 1895:16). 'It has made it clear that the state of economic development on the Continent at that time was not, by a long way, ripe for the removal of capitalist production' (ibid.). They were all 'under the spell of previous historical experience, namely that of France' (ibid.: 12).

Time, space and movement

The common attribute of workers, the bourgeoisie, industry and the state, emphasized through repetition, is that they are *modern*. [12] The *Manifesto* speaks of 'modern' large scale industry, the 'modern' bourgeoisie, the 'modern' representative state, 'modern' workers, the 'modern' working class, 'modern' industry, 'modern' industrial labour', the 'modern' enslavement by capital, the 'modern' worker, and so on. These modern characteristics of society are connected by capital, a 'social force', and it is this, rather than the bourgeoisie, the proletariat or the struggle between them, that is the subject, the

driving force of history. The *Manifesto* is a compelling and objective analysis of how capital causes modernization, not an indictment of the bourgeoisie.

The *Manifesto's* words on modernization make interesting reading in the light of Harvey's account of the condition of postmodernity in terms of the 'compression' of space and time (Harvey 1989). Marx lacked the concepts to express the idea, but the *Manifesto* is a concise description of the time-space compression which took shape during the 1840s, under the stimulus of the crisis of over-accumulation in 1837 (and its post-crisis in 1842), and given added momentum by the crisis of 1847–8. 'Urged on by the need for an ever-expanding market' (Marx and Engels 1848:29), capital, the *Manifesto* tells us, 'sets up means of communication here, there and everywhere', drawing raw materials 'from the remotest spots', selling its commodities 'the wide world over', destroying national foundations by invading every quarter of the globe.

Marx's words on 'the modern' were written with an eye on the political situation in Germany, but in the light of what he witnessed in Paris, capital of modernity. He saw that an effect of the 1789 Revolution was that France was divided geometrically, into *départements*, composed of absolutely regular squares. He saw how capital was urbanized, that is, made concrete through the design and architecture of a host of new, 'modern' buildings (Clarke 1992). Before his eyes were tangible counterparts to the abstract dualisms of modernity which he spent the decade trying to understand, a landscape of new private and public buildings.

In 1844, Marx argued it was impossible for the state to understand the causes of social problems because it was based on the very contradiction which caused them (Marx 1844c). Blind to this, it could only blame private individuals, and most often, the bad will of the poor. This abstract analysis, developed in examination of rural poverty, found concrete expression in the very buildings of urban Paris. The idea of the competititive free market emphasized individual responsibility. Those who had 'chosen' to be poor, sick, mad or bad, had to be reformed, and so 'houses of correction' were constructed, poor-houses, work-houses, orphanages, hospitals, asylums, and prisons. Buildings of the 'Great Confinement', housing organizations to correct symptoms of 'moral pathology', came of age during this decade. They materialised a system for collecting, confining and correcting those capable of disturbing the social order. This programme for re-forming private individuals, in the image of the rational, responsible monad, consumed by far the greatest slice of public building resources, and was the tangible, darker underside to the idea of the state.

Side-by-side with these 'public' buildings of correction were private buildings within which commodities were made and exchanged: factories, corn and coal exchanges, stalls, fairs, markets and shops within which producers and consumers sold and bought (Markus 1993:300). The movement of goods, by water or land, described by the *Manifesto*, needed buildings at every point for loading, unloading, storing and inspecting: quays, warehouses, offices, toll booths and custom houses. To regulate what could be made and sold, by whom, when and where, laws had to be enacted and administered, within council chambers, parliamentary assemblies, guildhalls and lawcourts (Markus 1993).

By 1850 Paris, like most modern cities, had a proliferation of new public and private buildings. This modern organization of space was active in the design of the very place in

which Marx would spend so much time studying after moving to London. The year the *Manifesto* was published (1848), plans were made to fill the hollow square of the British Museum's courtyard with a circular reading room. On its wall was a cylindrical map of knowledge. At its centre, from which radiated readers' tables, sat a Superintendent, under the eye of the dome and surrounded by concentric rings of the catalogue (Markus 1993:178). Marx researched capital at the centre of a panoptic organization of space, modelled on a symbol of the idea of the state in the capital of modernity. Also at this time, seventeen acres of grassy hillside were being turned into London's most fashionable necropolis, Highgate Cemetery, where Marx would be buried in 1883. Now fallen into fascinating disarray, it was once a showcase of death, with graves laid out systematically in rows, the creation of the founder of the London Cemetery Company, Stephen Geary, an entrepreneur by inclination and an architect and civil engineer by training (Barker and Gay 1984).

This modern organization of space complemented a transformation in the organization of time. Marx moved to Paris in the middle of the decade in which France built its railway and canal networks and constructed a system of local roads. Use of the telegraph, which transmitted information instantly between widely separated places, and the postal service, also developed during the 1840s. The railway network was especially important in developing modern time. Its timetable synchronized and standardized time in discrete and distant places, creating a giant national clock (Dohrn-Van Rossum 1996). These modern means of communication shrank space by reducing time. Not only did this effectively bring places and people closer together, by reducing the travelling time between them, it also created the sensation of *movement*, and this changed how things were perceived. Travelling by train was a concrete counterpart to Marx's thoughts on the immutability of the abstraction of movement (Marx 1847a:166).

It is likely that Marx had much the same experience of the train as his contemporary, Victor Hugo:

> The motion is magnificent… The speed is unbelievable. The flowers at the track-side aren't flowers any more; they turn into blotches or red and white stripes. There are no points, only stripes…. Inside the carriage, people say, "It's three leagues from here; we'll be there in ten minutes."
>
> (Hugo, cited in Robb 1997:206)

Hugo's observations are of his experience of the line between Brussels and Antwerp. It is not unreasonable to suppose that Marx took the very same journey while living in Brussels. Hugo 'managed the extremely unusual feat of *describing exactly what he saw:* forms disengaging themselves from concepts; familiar objects turning into abstract shapes… Through the carriage window, the world did not simply look different; it was different' (Robb 1997:206–7, my emphasis). Marx, like Hugo, realised that he was witnessing something new. Hugo described what he saw. Marx tried to discover the cause of what he saw: a compression of processes in space and through time, accelerating the pace of daily life, driven by the engine of capital. Permanent change. Creative destruction. Terrible beauty. Capital 'creates a world after its own image' (Marx

1848:31), and this image, this world, is a modern one.

Marx's *explicandum*, then, is much broader than 'economics'. It is an experience of space and time, materialised in the built environment, shaped by the imperative of capital accumulation. It is a period when the economic and the political, the private and the public, now taken for granted, were being segregated. Marx tried to understand the process of segregation, modernization. For a description of Marx's *explicandum* read the novels of Balzac and Hugo, for they portray the formation of modern society in which, as Marx put it, 'all bounds of morals and nature, of age and sex, of day and night, were broken down' (Marx, cited in Berman 1983:87). [13]

The idea of the state versus the idea of communism

The atomization of society, the idea of the state and capital accumulation developed in mutual interaction. Central to this was the linearization and homogenization of space and time, and their 'compression' by modern means of communication, for this created the sense of simultaneity that makes it possible for diverse monads to feel membership of this imagined community. Marx wanted to unite these monads into a genuine community by removing the source of their atomization, bourgeois private property; not to seize control of the state, or to replace one form of state with another, but to remove the need for an imagined community at all.

For a few months, it seemed Marx might be right. In February 1848, a three-day Parisian uprising deposed the 'bourgeois king', Louis Philippe, established a French republic, guaranteed the right to work and established universal suffrage for men. 'It's like the end of the world. Debtors aren't paying, creditors aren't suing, governments aren't governing, the troops are disarmed, magistrates aren't prosecuting, the legs are leading the head!' (Balzac, cited in Robb 1995:388). But a reaction quickly set in. Small property-ownership (especially among the peasantry) was widespread in France and property was not what it is today, the symbol of conservatism. Then 'its value was fresher, cherished like a conquest, and less exhausted by propaganda' (Furet 1995:406). The idea of abolishing it, the *Manifesto's* arguments notwithstanding, was not universally popular. And resentment grew against the thousands of unemployed, drawn to Paris from the provinces, by the guarantee of a right to work, seemingly subsidized by the state.

When property is 'liberated' from the community, wrote Marx and Engels, the state becomes a separate entity 'alongside and outside' civil society, a means by which the bourgeoisie enforces its own interest in the name of the public. In June, the propertied proved the truth of this analysis by suppressing the revolution with ferocious violence, in the name of the state, and creating a conservative republic. The matter was settled over barricades in the east of Paris between 23 and 26 June 1848, the Parisian Left on one side, the bourgeoisie and peasantry on the other. The insurgents were defeated in the name of the Republic, which 'through universal suffrage had become the legitimate choice of the whole nation' (Furet 1995:406). Thousands were killed and those who were not were deported to Algeria. Immediately following that defeat 'all over Europe, the new and old Conservatives and Counter-Revolutionists raised their heads with an effrontery that showed how well they understood the importance of the event' (Engels

1967b:184).

The *Manifesto* 'proclaimed the winning of universal suffrage, of democracy, as one of the first and most important tasks of the militant proletariat' (Engels 1895:20). It also proclaimed that 'the workers have no country' (Marx and Engels 1848:49), that 'national distinctions and contrasts are already tending to disappear' (ibid.: 50). When French workers, however, had the opportunity, in December 1848, they voted *en masse* with the petty bourgeoisie to elect as President of the Republic somone who embodied a whole concept of the state, of France, Napoleon's nephew, Louis Napoleon. The people identified Louis Napoleon not with one political force among several in the state, nor even as an important political leader with a following of his own, but with 'France' (Furet 1995). The idea of 'the state', this imagined community, proved more compelling than the idea of communism. Workers in 1848 were singing the *Marseillaise*, not *The Red Flag*. By the end of 1851, this elected President of the Republic had overthrown it in a *coup d'état* and proclaimed the Second Empire. And, as Furet puts it: 'insurrectional socialism…went on its way in an internal exile, building up in advance an autonomous political culture for a working class which was yet to come' (Furet 1995:410).

The *Manifesto* claimed that a bourgeois revolution 'can only be the immediate precusor of a proletarian revolution' (Marx and Engels 1848:68). Its downfall and the victory of the proletariat are 'inevitable', it argues, because capital's periodic crises of over-accummulation will increasingly cripple capitalism and eventually destroy it. But it was modernization—a compression of space and time—that proved 'inevitable'. Through the medium of Haussmann, Prefect of the Seine between 1853 and 1870, the bourgeoisie remodelled Paris from top to bottom, starting with the ancient centre, that tangle of medieval streets between the rue Saint-Denis and the rue Saint-Martin, the abode of popular insurrection. Haussmann created a rectilinear Paris, with avenues, squares, apartment blocks and a super-efficient sewage system, transforming Paris into a truly modern city. By the time of the next workers' uprising, the Paris Commune of 1871, Paris had been rebuilt in the image of capital: the geometry of the straight line.

The modern Prometheus: an afterthought

Marx began, in 1839, with 'Who will follow Hegel?' He likened the Young Hegelian to Prometheus, taking fire from the Gods and giving it to man. Marx certainly knew his Aeschylus. We do not know if he realised that the 'modern Prometheus' is the sub-title of Mary Shelley's *Frankenstein* (1818). Attempting to increase human powers through science and rationality, the scientist Victor Frankenstein creates a human monster and endows it with life. But it behaves irrationally and beyond his control, with horrifying results. The creation eventually destroys the creator. This modern Prometheus surely lies behind the *Manifesto's* likening of bourgeois property relations to a magician 'who is no longer able to control the spirits his spells have summoned from the nether world' (Marx and Engels 1848:32). It is an interesting representation of 'modern bourgeois society'. We are in awe of the creation, but dread its effects. 'Our epoch becomes more and more terrible and beautiful' (Bruno Bauer to Marx, 1840).

Note then, Marx began this period with the classical Prometheus, chained to a rock in

the Caucasus, his liver preyed upon every day by a vulture, but he ended it with the modern Prometheus, let free to wreak havoc on the world, answerable to no one. [14]

'Prometheus' means 'forethought'. In the name of his brother, Pandora's husband, Epimetheus, let me add this 'afterthought'. Marx intends this modern Prometheus to refer to the bourgeoisie (capital being the monster): but this analogy does not work at all, for Frankenstein's monster does only harm, while Marx maintains capital has twin effects, poverty and wealth. The analogy is more applicable to Marx himself. Just as Prometheus turned against the gods, Marx turned against Hegel ('our master'), stealing his fire, handing it to man and teaching him to use it against the world of appearances. Who was to follow Hegel was a question Marx could not then answer. But Marx followed Hegel. And just as 'Frankenstein' is usually mistaken for the name of the monster, rather than its scientist creator, so 'Marxism' can be portrayed as a modern Prometheus. It took hold in Russia precisely because it was seen as rational and scientific, a modernizing influence (Figes 1996:140). As to its effects, let us note Proudhon's warning to Marx:

> Let us seek, if you wish, the law of society, the manner in which these laws are realised, the process by which we shall succeed in discovering them; but, for God's sake, after having demolished all the *a priori* dogmatisms, do not let us in our turn dream of indoctrinating the people…let us not…make ourselves the leaders of a new intolerance, let us not pose as the apostles of a new religion, even if it be the religion of logic, the religion of reason.
>
> (Proudhon to Marx, 17 May 1846, cited in McLellan 1973:159)

It is to the textual basis of 'Marxism' I now turn.

Part III
The unknown masterpiece

Marx's model of capital

You have sufficient intelligence to imagine the rest from the glimpses that I am giving you.

The painter Frenhofer, in Honoré Balzac's *The Unknown Masterpiece*, Paris, February 1832, one of Marx's favourite stories.

[Marxism is] a research programme initiated by Marx but no more completed by him than Copernicus completed the revolution in thought which Galileo, Kepler and Newton developed, and Einstein and quantum theory have radically transformed this century.

R.Bhaskar, *Reclaiming Reality* (1989:5)

6
The inner connection

Production, distribution and circulation

> as if the task were the dialectic balancing of concepts, and not the grasping of real relations!
>
> (Marx 1857:90)

> in general, relations can be established as existing only by being *thought*, as distinct from the subjects which are in these relations with each other.
>
> (Marx 1858:143)

Introduction

After the defeat of the revolutions, Marx sought refuge in London, in August 1849, where he hoped to start a German newspaper (Marx to Engels, 23 August 1849). He was married, with three children (and a fourth on the way), but no income. Born into an amalgam of competing states, he was himself stateless. He expected a world conflagration soon to summon him home to Germany, but Marx was to remain in London for the rest of his life.

Practically unknown in Britain and speaking little English, he effectively retired from active politics during the 1850s and resumed his studies, picking up his earlier line of thought. In June 1850 he obtained a ticket for the Reading Room of the British Museum Library, where he was to spend much of this decade. Between September 1850 and May 1854, he filled twenty-eight notebooks with excerpts and comments on his reading there, which focused on political economy (Oakley 1983:41). Since little of this has been published, there is a void in the material needed for a complete analysis of the evolution of his line of argument We know, however, that 1851 was his most intensive year of study, when he filled fourteen notebooks (ibid.: 42).

Towards the end of 1851, Marx indicated to both Engels and Lassalle that his ‘Economics’ was almost complete and he made unsuccessful attempts to find a publisher. Oakley notes with skepticism, however, that ‘No manuscript drafts of any of the “volumes” have been found’ (Oakley 1983:48), and suggests that Marx’s work ‘really involved little beyond basic preparatory research’ (ibid.: 45). Marx effectively abandoned

the project between 1854 and 1857, owing to both problems with his economics and the need to earn a living through journalism.

In the autumn of 1857, on the eve of another economic crisis, he was again convinced of the imminence of revolution and wanted to get the outlines of his theory down on paper beforehand. He sat down with his 1840s notebooks together with those from his work at the British Museum, and worked intensively until June 1858, reworking his material from 1843 onwards. The result of this period's work is a series of seven notebooks, drafted over the winter of 1857–8, known to us as the 'Outline' or *Grundrisse* (Marx 1858). They contain the 'rough draft' of his economics. This is 'the only true complete work on political economy that Marx ever wrote' (Nicolaus 1972:309) and the foundation of his subsequent work (Oakley 1983). It is the putative *explicans* (H) of the *explicandum* (P_{123}) reconstructed in the previous two chapters.

These notebooks lay virtually unknown until the middle of this century, but shortly after the middle of the last, Marx reworked and published a small portion of them in the form of a short, but unsuccessful, book, *A Contribution to the Critique of Political Economy* (Marx 1859b; henceforth referred to as *CCPE*). The *Preface* to this book, but not the book itself, proved pivotal in shaping perceptions of Marx's entire analytic, for supporters and opponents alike (Marx 1859a). Its biographical sketch became a ideological lens through which to view his preceding work, which was construed as juvenilia and relegated in importance. Its allusion to a 'base' and a 'superstructure' was construed as a metaphor by which to interpret his subsequent work. Generations of Marxists struggled, in vain, to discover the causal relationship between those, supposedly discrete, economic and political spheres.

This double effect of the *Preface* severed continuity in Marx's work and left us with the problem of making sense of the relationship between the early, humanist or philosophical, Marx and traditional, scientific or economic, Marxism. These are sides of the same problem. Traditional Marxism was formulated in ignorance of Marx's early work, much of which was published long after his death, and the early Marx was subsequently interpreted according to traditional Marxism. This textual interpretation of the *Preface* had enormous practical consequences, for it formed the core of the version of historical materialism enshrined as the official ideology of the USSR and European communist parties (Colletti 1975). Millions experienced the violence of the abstractions, 'base' and 'superstructure' (Sayer 1987; Yakovlev 1993).

The *Grundrisse* notebooks were first effectively published in the German original in 1953, and in English in 1973. They were found to contain a short *Introduction* in which Marx reflects on the object before him (Marx 1857). Which account, the 1857 *Introduction* or the 1859 *Preface*, is taken to be representative of Marx's actual position has a pivotal bearing on how we interpret his analytic. Sight of the *Introduction* disturbed traditional inter- pretations of Marx, but this proved temporary. Notwithstanding the many doctrinal differences among Marxists, there is consensus that it was set aside by Marx in favour of the *Preface*. This conclusion is evident in the work of two opposing interpreters of his work. The *Preface* functions as the guide to Cohen's, much criticised, but not yet displaced, use of analytic philosophy to explicate Marx's key concepts (Cohen 1978). And Sayer's critique of Cohen agrees that 'there remains no convincing reason not

to regard the 1859 *Preface* as Marxists traditionally have: as providing a definitive summary…of the core of the materialist conception of history' (Sayer 1987:2). The *Preface* survives as the most influential guide to Marx's analytic and it is no exaggeration to say that it stands as an obstacle to developing an alternative to traditional Marxism.

This chapter challenges the conventional view of the *Preface,* and establishes the basis for a realist interpretation of the *Grundrisse*. I argue that, in these notebooks, Marx continues his retroductive investigation into the problem he formulated and explored in his earlier essays, but that, in doing so, he develops a realist ontology. This is the novel feature of these notebooks. On this basis, I argue in favour of the *Introduction* and against the *Preface* as a guide to Marx's analytic. In the process, I reflect on the significance of a realist understanding of Marx's retroductive method for understanding, reconstructing and developing that method's creation: his model of capital.

How to read the 'rough draft'

The *Grundrisse* notebooks contain Marx's first, rough draft of his analytic, an amorphous document of 778 printed pages, written between September 1857, and June 1858. It is preceded by an *Introduction,* written between late August and mid-September, an unfinished document of twenty-eight pages, consisting of four sections and containing Marx's only explicit discussion of the method of political economy. In this section, I want to relate the *Introduction* to that which it introduces, the two chapters on money and capital which form the substance of these notebooks.

As we might expect, in the *Introduction* Marx poses the problem which he tackles in the notebooks: the tearing apart by economists of things that are organically connected and their lack of understanding of the 'theoretical method' (Marx 1857:102). Marx restores the connections between the individual and society (in Part One) and between production and exchange, distribution and consumption (in Part Two), and establishes what he takes to be the correct method of examining this 'organic whole' (ibid.: 100) (in Part Three). Since the *Introduction* preceded any substantive analysis, we must regard it as tentative and provisional. Nevertheless, I want to argue that it is an useful guide to Marx's analysis in the *Grundrisse*.

Commentaries tend to focus on the third section, 'The method of political economy', to the exclusion of the rest of the *Introduction* and the broader context of Marx's work, by which I mean his 1840s essays and the *Grundrisse* notebooks themselves. I want to argue, however, that an understanding of the relationship between his 1840s work and the *Grundrisse* is essential to an understanding of the *Introduction;* and that an understanding of the first two sections, 'Production' and 'The general relations of production to distribution, exchange, consumption', which summarise this relationship, is essential to an understanding of the third, on method. I start therefore with the first section.

Marx's realist ontology

Marx begins, in Part One, by criticising a basic premise of political economy: its concept

of a ‘civil society’ of free competition in which individuals appear detached from all social bonds. This is, in fact, the problem he began to formulate in 1843. Economists construe production as undertaken by these individuals, project these mythical ‘individuals’ into the past, regard them as something posited by nature and so eternalize a particular mode of production. Marx argues against this ‘twaddle’ (Marx 1857:84). ‘Man’, this ‘natural individual’, is a historical product of the dissolution of feudalism and the development of new forms of production. The further back in history we delve, the more we find that the individual is dependent on others, a member of a greater whole. Paradoxically, the ‘isolated’ individual’s semblance of independence is a product of modern, developed social relations. The human being is ‘an animal which can individuate itself only in the midst of society’ (ibid.: 84; see also Marx 1867a:170).

Marx restores the link between the individual and society. This immediately affects how we conceive production: ‘Whenever we speak of production, then, what is meant is always production at a definite stage of social development—production by *social* individuals’ (Marx 1857:85, my emphasis). This reconception of production as a social activity poses a problem: if production ‘is always production at a definite stage of social development’, does this mean that ‘to talk about production at all’ we must pursue its historical development? Marx argues that it does not, for we can consider production abstractly, in two stages. First, by comparing particular modes of production we can sift out or abstract the traits, characteristics and elements common to all epochs. These elements are themselves segmented and split into different determinations. Second, once we know which determinations are common to all epochs we can more readily identify those which are unique to the mode of production we happen to be examining, in this case, the modern, bourgeois mode of production. For this reason, while in reality there is only a particular production, ‘production in general’ is a rational abstraction because it conceptualises the ‘moments with which no real historical stage of production can be grasped’ (ibid.: 88). Marx argues that economists fail to heed the distinction between general and particular determinants when they analyse production and distribution. They correctly establish the pre-conditions of all production but mistakenly generalize them to all epochs. Confusing the particular with the general enables them to argue that a particular form of production and property is natural and eternal, when it is actually social and historical.

To recap, in Part One, Marx criticises economists for tearing ‘man’ from ‘society’ and ‘production’ from ‘distribution’ and he restores their connections.

In Part Two of the *Introduction*, Marx criticises economists for conceiving production, distribution, circulation and exchange as ‘independent, autonomous neighbours’, and for failing to grasp the ‘real relations’ which connect and unify them. He proceeds to show that production and circulation, production and exchange, and production and consumption are internally-related, obverse sides of the same social relations, members of a totality, distinctions within a unity (Marx 1857:99). The relations and mutual interactions between these ‘moments’ Marx refers to as ‘relations of production’ and they constitute the object of his analysis in the *Grundrisse* notebooks. This is the ‘inner totality’ of which he speaks (Marx 1857:264). I want to explore Marx’s conception of this object by relating Marx’s 1840s essays to the *Grundrisse* notebooks. The broad

argument I want to make is that, in these notebooks, Marx incorporates and synthesizes his earlier analyses into a model of this 'inner totality, and that in so doing he employs a realist ontology. The *Introduction* must be understood in this context.

What evidence is there that Marx reworked his earlier ideas in the *Grundrisse?* Marx himself tells us that the *Grundrisse* notebooks represent the results of fifteen years' research, not just the seven or eight years he spent in the British Museum Library (Marx to Lassalle, November, 1858). He records, in the 1859 *Preface*, that when he resumed his economic studies in London in 1850, circumstances induced him to 'start again from the *very beginning*' (Marx 1859a:23, my emphasis). These comments suggest that Marx reworked his material from 1843 onwards in the *Grundrisse* notebooks; they do not suggest a marked departure from this material. Indeed, we know that both the *Grundrisse* and *Capital* were written with the aid of his 1840s notebooks. McLellan draws our attention to the fact that 'the beginnings of the *Grundrisse's* chapter on capital reproduces almost word for word' passages in the Paris manuscripts (McLellan 1973:303–4).

The bibliographic links between Marx's earlier work and the *Grundrisse* are evident in the first few lines of the *Introduction*, where Marx declares: 'Individuals producing in a society, and hence the socially determined production of individuals, is of course the point of departure'. [1] The first two pages of the *Introduction* discuss the individual of 'civil society' under the subtitle, 'Independent individual. Eighteenth-century ideas'. This is the very problem with which Marx began in *A Contribution to the Critique of Hegel's Philosophy of Right* in 1843, and which occupied him for most of the 1840s.

Marx objects to 'civil society' because it refers to externally or contingently connected individuals. He gradually reconceptualises the 'civil society' of external relations between contingently connected individuals as a 'society' comprised of internal, necessary relations and practices. We can see evidence of this emerging conception of society as early as 1847, in *The Poverty of Philosophy:* [2]

> society, social relations based on class antagonisms. These relations are not relations between individual and individual [as in 'civil society'], but between worker and capitalist, between farmer and landlord, etc. Wipe out these relations and you annihilate all society.
>
> (Marx 1847a:159)

Ten years later, in the *Grundrisse*, the conception is clearer:

> Nothing is more erroneous than the manner in which economists as well as socialists regard society in relation to economic conditions… Society does not consist of individuals, but expresses the sum of inter-relations, the relations within which these individuals stand… To be a slave, to be a citizen, are social characteristics, relations between human beings, A and B. Human being A, as such, is not a slave. He is a slave in and through society.
>
> (Marx 1858:264–5)

The actions of the abstract, isolated individual of 'civil society' are now embedded in internal relations. The relations between master and slave, or capitalist and worker, are internal and necessary because the existence of one presupposes that of the other; each 'pole' of the relation cannot exist without the other.

Marx regards this ensemble of internal relations—those between production and distribution, exchange and consumption—as real, but nonempirical: 'They can be established as existing only by being thought, as distinct from the subjects which are in these relations with each other' (Marx 1857:143). It is because this object of Marx's analysis is nonempirical, and therefore invisible to empiricist, commonsense thinking, that Marx, like most scientists, makes extensive use of metaphor. As I argued in Chapter 3, metaphor aids theorizing by transferring explanations from the known to the unknown, thus highlighting the hypothetical objects and mechanisms said to account for the phenomena under study and bestowing them with existential plausibility. These objects and mechanisms are then explained by developing a conceptual model which maps the actual causal relations of this 'organic whole'. It is important to understand that Marx's frequent and vivid use of metaphor is not simply an illustrative device, but an integral component of his mode of theorizing which has to be taken seriously.

The dominant metaphor of the *Grundrisse* notebooks is that of the surface (circulation) and the interior (production) of society. This is their innovative feature. The significance of this metaphor, I believe, is that it bestows the object of Marx's analysis with 'ontological depth', that is, this object is construed as a real but nonempirical entity, which generates the phenomena observed. This metaphor is Marx's means of imagining and theorizing about the structures and mechanisms which generate the 'civil society' of isolated monads, those citizens of the 'political state', the *explicandum* with which he began in 1843 and which forms his 'point of departure' in the *Introduction* (Marx 1857:83). This interpretation is confirmed by Marx's progress through the notebooks themselves. He proceeds from the surface of society, the chapter, 'On money', to its depths, the chapter 'On capital', where he delineates the 'inner connections' between 'relations of production, of distribution and circulation' (Marx 1858:122). Ontological depth is the novel feature of these notebooks. They represent, says Marx, 'the first attempts at a scientific presentation of an important view of social relationships' (Marx to Lassalle, cited in McLellan 1973:307). And the implicit concept of science of these notebooks, I believe, is that elucidated by the literature on critical realism.

Marx's retroductive method

I want to relate this discussion of Marx's realist ontology, revealed in Parts One and Two of the *Introduction*, to his concept of the 'method of political economy', revealed in Part Three. But first it is necessary to settle the vexed question: which method—inquiry or presentation—is Marx talking about in the *Introduction?* Derek Sayer argues that the *Introduction* deals only with Marx's method of exposition: 'So far as I am aware nobody has ever explicitly denied that Marx's reflections in the *Introduction* bear primarily on the presentation of his analysis' (Sayer 1979a:94). I deny this, for two reasons. First, the *Introduction* was written prior to Marx's analysis in the *Grundrisse* notebooks and it is

hardly likely that he would contemplate his method of exposition before he had anything to present. Second, Marx's extreme self-consciousness about the problem of presenting his work developed only after the failure of *CCPE* in 1859 (Oakley 1983:76, 115) and in 1857 he did not consciously distinguish between them. I believe that in the *Introduction*, to concentrate his mind on the work ahead, Marx draws together all the economic knowledge of his day, recapitulates his earlier analyses and sorts out the order of the material before commencing work.

To discuss this method, rather than use his hypothetical 'population', I believe it is more helpful to use 'civil society', for it is a neglected fact that 'individuals producing in a society' (Marx 1857:83) is Marx's actual 'point of departure', which he declares in the opening lines of the *Introduction*. Let us consider 'civil society', then, this 'point of departure for observation and conception' (ibid.: 101). On the face of it, 'civil society' seems a concept of a very real and concrete thing. Indeed, this is how it is regarded by economists, who construct their theories upon this seemingly solid foundation. 'However, on closer examination this proves false' (ibid.: 101). We discover that it is a concept of a very complex set of social relations, which contains within it, or presupposes, concepts of its constituent elements and earlier social relations. To explain 'civil society' we have to unpack these concepts until we arrive at its simplest, most abstract, determinations. Once done, the return journey must be made. We must ascend from simple to advanced concepts, a theoretical movement corresponding to the real historical process (ibid.: 102), until we reconceptualise 'civil society' 'as a rich totality of many determinations and relations' (ibid.: 100). Through this process we discover that:

> the concrete is concrete because it is the concentration of many determinations, hence unity of the diverse. It appears in the process of thinking, therefore, as a process of concentration, as a result, not as a point of departure, even though it is the point of departure in reality and hence also the point of departure for observation and conception.
>
> (Marx 1857:101)

Marx's brief description of this two-way movement of abstraction is regularly sifted for evidence of the secrets of his method. But, as far as I am aware, it has never been considered in the context of Marx's realism. I want to argue that Marx's remarks on method in the *Introduction* are an alternative to Feuerbach's empiricist materialism and Hegel's idealist dialectics, and that critical realism helps us understand Marx's remarks on this alternative.

Marx's objection to Feuerbach is that he conceives society as a static entity, when it is actually a product of social activity or practice (Marx 1845: Thesis 1). Hegel has the merit of grasping things as a product of movement but 'makes it seem as if it were merely a matter of conceptual determination and of the dialectic of these concepts' (Marx 1857:114). It is in this light that we should consider Marx's distinction between 'the process by which the concrete itself came into being' and 'the process by which thought appropriates the concrete' (ibid.: 101). Here Marx distinguishes between the ontological or intransitive and the epistemological or transitive dimensions, or put another way,

between the social practices producing society and the conceptual practices by which we know them. The error of empiricism is to regard theory as a reflection of the concrete. The error of idealism is to regard the concrete as conceptually determined. Marx's alternative to idealism and empiricism is to argue that reality is conceptually *mediated:* concepts determine what we can see, but what we *do* see is also determined by the phenomena social relations actually produce. It is because the concrete is conceptually mediated that it is both 'the point of departure for observation and conception' and 'a process of concentration…a result' (Marx 1857:101).

Marx describes a retroductive movement in thought from concepts of manifest phenomena (the 'empirical' or 'concrete') to the description and explanation of the generative mechanisms of their essential relations (the 'theoretical' or 'abstract'). On this basis, knowledge of surface phenomena is then revised and explained. Continuing the metaphor of depth, as we dig deeper, through successive levels of reality, the boundary of the empirical world expands. What we recognize as the concrete expands with our theoretical knowledge. The distinction between the ontological and the epistemological, and the conceptual mediation of perception, is vital to understanding Marx's conception of society and his method of analysing it.

The first, downward, path, from the concrete to the abstract, represents the method of retroduction, that is, reasoning from *explicandum* or phenomenal forms to provisional *explicans*, the structures and mechanisms sustaining them. Marx develops his own ideas about these structures and mechanisms by critiquing concepts of those phenomenal forms, thus critique is an integral part of his retroductive reasoning. Indeed, he describes his work in these notebooks as a 'critique of the economic categories' (Marx to Lassalle, 22 February 1858). The second, upward, path, from the abstract to the concrete, represents the process whereby this provisional *explicans* is tested in explanation of the original problem, according to criteria of exhaustiveness, independence and consistency (Sayer 1979a). Marx portrays these movements of thought simply as a movement from the concrete to the abstract followed by a movement from the abstract to the concrete. But in practice, via imaginary experiments alluded to in Chapter 3, it is a constant shuttling back and forth between them, as is evident in the notebooks themselves.

Let me illustrate this argument by retracing Marx's retroductive line of argument, from the early 1840s to that winter of 1857–8. As Engels was empirically investigating the 'dissolution of mankind into monads' (Engels 1969:58), in 1842–3, Marx was theoretically investigating the same problem, the connections between this monad, civil society and the state, via his critique of Hegel. This relationship is Marx's initial *explicandum*. Marx forms the view that the private individuals of civil society, who imagine themselves beyond social forces, and the public citizens of the state, who imagine themselves equal to others, are mirror images, products of the same—yet-to-be-explained—process.

Marx establishes money as a central component of civil society in the 'Paris Manuscripts' (Marx 1844a:271, 322–6), in 1844, and shows how 'money is not a thing, [but] a social relation', in *The Poverty of Philosophy* (Marx 1847a:145), in 1847. In the *Grundrisse* notebooks, gathering together these thoughts, Marx critiques 'money', shows how it mediates private interests (Marx 1858:156), and examines the 'process taking

place behind it' (ibid.: 255). He shows how exchange-value, or relations between commodities, objectifies relations between people, how it 'latently contains the opposition between labour and capital' (ibid.: 248), and is 'nothing more than a mutual relation between productive activities' (ibid.: 160). On this basis, Marx argues that the apparent 'equality and liberty' of the 'independent' person of 'civil society' is an illusory characteristic of these external, money relations, for it is merely the freedom to 'engage in exchange' (ibid.: 163–4). The developed system of exchange is only a semblance of people's actual conditions of existence. These conditions 'explode', 'rip-up' and 'dissolve' ties of personal dependence but replace them with objective or external dependency relations which actually oppose these seemingly independent individuals. In arguing thus, Marx shows how the abstraction 'man' is a creation of modern production relations (Marx 1857:103) which sever the organic links between individuals and society (ibid.: 104). Private interest 'is already a socially determined interest' (Marx 1858:156).

Over the course of the fifteen years that went into the making of the *Grundrisse*, then, Marx retroduces from the internally-divided private/public 'man' of civil society and the state (Marx 1843c), to 'labour' (Marx 1844a), to 'social relations' (Marx and Engels 1846), to 'movement' of these relations (Marx 1847a). In the *Grundrisse*, Marx construes 'civil society', 'this society of free competition' (Marx 1857:83), as the surface of a process taking place 'behind it' (ibid.: 255), and explains it in terms of the 'moving unity' and 'inner necessity' (ibid.: 415) of the elements comprising 'the internal structure of production'. The name of this 'inner structure' and 'complicated social process' (Marx 1864:830), which 'actually conceals the inner connection behind the utter indifference, isolation, and alienation' of the problematic 'abstract private person', is *capital*.

This retroductive logic of investigation is evident in the order of the notebooks. Marx reasons from exchange to production, from the one chapter, 'On money', to the other, 'On capital'; from the surface of society to its interior, where 'entirely different processes go on, in which this apparent freedom and liberty disappear' (Marx 1858:247).

The theoretical method and the law of value

The distinction between behavioural interactions within 'civil society' and the social relations structuring them, or surface and interior, corresponds to a distinction between applied and theoretical research, between patterns of events and causal laws. Marx writes:

> In order to develop the laws of bourgeois economy…it is not necessary to write the real history of the relations of production. But the correct observation and deduction of these laws, as having themselves become in history, always leads to primary equations—like the empirical numbers e.g. in natural science—which point towards a past lying behind this system. These indications, together with a correct grasp of the present, then also offer the key to the understanding of the past—*a work in its own right*.
>
> (Marx 1858:460–1, my emphasis)

If historiography is 'a work in its own right', *ipso facto*, so too is 'observing and

deducing' the laws governing relations of production. But what sort of work is it? Creative conceptual work centres around modelling or 'object constitution'. Via the two-way movement of thought, described earlier, Marx explains 'civil society' by developing a conceptual model of its internal structure, which he construes as a real, but nonempirical, social object. His concepts are not generalizations from the empirical, nor are they concepts under which similar categories of events are grouped; they are attempts to designate the necessary connections within an internally-or organically-related object, which Marx regards as real.

While Marx certainly talks of the theoretical or conceptual method he seldom describes his work as a 'theory'. Remarkably, in his entire prodigious output, Marx nowhere speaks of the labour theory of value: always the *law* of value. I want to consider the nature of Marx's 'theoretical method' (Marx 1857:102) and his concept of 'laws' by reflecting on Engels's comment on this law (Engels 1967a), which he found necessary to write because of widespread misunderstanding of what Marx was trying to say.

We misunderstand Marx, says Engels, if we regard value as a 'mental' or a 'logical fact' (Engels 1967a:894), or if we consider the law of value as a 'scientific hypothesis', as an 'illuminating' and necessary 'starting point' in the analysis of exchange, a 'pure, although theoretically necessary, fiction' (ibid.: 895). Neither interpretation, says Engels, 'make [s] sufficient allowance for the fact that we are dealing here not only with a purely logical process, but with a historical process and its explanatory reflection in thought, the logical pursuance of its inner connection' (ibid.).

I interpret Engels's defence of the law of value in realist terms. The law of value refers to the powers of a real, but nonempirical, social substance which undergoes metamorphosis through various material forms. This is the 'historical process' referred to by Engels. 'Its explanatory reflection in thought, the logical pursuance of its inner connection' entails developing a model of the internal dynamics of this structure of social relations, this historical process. The law of value refers to the logic of this dynamic process. This logic works through 'multifarious relations' which 'assert themselves without entering the consciousness of the participants and can themselves be abstracted from daily practice only through laborious theoretical investigation' (Engels 1967a:899).

Marx, Hegel and the dialectic

Marx's reflections on method in the *Introduction,* together with those few pages of the 1859 *Preface,* to which I will shortly turn, have acquired a disproportionate importance because they constitute most of what Marx has to say on method. This is a source of much regret and puzzlement among Marxists. Yet there are grounds for doubting the salience of even these brief remarks. The *Introduction* is a preamble to a rough draft of his analytic, written, I believe, to recapitulate his earlier work and to concentrate his thoughts on the work ahead. It was never intended for publication. I shall later recall Prinz's argument that the *Preface* was carefully crafted to meet the conflicting demands of the censor and Marx's supporters in Prussia and must be treated with the utmost circumspection (Prinz 1969).

All the words of regret over the absence of a clear statement from Marx about his

method, and those which squeeze the last ounce of meaning out of the *Introduction* and the *Preface*, miss the obvious significance of this absence. Marx wrote next to nothing on method because he opposed in principle all *a priori*, preconstituted methods—dialectical or otherwise—and would have opposed attempts to extrapolate from his work a method of general applicability. Marx construes the dialectical method, of critique-retroduction, as a free movement of the imagination bound only by the nature of the object under analysis (Echeverria 1978a:254):

> Lange is näive enough to say that I 'move with rare freedom' in empirical matter. He has not the slightest idea that this 'free movement in matter' is nothing but a paraphrase for the method of dealing with matter—that is, the dialectical method.
>
> (Marx to Kugelman, 27 June 1870)

Critique-retroduction is an *a posteriori* mode of concept formation, a serendipitous process of conceptual writing, editing, revising and rewriting, the ultimate aim of which is to orient empirical work by indicating where investigations 'must enter in' (Marx 1858:460).

This realist understanding of Marx's retroductive method immediately raises the question of the relationship between Marx and Hegel and how we should assess Marx's remarks concerning his use of the dialectical method. On 16 January 1858, while Marx was working on the fourth *Grundrisse* notebook (Marx 1858:373–479), he remarks to Engels that 'In the method of working it was of great service to me that by mere accident I leafed through Hegel's *Logic* again' (Marx to Engels, 16 January 1858). And in the *Postface* to the second edition of *Capital*, Volume One, Marx claims that Hegel's dialectic 'is standing on its head. It must be inverted, in order to discover the rational kernel within the mystical shell' (Marx 1873:103).

Traditionally, Marx is understood to have placed Hegel right way up simply by reversing the direction of causality between the ideal and the material. But there are two arguments against this interpretation. First, as I argued earlier, simply to reverse the direction of causality leaves the material/ideal distinction intact, whereas it is the idea of their *separability* Marx opposes (Sayer 1987:85). Second, by 'material', Marx does not refer merely to the physical attributes of things, but to the amalgamation of the social and material characteristics of objects (Mills 1989). Although Marx is certainly interested in material forms and ideal conceptions, his paramount concern is with the *social* reality behind them: the internal structure of production and, in particular, the mutual relations among the moments constituting this structure.

Marx's inversion of Hegel's dialectic has to be understood in the context of the *Introduction's* distinction between the ontological, or intransitive, and the epistemological, or transitive, which I underlined earlier. Marx's use of the dialectic is 'exactly opposite' (Marx 1873:102) to Hegel's in the sense that Hegel refers to thought while Marx refers to social reality. The inversion is not between the ideal and the material, it is between the epistemological and the ontological, or the transitive and the intransitive. Marx took Hegel's idealist dialectic, that is, a dialectic among concepts, and

employed it as an insight into the character of social reality: 'In its rational form…[the dialectic] regards every historically developed form as being in a fluid state, in *motion*' (Marx 1873:103, my emphasis). This insight is the rational kernel of Hegel's dialectic. It is as an *aid to the imagination* that Marx found Hegel's *Logic* of 'great use'. Marx's 'ultimate aim' is 'to reveal the economic law of motion of modern society' (Marx 1867b: 92). Marx thus construes social reality dialectically, as constituted by the actions of contradictory forces, and it is these which turn social relations upside down and inside out. The task is to discover the logic of social reality, not to impose a pre-established logic upon it. In other words, I believe that Marx subscribes to an ontological dialectics.

The adjective 'dialectical' applies predominantly to Marx's method of *presentation*. Consider Marx's response to the anticipated objections by 'the Philistines and vulgar economists' to *Capital,* Volume One:

> if I wished to refute all such objections in advance, I should spoil the whole dialectical method of *exposition*. On the contrary, the good thing about this method is that it is constantly setting traps for those fellows which will provoke them into an untimely display of their idiocy.
>
> (Marx to Engels, 27 June, 1867, my emphasis)

Marx's method of presentation or 'exposition' is dialectical because social reality is dialectical, and for no other reason. Marx's distinction between critique as an *a posteriori* method of concept development and dialectic as a method of presentation, and his aversion to the imposition of a formal, preconstituted method, is evident in his comment on Lassalle, made to Engels a few months after completing the *Introduction:*

> It is plain to me from this one note that, in his second grand opus, the fellow intends to expound political economy in the manner of Hegel. He will discover to his cost that it is one thing *for a critique to take a science to the point at which it admits of a dialectical presentation,* and quite another to apply *an abstract, ready-made system of logic* to vague presentiments of just such a system.
>
> (Marx to Engels, 1 February 1858, my emphasis)

If Marx opposes 'method' *per se,* what is the intent of his remarks on 'The method of political economy' in the *Introduction*? Commentaries tend to focus on the half-page or so which discusses the two-way movement between the concrete and the abstract, but this forms only a small proportion of this section. Marx's concern is less with explicating the nature of 'conceptual thinking' or the 'theoretical method', as he puts it, and more with emphasizing the importance of the distinction between the ontological and the epistemological for understanding the 'order and sequence of the categories' that constitute his evolving model. 'Decisive' in this regard, and important enough for Marx to repeat twice, is the fact that 'in the theoretical method', society retains its autonomous existence outside the head and must always be kept in mind as the presupposition of

analysis (Marx 1857:102). In this statement Marx reveals the true purpose of the *Introduction*.

Were Marx examining society historically, he tells us, he would begin with ground rent and landed property since these are tied up with the first form of production, agriculture. But his concern is with constructing a model of the 'inner connection between relations of production, of distribution and of circulation' (Marx 1858:122) and, for this reason, the sequence of categories in this model must correspond to the causal relationship between their referents in modern, bourgeois society, rather than the sequence in which they were historically decisive.

> It would therefore be unfeasible and wrong to let the economic categories follow one another in the same sequence as that in which they were historically decisive. Their sequence is determined, rather, by their relation to one another in modern bourgeois society, which is precisely the opposite of that which seems to be their natural order or which corresponds to historical development.
>
> (Marx 1857:107)

Because modern society is dominated by capital, its concept must be the centre of this model. In the *Grundrisse* Marx reconceptualises capital via a critique of 'money' and subsumes under its concept many things 'which do not seem to belong within it conceptually' (Marx 1858:513): those elements, in fact, which economists regard as 'autonomous and independent neighbours', with which Marx began in the *Introduction*.

An ironic travesty: the 1859 *Preface*

This realist account of the *Introduction*, as a valid guide to Marx's analytic, must confront the widespread belief that he abandoned it in favour of the P*reface*, the supposed definitive summary of his ideas. [3] Which account one accepts is pivotal to the interpretation of his entire output. To repeat: as the source of the base-superstructure metaphor and the belief in the disjuncture between the 'early' and the 'mature' Marx, the influence of the *Preface* is an obstacle to overcoming the limitations of 'traditional' Marxism. It is imperative, therefore, to discover why Marx used it to displace the *Introduction*. The explanation lies in Marx's difficulties in presenting his model of this organic thing, capital, in which 'effects become causes', where 'every economic relation presupposes every other' and 'everything posited is thus also a supposition' (Marx 1858:278). This section explores these difficulties by examining the bibliographic links between the *Introduction*, the *Grundrisse* and the *Preface* and *CCPE*. It explains why the *Introduction* was displaced by the *Preface* and argues against the veracity of the last as a guide to Marx's analytic. On this basis, I suggest how his model of capital, even now, can be reconstructed and developed.

Marx's plan for his 'Economics'

During the course of writing the *Grundrisse*, Marx evolved four draft plans for his 'Economics', before arriving a plan for a six-book work: *Capital; Landed Property; Wage Labour; The State; Foreign Trade; World Market* and *Crises*. [4] The first book, *Capital*, was to consist of four sections: capital in general; competition; credit; share capital. [5] The *Grundrisse* is a draft of 'capital in general', so it is only 'one fourth of one sixth of the entire opus as originally projected' (Nicolaus 1973:55).

In March 1858, Marx agreed with the Berlin publisher Franz Duncker to publish his work in a series of instalments. [6] The first, 'capital in general', was to comprise value, money, and capital, and would examine the processes of production and circulation in their unity (Marx to Lassalle: 11 March 1858). [7] It was to be ready by the end of May 1858 (Marx to Engels, 29 March 1858) so Marx set about preparing the rough draft for publication. Marx's intentions regarding this first instalment are important, for they will subsequently have a bearing on how we explain the displacement of the *Introduction* by the *Preface*. Let us note that he, first, regarded this first publication as a pamphlet 'in its own right', second, believed it lay 'the foundations for all that follows' (Marx to Lassalle, 11 March 1858), and third, identified the chapter on capital as 'the most important part of the first instalment' (Marx to Engels, 2 April 1858). The inner consistency of his argument required that 'money' and 'capital' appear simultaneously, indeed, 'the whole effect depends on it' (Marx to Lassalle, 12 November 1858).

Marx worked on revising the *Grundrisse* manuscript for publication between August 1858, and January 1859, and, sure enough, *CCPE* was published by Duncker in Berlin in June 1859. The book begins with a short chapter, 'The commodity', and quickly moves on to the much longer, 'Money or simple circulation'. These chapters are the product of a reworking of the *Grundrisse's* first, smaller chapter, 'On money', which Marx rewrote twice in the interim. It is important to note that, *for some reason*, *CCPE* omits the *Grundrisse's* massive—and, for Marx, crucial—chapter, 'On capital'. As he wrote to Engels: 'The manuscript is about 12 printer's sheets long and—take a grip on yourself—in spite of its title… contains NOTHING on Capital' (Marx to Engels, 13–15 January 1859). [8] It is this reason I now want to discover.

C*CPE* is little read because it contains little of interest; it is primarily an exposition of previous theories of value and money. The book's significance, of course, lies with Marx's 'few brief remarks' regarding the course of his study of political economy in the book's *Preface,* for these sketch his intellectual biography and 'summarize' what is taken to be 'the historical materialist perspective' (Sayer 1987:x), what Marx refers to as 'general conclusions…which, once reached, became the guiding principle of my studies' (Marx 1859a:20). An understanding of the relationship between the *Introduction* and the *Preface* is usually derived from this statement by Marx, in the *Preface:*

> A general introduction, which I had drafted, is omitted [another translation says 'suppressed'], since on further consideration it seems to me confusing to anticipate results which still have to be substantiated, and the reader who really

> wishes to follow me will have to decide to advance from the particular to the general.
>
> (Marx 1859a:19)

Two mutually supportive impressions are left by this quotation. First, the Introduction was written for *CCPE*, for why else would Marx mention it? Second, Marx replaced the *Introduction* with the *Preface* because he had changed his mind, for why else would he 'omit' it? Both impressions are encouraged by Marx, but they combine to conceal the *real* reason why he omitted the *Introduction* in favour of the *Preface*. The first impression is demonstrably mistaken. Marx wrote the *Introduction* as a preamble to the rough draft of his analytic contained in the *Grundrisse* notebooks: 'there can be no question…that the *Introduction* and the main text form an organic whole from the bibliographic, or textual, viewpoints' (Nicolaus 1973:13). The second interpretation is maintained by Echeverria (1978b: 346) and also by Sayer (1987), who argues that Marx 'himself indicates that he wrote the 1859 *Preface* to replace an earlier draft introduction, that of 1857 to the *Grundrisse*' (Sayer 1987:2). I want to argue that this interpretation is mistaken also.

The suppression of the Introduction

To understand why the *Introduction* was 'omitted' or 'suppressed' in favour of the *Preface*—Marx never said it was 'replaced', as has been claimed—we have to understand the relationship between what they introduce and preface, the *Grundrisse* notebooks and *CCPE*. I want to argue that the *Introduction* was omitted because Marx omitted from *CCPE* the vital chapter on capital and concluded that it was redundant, and that its redundancy is explicable in terms of my realist interpretation of these texts.

In the 1857 *Introduction* Marx establishes the unity of circulation and production, relates this to his method of abstraction, and introduces the reader to his actual practice in the notebooks, which describes a movement from the surface of society (money) to the depths (capital). By omitting the chapter on capital, Marx shattered the 'inner consistency' of his argument—the internal relations between circulation and production—which he regarded as vital to its success. He thus rendered the *Introduction* meaningless and, as he says, 'confusing' to the reader of *CCPE*. [9]

Here I allude to the earlier quotation from the *Preface:* 'From the particular to the general' refers to the movement from the commodity and exchange-value, with which both the *Grundrisse* and *CCPE* begin, to the general laws of capitalist production, which are revealed in the missing chapter on capital: these are the 'results which still have to be anticipated'. The remarkable thing about *CCPE*—Part One, 'Capital in General', of Book One, *On Capital*—is that it contains *nothing* on capital! The absence of the crucial chapter explains why the book was poorly received. To Marx's surprise and dismay it was virtually ignored. [10] It fell flat, I suggest, because the 'internal relations' between money and capital were severed and so much of the theoretical message was lost: 'The work had fallen between chairs' (Nicolaus 1973:57).

The critical question is, why did Marx omit from *CCPE* the vital chapter on capital? Given the canonical status of the *Preface,* it is remarkable that this question is seldom

asked. [11] A review of Marx's work during this period strongly suggests that the vital chapter was not published as part of *CCPE* because it was not ready and that Marx's *post hoc* rationalizations amount to an attempt to make a virtue out of necessity. [12] This conclusion is supported by what we know of Marx's subsequent difficulties with the capital material. After he had finished the manuscript for *CCPE,* in January 1859, he began redrafting the *Grundrisse's* chapter on capital for publication as the third chapter of Book One of his projected six-book work (Oakley 1983:76). Reviewing the notebooks not used in *CCPE* provided the 'basis for a draft plan for the third chapter written out in an unmarked notebook during February and March 1859' (ibid.: 77). He promises Lassalle (2 October 1859) that this third chapter will be finished by the end of December 1859, 'at the very outside'. According to Oakley, however, 'there is no evidence that Marx wrote anything for the third chapter beyond this plan during 1859', and Marx 'does not appear to have returned to his critical theory until the middle of 1861' (ibid.: 78). [13] Nor can we conclude that Marx simply changed his mind about the importance of the 'inner consistency' of his thesis. He repeats to Lassalle that 'the first two instalments form a whole' (Marx to Lassalle 2 October 1859); he reworked the two chapters of *CCPE* to form the first three chapters of Volume One of *Capital;* and he originally intended to publish Books One and Two of *Capital* (*Production* and *Circulation,* respectively) in one volume. To repeat: the chapter was not 'withheld' for strategic, political reasons: it simply was not ready. This is why the *Introduction* was displaced by the *Preface*. [14]

Marx attributed *CCPE*'s lack of impact to its form of presentation, rather than the missing chapter. His extreme self-consciousness about his difficulty in making his investigative writings presentable to the public began at this time. But what exactly was the problem? Marx had previously written for 'presentation' with no obvious difficulty; he was a skilled and accomplished writer. In November 1858, while hard at work on the manuscript for *CCPE,* which at this time was to include the missing chapter, Marx writes: 'my aim is not to produce an elegant exposé, but only to write *as I usually do*' (Marx to Lassalle, 12 November 1858, my emphasis). During this same period, Marx wrote 'the equivalent of at least two printed volumes of English leading articles about everything under the sun and more' (ibid.). It was just *this* subject on which he was unable to write. What was it about the nature of the material that prevented him presenting 'money' and 'capital' as 'an organic whole'?

I believe Marx's problems with the chapter on capital are of a different nature to the usual problems of writing. They have little to do with the appropriate style and form of presentation and everything to do with the unorthodox concept of causality and explanation that Marx operationalized. In the *Grundrisse* notebooks, Marx attempts to synthesize into a model the various internal relations which he had identified in the 1840s. The 'inner consistency' he speaks of to Lassalle refers to the 'categories which make up the inner structure of bourgeois society' (Marx 1857:108). The problem he encountered in preparing *CCPE* for publication was how to present sequentially a model in which every concept of every element of this 'organic whole' presupposes every other. [15] This is, I suggest, why beginnings are 'always difficult in all sciences' and why the first chapter of *Capital* will 'present the greatest difficulty' (Marx 1867b:89).

As Marx was attempting to prepare Books One and Two for publication as Volume

One of *Capital,* he recognized that publishing in instalments is inimical to the presentation of writings that have 'dialectical structure':

> Whatever shortcomings they may have, the advantage of my writings is that they are an artistic whole, and this can only be achieved through my practice of never having things printed until I have them in front of me in their entirety.
>
> (Marx to Engels, 31 July 1865)

We should note, however, that just as Marx failed to publish *Money* and *Capital* together in one volume *(CCPE),* so he failed to publish *Production* and *Circulation* together in Volume One of *Capital,* as was his original intention. [16] It is no coincidence that, like *CCPE,* Volume One failed to have the impact envisaged by Marx. The difficulty of presenting the 'organic whole' drafted in the *Grundrisse,* which began with *CCPE,* plagued Marx for the rest of his life and—let us be clear—eventually it defeated him. Despite being intellectually active up to the end 'his concern for the publication of *Capital* just faded away' (Oakley 1983:116).

The Preface *and the Prussian censor*

My explanation of why Marx 'omitted' or 'suppressed' (never 'replaced') the 1857 *Introduction* in favour of the 1859 *Preface* does not explain what Marx wrote in the *Preface* nor why it was written. But my argument thus far gives added credence to Prinz's (1969) sadly-neglected explanation of Marx's ulterior motive in the *Preface*.

The normal function of a preface is to introduce a book by stating its subject and defining its scope of enquiry. The striking feature of this *Preface,* however, apart from its dissimilarity to the *Introduction,* is that it bears no relationship to that which it prefaces: *CCPE* itself! This is explicable, Prinz suggests, in terms of an added function of a preface in a Prussia marked by restrictions on the freedom of expression: since it was the only part of a book that the censor could be relied upon to read, it provided a vehicle for an author to allay any suspicion that the book might be politically unacceptable. This is significant, because 'censorship had produced the art of reading between the lines and this induced authors to practice the art of writing between the lines' (Prinz 1969:439). Marx was writing in code, a skill he perfected as editor of the *Rheinische Zeitung*. Prinz argues that Marx designed the *Preface* to avoid the Scylla of confiscation and the Charybdis of disappointing his supporters in Germany, who had waited years in anticipation of the great work (ibid.: 445).

We can see how this might be so. Marx's frankness about his earlier political activities revived memories among his supporters of past battles and impressed the authorities with his apparent sincerity. His remarks about 'starting again from the very beginning' and working 'carefully through the new material' (Marx 1859a:23) can be interpreted as a break with his former convictions or as an intensification of them, depending on one's point of view, censor or supporter. His explanation of the break in his studies due to the need to earn a living as a correspondent with the *New York Tribune*—that 'rotten sheet' (Marx to Engels, 17 December 1858)—excuses the delay of the book to his

supporters and impresses the Prussian officials with an apparent respectability. Finally, by quoting Dante in conclusion, Marx (1859a:23) cloaks himself in the legitimacy of science.

What of Marx's supposed 'definitive summary of the core of the materialist concept of history' (Sayer 1987:2), the 'general conclusion' which became the 'guiding principle' of his studies (Marx 1859a:20)? Traditionally, Marxists have construed Marx's metaphor of a basis or foundation and a superstructure as a distinction between qualitatively distinct social relations and institutions (economic and political) and have expended much energy in an attempt to discover the precise causal relationship between them. But this is to misconstrue Marx. I have already pointed out that the *Preface* does not preface *CCPE:* it does not summarise the *Grundrisse* either. As we might expect of a 'guiding thread', it refers to a position established previously, in this case, one established by Marx during the 1840s. He makes occasional use of the metaphor of a 'superstructure' in his work of this period and we should note its usage when reading the *Preface*. The adjective Marx commonly attaches to 'superstructure' is 'idealistic'. As Sayer argues (1987:92), the base/super-structure relation is one between social being and social consciousness, not between different levels of society or types of institutions. 'Base' and 'superstructure' are no more separable than 'material' and 'ideal'.

But how are we to interpret Marx's comments regarding the 'conflict between the social forces of production and the relations of production' (Marx 1859a:21)? Traditionally, on the basis of this passage, Marxists construe forces and relations as mutually exclusive, determining and determined, phenomena. This interpretation is exemplified by Cohen's technological-determinist thesis of 'the primacy of the productive forces' (Cohen 1978:136–42). Against this position, I want to argue two points. First, Prinz argues that Marx's determinism in the *Preface* is a deliberate strategy intended to disguise his actual beliefs from the censor. 'Is it not wonderfully comforting to know', asks Prinz, that the kind of revolution Marx has in mind, 'neither can be prevented nor does it involve any immediate danger' (Prinz 1969:449). Second, in support of Prinz, we should note that Marx's undeniable remarks in the *Preface* are quite dissimilar to his other analyses of forces and relations (see, for example, Marx 1858:706), where he treats them as internally-related aspects of the same phenomena. They 'are not mutually exclusive concepts, denoting substantially distinct entities' (Sayer 1987:37).

Marx succeeded in pulling the wool over the eyes of the Prussian censor and, as we know, *CCPE* was published. But at what cost! The lack of the crucial chapter on capital made the book incomprehensible, even to his staunchest supporters in Prussia, and the failure of the book resulted in Marx's debilitating self-consciousness over the presentation of his analytic. In an ironic travesty of Marx's actual position—set out, I have argued, in the *Introduction*—the sham *Preface* acquired canonical status as the definitive statement of Marx's conception of history.

Some errors of traditional Marxism

I have argued that in the *Grundrisse* notebooks Marx bestows the object of his analysis

with ontological depth and operationalizes a realist conception of science and retroductive mode of inference. The 1857 *Introduction* is a valid—albeit rough and tentative—account of Marx's analytic in these notebooks. On this basis, I examined the bibliographic relationship between the *Grundrisse* and *CCPE*. I argued that because Marx was unable to present the internal relations between 'money' (circulation) and 'capital' (production) the *Introduction* was rendered redundant and meaningless to the reader of *CCPE*. For this reason Marx 'suppressed' it in favour of the 1859 *Preface*, which he used as a vehicle to convince the Prussian authorities that the book was politically respectable. I maintain, therefore, that the *Preface* is a singularly inappropriate basis on which to found an understanding of his analytic.

I realise that my realist reading of Marx conflicts with more traditional interpretations. Before developing this reading, therefore, I want to clear the way by summarising what I take to be the principal misconceptions of the relationship between the *Introduction* and the *Preface*.

Typically, the *Introduction* is regarded as an earlier draft of the *Preface* which Marx 'replaced' because he changed his mind. This effectively severs the organic relationship between the *Introduction* and the *Grundrisse* and renders the former meaningless. A variation on this theme is to conclude that, because the *Preface* bears little relationship to *CCPE*, the *Grundrisse* must be 'the material of which the generalizations in the *Preface* are the distillate' (Nicolaus 1972:308). Nicolaus concludes from Marx's remarks in the *Preface* that he 'viewed most of the early works…with skepticism bordering on rejection' (ibid.: 307). This effectively severs the organic relationship between these works and the *Grundrisse*, which is read as 'a critique of all those earlier ideas' (ibid.: 312).

Severing the organic links between the *Introduction* and the *Grundrisse* and Marx's preceding work, in this way, encourages an assessment of the *Introduction* on the basis of its ability to 'decode the logic of *Capital*' (Echeverria 1978b:334). The complex bibliographic relationship between the *Grundrisse* and the assorted manuscripts that comprise *Capital*, examined in detail by Oakley (1983), means that it must fail this test. Inevitably the reader detects a tension between the *Introduction*, which takes 'civil society' as its 'point of departure' (Marx 1857:83) and explains Marx's method of inquiry, and Volume One of *Capital*, which begins with 'commodity' and presents Marx's method of exposition. On this basis, Marx's apparent decision to 'replace' the *Introduction* with the *Preface* is supposedly explained.

Severing the organic links between the *Introduction* and the *Grundrisse* and between the *Introduction* and Marx's preceding work also focuses attention on the third section of the *Introduction*, to the exclusion of the first two, which encapsulate this relationship. As a result, the significance of Marx's metaphor of depth is missed, the object of his analysis is construed as ontologically flat and his method of abstraction is misunderstood. Let us recall, from the *Introduction*, that Marx construes abstraction as a descent, that is, as a digging beneath surface forms, via critique, to uncover the mechanisms and conditions sustaining them. This is the process of retroduction I explained in the previous chapter. The second movement of thought which Marx describes in the *Introduction*, the return journey of ascent from the abstract to the concrete, is the task of empirical research—'a

work in its own right' (Marx 1858:461)—during which the retroduced model and its causal laws are tested in explanation of the initial *explicandum*.

Traditional Marxism turns all this on its head. Without ontological depth, critique as a retroductive, *a posteriori* mode of concept formation (the first movement Marx describes in the *Introduction*) becomes meaningless. Denied their real referents, Marx's concepts are reduced to heuristic devices, of the sort Engels (1967a) criticises, and Marx's abstraction has no place to go but upward, from the concrete particular (the commodity) to its simplest, most abstract determinants. The corollary of this position is to consider Marx's analytic as essentially complete and of broad applicability. It is also to construe the Marxist method of analysis as a descent from the 'high' level of abstraction, that Marx supposedly established, to the concrete, this time conceived 'as a rich totality of many determinations and relations' (Marx 1857:100). Given the conceptual mediation of perception, which I maintain Marx describes in the *Introduction,* the concrete recedes as fast as it is approached, and this impossible abstract ➔ concrete methodological trajectory removes the need for empirical accountability and transforms theory into an end in itself. Sayer's injunction that 'theory should be abandoned if it gets in the way of knowledge' sums it all up (Sayer 1987:149).

This amalgam of self-confirming misconceptions conspires to sustain the predominant interpretation that Marx replaced the *Introduction* with the *Preface* and, in this way, the latter is confirmed as the definitive statement of historical materialism.

Such is traditional Marxism. But what is the alternative?

The unknown masterpiece

While Marx was struggling to organize his draft of Volume One of *Capital* into publishable form, he advised Engels to read Balzac's *The Unknown Masterpiece* (Marx to Engels, 25 February 1867). This was one of Marx's favourite stories, it made a deep impression on him and he likened himself to its central character, the old painter, Frenhofer (Berlin 1963; Prawer 1976:367). For ten years, Frenhofer tries to depict on canvas the image in his imagination. In his quest for perfection, he is forever putting the finishing touches to his masterpiece and is unwilling to expose it to the public gaze. When his creation at last is revealed, it is perceived by others as an incomprehensible mass of colour and lines. In despair, Frenhofer burns his canvases and by the next morning he is dead.

This story is usually interpreted as a parable on the futility of seeking artistic perfection, but I do not think this is what Marx saw in it. There is something more. Earlier in the story, Frenhofer outlines a theory of art by which to understand his masterpiece. The artist must try to penetrate the 'mystery of form' and grasp the essence and movement of things. The real difficulty, we are told, is to separate cause and effect, for each is contained in the other (Balzac: 8). [17] Frenhofer's tragedy was not to be obsessed with perfection: it was to 'see above and beyond others' (ibid.: 18), to be too ahead of his time to be understood by his contemporaries. I suggest this was Marx's tragedy too, and why he identified so much with Frenhofer.

Recognition of the significance of scientific discoveries often takes some time, as does their subsequent verification. Nor is it uncommon for philosophical understanding to lag behind progress in science. Only recently have philosophers recognized and explicated the realist concept of science that Marx operationalized over a hundred years ago. Yet realists have been preoccupied with demonstrating that Marx is indeed a realist—as if the imprimatur of science that realism bestows automatically makes Marx's analysis true—at the expense of putting realism to work in explicating Marx's analytic and in scrutinizing its veracity. Let us recall that retroduction is a logic of discovery, not proof; it 'merely suggests that something *may* be' (Hanson 1961:85). Marx's model of capital may well be a masterpiece, but this review of his bibliography suggests that, almost 120 years after his death, it is still largely unknown.

There is much work to be done. An examination of the bibliographic relationship between his 1840s essays, the *Grundrisse* notebooks, and the assorted manuscripts that comprise *Theories of Surplus Value* and *Capital*, reveals two things. First, the scope of Marx's intended opus is much broader than a reading of *Capital* suggests. We should not forget his 1845 commitment to write a 'special work' which would bring together his critiques of the state and civil society in a 'connected whole', the contracted book *Critique of Politics and Political Economy*. As Oakley (1983:81) puts it: 'it is not possible to be certain about what it was that Marx did not finish!' Second, given Marx's dissatisfaction with the various editions of Volume One and the incomplete and fragmented nature of the manuscripts that Engels edited into Volumes Two and Three, it is doubtful if Marx's model of capital has ever been adequately presented. Even within the restricted scope of Marx's 'Economics', '*Capital* must be read as an incomplete work of uncertain bibliographic and substantive status' (Oakley 1983:126), rather than the definitive work it is often taken to be. In short, Marx did not finish what he set out to investigate and he did not present all that he did investigate. These are grounds for concurring with Bhaskar's assessment that Marxism is 'a research programme initiated by Marx but no more completed by him than Copernicus completed the revolution in thought which Galileo, Kepler and Newton developed, and Einstein and quantum theory have radically transformed this century' (Bhaskar 1989a:5).

I think my use of realism and retroduction to make sense of Marx goes some way towards explaining his predicament. The problem is this: how to present a model of an object comprised of interdependent elements, in which every concept of every element presupposes every other, where effects become causes, and where 'every economic relation presupposes every other…and everything posited is thus also a presupposition' (Marx 1858:278).

In hindsight, having developed the interdependence of his categories in the *Grundrisse*, Marx should have presented them at the outset of *Capital*, alerted the reader to the novelty of the concept of causation and explanation that his model entails, and structured the presentation of his analysis accordingly. But Marx's concept of science is embedded in his concept of society, and he was not fully aware of the significance and consequences of what he had achieved, as is evident in his surprise and bewilderment over the poor reception of *CCPE* and Volume One of *Capital*. This awareness developed only gradually, in the form of the problematic relationship between the methods of

inquiry and exposition. Internal relations cannot be understood, and therefore should not be presented, sequentially, and certainly not as discrete in time as *CCPE* and Volume One, and Volume One *(Production)* and Volume Two *(Circulation)*. This understanding came too late for Marx and eventually these difficulties consumed him.

The lesson of *The Origin of Species*

At the very time Marx was in his London suburb working on his 'rough draft', that winter of 1857–8, Darwin was just seventeen miles away in his Downe village rectory working on a draft of *The Origin of Species* (Darwin 1985). *The Origin of Species* was published in 1859, in London. Darwin intended it as only an abstract of a much larger work which was to follow. But his publisher objected to 'abstract' appearing in the book's title, so it was dropped, although the several allusions to a forthcoming larger work remain. That same year, Marx published *CCPE* in Germany. It was intended as the first instalment of a series of 'fascicles', the form in which he wanted to publish the rough draft of his economics, the *Grundrisse*. But here their similarities end. *CCPE* sank without trace. It was not read then and is not read now. Even Marx's supporters were bewildered by the book. Volume One of *Capital* met with a similar fate; it sold well only in Russia. *The Origin of Species*, on the other hand, was a resounding success. The first edition sold out on the day of its publication, as did its second printing a month later. Within a decade the validity of its central argument had been accepted. Engels maintained that Marx's discovery of the law of value is the social counterpart to Darwin's discovery of the law of natural selection. Analogous discoveries, perhaps; but very different receptions, certainly. Why? The answer contains some valuable lessons on how to present Marx's discovery.

There are many reasons why Marx's law of value and Darwin's law of natural selection met with very different fates, but their very different rhetorical, textual strategies for presenting their discoveries to the public, in other words, the way in which they try to persuade the reader that their arguments are credible, were critical (Kurzman 1988). Discovering a mechanism is one thing, persuading others of its existence and workings is quite another. Retroduction suggests what may be, it does not prove what is. A large part of the popular success of the *The Origin of Species* is because Darwin recognized this distinction, and a large part of the failure of *Capital* is because Marx did not.

Darwin does not attempt to prove the validity of his theory of natural selection in *The Origin of Species*, because he knows he cannot. Instead, he describes for the reader how he arrived at this theory by reconstructing his process of reasoning. *The Origin of Species* is a model retroductive argument, written with great economy. In the very first chapter, he presents the problem to be explained—the existence of variation within and between species—a problem he first formulated twenty years previously. He then reconstructs his process of excavation: from the problem of variation, to the struggle for existence, to the mechanism of natural selection, and finally to the laws of variation. He then anticipates objections to his theory, admits what he cannot explain, and shows how 'natural selection' has the potential to explain not only variability, but also other facts and

problems. By making explicit his process of reasoning, Darwin invites readers to decide if 'natural selection' is a promising conjecture, a likely direction of enquiry. They decided it was. I want to suggest that Darwin adopted this approach because he realised he was not in a position to say that natural selection did exist and cause the origin of species, only that it *might*. It is Darwin's very willingness to concede that he might be wrong that persuades us that he may be right.

There were, in fact, many serious gaps in Darwin's theory of natural selection. Most fundamentally, it could not explain how those variants are inherited that enable their possessors to deal successfully with environmental conditions and contingencies. This gap in his argument could have proven fatal to his theory of natural selection: but it did not. Why? By recognizing the distinction between conjecture and proof, between what might be and what is, Darwin presents us with an interesting retroduction, acknowledges what he cannot explain, and thereby invites others to continue the work he began. Once readers are persuaded that this is an interesting conjecture they are more likely to want to help resolve gaps and anomalies in Darwin's argument. In fact, as is usually the case in science, the truth of natural selection was demonstrated only much later, by other people, through work in genetics.

Marx, however, adopts a very different rhetorical strategy. Like Darwin, he wrote for the general, educated public. He wanted his work to be a popular success because he wanted it to be immediately politically influential. But unlike Darwin, he presents his theory without an account of how he arrived at it. He presents his putative *explicans*, but not his initial *explicandum* and thus denies us the ability to assess the first in the light of its ability to explain the last. Severing this logical connection makes a mystery of that of which capital is an explanation. Darwin adopts the persona of the humble traveller-naturalist, reporting on his findings. Marx adopts the persona of the authoritative scientist, who refuses to concede to 'the prejudices of so-called public opinion' (Marx 1867b:93).

The Preface to the first edition of *Capital* Volume One is full of allusions to biology and physics; he talks of the 'natural laws of capitalist production' and views 'the economic formation of society' as 'a process of natural history'. Indeed, *Capital's* very scientificity is presented as an explanation of why the reader might find it difficult to understand. If the reader finds the first sections of Volume One hard going, it is not the writer's fault, but because 'beginnings are always difficult in all sciences' (Marx 1867b:89). In effect, the reader is asked to defer to the superior authority of the scientific writer whose conclusions are not to be doubted. Unlike Darwin, Marx mocks those who fail to understand him, and makes acceptance of his theory, in total, an act of political faith. This would be excusable were *Capital* political polemic, but Marx is adamant that his work is scientific; indeed, it is a 'natural history'. A consequence is that more energy has been invested by his supporters in demonstrating the truth of Marx's theory of capital than in seeking out and remedying its manifest deficiencies.

It might be thought that the 'political' nature of *Capital* makes a comparison with *The Origin of Species* untenable. His political opponents would do their best to rubbish his theory. This is true. But the point to note about its first publication was that even Marx's supporters could not see its political relevance. It was politically influential only in

Russia, and largely because of its perceived scientificity. In fact, *The Origin of Species* was by far the more politically sensitive book. Evolution was perceived as a godless, socialist idea. The ideological chill created by the threat of revolution in the years in which Darwin grew up 'made advocacy of French evolutionism seem as dangerous to sound morality as Russian bolsheviks appeared to early twentieth century Americans' (Depew and Weber 1996:69). Its publication created (an albeit short-lived) cultural crisis in Britain because it challenged the unwritten rule that the (Newtonian) scientific model would not be applied to living things and thereby challenged the authority of the Church and its theological narratives about the human condition (ibid.: 10).

There may yet prove to be one more similarity between Darwin and Marx. At the turn of the twentieth century Darwinism, like Marxism now, was thought to be on its deathbed. But 'traditions that have fallen on hard times sometimes manage to get back on their feet by changing…their ontology…that is, the kinds of theoretical entities and processes they recognize' (Depew and Weber 1995:3). This was certainly true of Darwinism:

> Rather than collapsing… Darwinism eventually received a new inter- pretation, allowing it to rise up with new vigour and to become one of the most fruitful scientific research programs of a century that will be remembered for its spectacular scientific successes.
>
> (Depew and Weber 1996:1)

An understanding of realist ontology changes the kinds of theoretical entities and processes one can recognize in Marx and has a similar capacity to reinvigorate the research he began. It is to this I now turn.

7
The nature of capital

Surface, structure, movement

Only in motion does a body reveal what it is.
(Engels to Marx, 30 May 1873)

Introduction

How might this account of Marx's realist ontology and retroductive method contribute to the presentation, assessment and development of the research he began?

First, it indicates that a prerequisite of knowing a nonempirical object, whether it be capital or quark, is the ability to envisage the possibility of its existence, to imagine, or form a mental image of it. Marx was well aware that his work amounted to mere fragments and would, I think, approve of Frenhofer's advice to his pupil that You have sufficient intelligence to imagine the rest from the glimpses that I am giving you' (Balzac: 11).

Second, it reveals that there is nothing mysterious or exceptional about Marx's retroductive method. Everyone infers thus. Discovering the central role of capital was a great retroduction, but one does not have to be Marx to engage in conceptual modelling, and the public availability of his work means that it can be continued.

Third, it underlines the epistemological significance of analogy in modelling social relations which 'can be established only by being thought' (Marx 1858:143). Initial insights into an object which cannot be observed directly, such as capital, must use analogical reasoning. But 'the identification of these mechanisms is possible only if the literal core of the metaphor is revealed' (Tsoukas 1991:567). To continue Marx's work it is necessary to imagine his object empathetically and reveal the literal core of the analogies active in the construction of his model. These come mostly from the natural sciences (and base/superstructure is not among them).

This chapter acts on these insights to reconstruct and criticise the model of capital which exists in fragments among the *Grundrisse* notebooks, the three parts of *Theories of Surplus Value* and the three volumes of *Capital*. This model should be understood in a realist sense, that is, as an attempt to designate the necessary connections within an internally- or organically-related object which Marx regards as real.

Modelling demands conceptual precision. Since these concepts model actual relations, the more sharply we define them, the more clearly we can see. But Marx's concepts have

been dulled and misshapen by being handed down through the generations and stamped with the authority of tradition. To model capital one must question this authority, be untraditional. Marx is dead. The Soviet Union is no more. We are free to think for ourselves, to use our 'disciplined imagination'. Piecing together the hundreds of internal relations from among Marx's assorted manuscripts will take some work. This is hardly a job for one person, much less one chapter. But a start must be made. Here I focus on those internal relations forming the nucleus of capital. My main aim is to convey how Marx imagined this nonempirical thing, for once this is grasped, like Frenhofer's pupil we can piece together the rest ourselves from the glimpses he left us. Since knowledge of what an object can do is contingent on knowledge of the nature of that object, I give priority to capital's model over its laws.

Capital as a cell: society's genetic code

To imagine what capital is, ask, 'What is capital like?' As Marx lay in his grave, Engels bore him this testimony: 'just as Darwin discovered the law of development of organic nature, so Marx discovered the law of development of human history' ('Speech at the Graveside of Karl Marx', 1883, cited in Colp 1982:470). Students of Marx tend to view this claim skeptically and put it down to Engels's positivist leanings. But we should take seriously Engels's analogy between the discovery of the law of natural selection and the discovery of the law of value, for there can be no doubt that Marx developed his understanding of capital and the law of value via analogy with the natural sciences, of which he (and Engels) was an avid student.

At the very time he redrafted the *Grundrisse* notebooks, during the 1860s Marx read widely in natural history, biology, astronomy, paleontology, physics, chemistry, and mechanics. [1] Indeed, it was to find some natural-scientific basis for his work on capital that Marx read *The Origin of Species* in December 1860, and re-read it during the summer of 1862. True, Marx had little time for the then fashionable 'social Darwinism', because he believed the cardinal difference between animal and human societies—'animals, at most, collect, while men produce'—makes it impossible to carry laws from the first to the last: (Marx to Lavrov, 12(–17) November 1875). But Marx deeply respected Darwin's achievement in *The Origin of Species*. 'This is the book that contains the biological basis of our conceptions' (Marx to Engels, 19 December 1860). It is a 'spendid work' (Marx 1863, Part 2:121).

Consider Engels's analogy between the law of value and the law of natural selection next to Marx's belief that he studied the cell form of society, 'very simple and slight in content', but more difficult to study than the 'complete body' or 'organism' (Marx 1867b:90): for the cell was to prove an important component of the theory of natural selection. [2] Marx imagined capital as a cell and sought its structure. [3] If Marx's law of value and Darwin's law of natural selection are analogous, as Engels contends, then Marx's allusion to 'cells' suggests to me that his discovery of the 'basic structure' of capital (Marx 1864:267) is analogous to Crick and Watson's discovery of the double-helix structure of the DNA molecule. [4] Their discovery illuminated how genetic

information is preserved and transmitted and helped make natural selection explicable.

Capital is analogous to a cell because it contains the primary, self-replicating genetic mechanism structuring individuals' capacity to act and is present in nearly all social organisms. These organizational cells are not a microcosm of the social body; they constitute the social body, just as actual cells constitute actual bodies. The capital-cell analogy is best appreciated in the context of a distinction among three types of causes (discussed in Chapter 3). Marx wants to discover material causes, that is, that structure of internal relations which bestows on the individuals who constitute it a capacity to act. In developing his model or theory of capital, Marx is less concerned with who exercises power and why (efficient and final causes) than with how the social relations that are capital—an 'entirely objective organization of production'—cause the capacity to act of both employers and employees (material causes) (Isaac 1987a).

It might be objected that the analogy with DNA leads to an unduly deterministic concept of capital; we are powerless before this nonempirical thing. [5] But this would be to misunderstand the nature of DNA and the power of material causes. DNA is not the inert, predictably stable molecule it is often taken to be. It is a metabolic molecule, responsive to what happens around it; and through recombinant DNA technology, genetic codes can be manipulated. This analogy with DNA is no more deterministic than Engels's analogy with natural selection or Marx's analogy with cells. And Marx's point is that while capital is a dynamic social relationship, not an inert thing, it *is* one of the causes determining social action. This is why he devoted his life to its understanding. But there are other causes, final and efficient: the exercise of the capacity to act is always negotiated and is contingent on political skill, the motives of people and the circumstances of its deployment.

It might also be objected that this analogy, between the structure of capital and DNA, ignores the differences between social and natural objects. [6] But Darwin had already overcome this objection. He got the idea of natural selection from political economy (Malthus). And Marx had no hesitation in reasoning in the reverse direction, from the natural to the social. Regardless, my aim is not to rehearse the possibility of naturalism, I take this as given, but to show how Marx assumed it and developed his understanding of capital by reasoning analogically from the natural to the social world.

The interdependence between the law of natural selection and cell theory suggests another connection between Engels's analogy between the law of value and the law of natural selection, and Marx's analogy between capital and the cell. The connection is provided by this requirement of the realist concept of science: understanding what an object can do (expressed in laws) is dependent on understanding what an object is (expressed in models). Understanding the law of natural selection proved to be dependent on understanding the nature of cells, on the mechanisms by which favourable characteristics are inherited. Similarly, I suggest, understanding what capital can do (the law of value) rests on understanding what capital is (a model of capital). If Marx's model of capital lies in fragments, as he admits, then we should approach any laws based on this fragmented model with circumspection. The corrollary is that understanding the law of motion of modern society can be furthered by piecing together these fragments and creating a coherent model of capital.

The metaphor of movement: value and gravity

The cell was but one of many metaphors and analogies Marx used to imagine capital and its mechanisms. But the dominant metaphor, which gives coherence and meaning to the others, is that of *movement*. Marx's ultimate concern, which warrants emphasis, is to 'reveal the economic law of *motion* of modern society' (Marx 1867b:92, my emphasis), that is, to conceptualise the logic of contemporary social history.

Marx encountered the idea of movement during his reading of Greek atomic theory in 1839, in preparation for his doctoral dissertation. He saw the idea, too, in Hegel's notion of the dialectic, which 'regards every historically developed form as being in a fluid state, in motion' (Marx 1873:103). Standing the dialectic on its feet by imagining it as a characteristic of social reality, he construes it as the existence and action of opposing forces, those dual-sided social relations between owners and non-owners which he first recognized in 1847 (Marx 1847a). Marx developed his understanding of the dialectic of movement by reasoning analogically from the natural sciences, which, at that time, were very much influenced by the physicist and astronomer Isaac Newton. Marx first read atomic theory and Newton around the same time, during 1839. He re-read Newton as he was working on revising his 1861–3 manuscript into *Capital* (Marx to Engels, 19 August 1865).

Marx could not but be influenced by Newton. No scientist of the mid-nineteenth century would be in any doubt that 'motion' referred to the movement of heavenly bodies and the 'laws of motion' referred to the three propositions formulated by Newton. Newton's own guiding analogy was from the social world: the heavens are a clock-like machine. The essence of his theory of the movement of bodies is that they are driven by external forces, principally by a tension between inertial tendencies and gravity. His laws of motion allow the forces exerted on bodies to be calculated and their effects predicted. From these laws, he was able to deduce the orbits of the planets. He could also account for almost everything then known about the movement of bodies on earth. Indeed, his laws were linked to electricity and magnetism.

Such was the influence of Newton's laws of motion that the explanatory model they contained was the canonical form of scientific theory in nineteenth century Britain (Depew and Weber 1996:149). For an explanation to be accepted as scientific, it had to conform to the Newtonian paradigm, and so it spread throughout the natural sciences, and from there to the social sciences. If, as Marx was adamant, political economy was to be scientific, it had to be Newtonian, that is, it had to have some recognizable analogue of an inner intertial tendency, of conserved momentum, and of a gravity-like force, the intensity of which decays with distance (ibid.: 1996).

Engels summarises this paradigm in a letter to Marx, 30 May 1873:

> The subject-matter of natural science—matter in motion, bodies. Bodies cannot be separated from motion, their forms and kinds can only be known through motion; of bodies out of motion, out of relation to other bodies, nothing can be

> asserted. *Only in motion does a body reveal what it is…* The knowledge of the different forms of motion is the knowledge of bodies. The investigation of these different forms of motion is therefore the chief subject of natural science. [7]
>
> (my emphasis)

In what comes close to describing the nature of Marx's conception of capital, Engels goes on to say that physics, 'the science of these forms of motion', establishes that, under certain conditions, forms 'pass into one another' and produce effects which cause changes in the internal structure of bodies.

It is tempting to regard capital—this curious two-sided metamorphic object, fusing social and material characteristics, unifying opposing forces, existing as discrete moments of a circuitous process—in much the same way as Newton's critics regarded gravity. His acceptance of the possibility of an invisible force, acting at a distance with no actual contact between bodies, was then an anathema to scientists, for they opposed the notion of invisible forces as a heresy smacking of magic and occult. Newton's disposition to accept the possibility of such entities owed much to his immersion in alchemy. Its chief practical object, the transmutation of baser metals into gold, attracted confidence tricksters posing as alchemists, who duped innocent individuals. It was these frauds who gave alchemy a bad name and opened it to ridicule. But genuine alchemists dealt with genuine chemical processes. Alchemy was the science of the Middle Ages, during the fourteenth and fifteenth centuries, going together with astronomy, and the prelude to modern chemistry.

If political economy was to be Newtonian, Marx had to find a force, like gravity, acting at a distance on these 'atoms' of 'civil society' (these 'rational economic agents'). And, like Newton, to find this force he had to imagine the possibility of an invisible (nonempirical) reality. This force is value. Value is to Marx what gravity is to Newton. As I shall later explain, just as Newton distinguishes between absolute and relative motion, Marx distinguishes between absolute and relative value. [8] This distinction, in fact, is the key conceptual dualism of the first eighteen of *Capital* Volume One's thirty-three chapters. [9] This analogy, between gravity and value, rests on the similarly heretical idea, advanced by critical realists, that real but nonempirical *social* forces may exist.

Marx finds this force everywhere. Like gravity, it is not a single force, but a single name for a vast number of different, but interlinked, causal transactions, with an identical structure. It is this force, value, which binds together the elements of this object, capital. Like gravity, value is nonempirical. It is a social force acting at a distance, without any visible intervening mechanisms, on people discrete in time and space. This is why value is so damned hard to understand and so easy to refute. Since it was invisible, Newton would not speculate on gravity's nature. 'We have', he said, 'explained the phenomena of the heavens and of our seas by the power of gravity', even if we 'have not yet assigned the cause of this power' (Newton, cited in Gower 1997:74). All he knew was that he could measure gravity's effects and use this imagined force to explain the movement of bodies (Depew and Weber 1996:89). Marx regards value the same way.

Imagining capital: surface, structure, movement

Marx imagines capital, this cell-like dynamic object, in three dimensions. It has an interior (production) and a surface (circulation), an inner life (propertied versus propertyless) and an outer life (buyer versus buyer, capital versus capital). It is organized around dual-sided relations of production: they empower and suppress, produce wealth and poverty. Movement within this object is energized by the consumption of labour by capital. The dialectic of this movement turns these relations upside down and inside out. As relations are inverted, their forms of appearance are mirrored. This outer appearance disguises the real, inner nature of the object by making everything seem upside down and in reverse.

To paraphrase Engels's letter to Marx (30 May 1873, cited on page 120): capital is a social relation which undergoes metamorphosis through various material forms, a process which produces effects that cause changes in the internal structure of these relations. Grasping this movement, that is, considering the process 'taken as a whole', requires an analysis of the 'basic structure' of capital (Marx 1864:267). The purpose of Marx's metaphor of depth is to create the space within which the causal mechanisms of this structure can be imagined, then modelled. The 'visible, merely external movement' of the moments of circulation, he contends, conceals the 'true intrinsic movement' of the process of production. To resolve the first into the last, 'is a work of science' (ibid.: 313). Developing the astronomical analogy, the 'moments' of capital are analogous to stars whose apparent orbits often conceal their real orbits (Marx 1867a:786). Like the astronomer, Marx attempts to break through the sphere of appearance and, by the power of his imagination, catch a glimpse of mechanisms in the reality beyond (ibid.: 433).

This three-dimensional conception makes more intelligible his stated object, announced in *Capital:* 'the capitalist mode of production, and the relations of production and forms of intercourse corresponding to it' (Marx 1867b:90). Let me say what these terms mean.

'Forms of intercourse' refers to the *explicandum* with which Marx began in 1843 and which he worked on throughout that decade, those monads of modernity: individuals, constituted by the internal relations between civil society and the state, who imagine themselves to be independent and free. They constitute the surface of society, the sphere of circulation created by the process of exchange: 'a very Eden of innate rights of man' (Marx 1867a:280). 'Forms of intercourse' (Marx 1867b:90) or, as Marx puts it elsewhere, 'forms of social/human life' (Marx 1867a:168), should be understood in the same way as Wittgenstein's 'forms of life', that is, as integral to and constitutive of social relations, rather than as a mere reflection of an external, objective reality: the surface or form of an object is as real as its inner structure or content.

The 'mode' and 'relations of production' are the *explicans* of these 'forms of life', the twin axes of Marx's model of capital. The mode of production is not a type of society or 'social formation', as it is often regarded: it is an organizing process; more prosaically, it is 'the way of earning a living' (Marx 1847a:166; 1864:514). Relations of production are

not a 'base', they are a substratum: the internal structure of capital, the product of this process.

A realist understanding of Marx's use of metaphor, then, leads to a conception of his object in three-dimensional terms, as the *surface* (civil society/political state), *structure* (relations of production), and *movement* (mode of production) of society. Marx aims to explain the law of motion of the mechanisms which mediate between structure and surface and which generate these apparently independent spheres, 'civil society' and 'political state', constituting the monad of modernity.

If, as Marx imagines, capital is a real internally-related and moving three-dimensional organic whole, several points follow. First, the model's concepts must be interdependent and fluid in meaning, rather than mutually exclusive and fixed. If the elements of capital are interrelated, concepts of them must be understood relationally. Second, the meaning of these concepts depends on what part of this object we look at. We can examine, one, capital's interior (production) or its exterior (circulation) (as Marx does in Volumes One and Two, respectively, of *Capital*); and two, the relationship between its interior and its surface (as Marx does in Volume Three). Third, the meaning of these concepts depends also on whether we consider capital at rest or in motion. Considered at rest, capital is a 'basic structure' (Marx 1864:267). Considered in motion, capital is a 'complicated social process' which undergoes a metamorphosis into things, then social relations once more (ibid.: 828, 830; 1858:301). It is, I suggest, because of these imagined characteristics of capital that Marx never defined his concepts; their meaning has to be inferred from their context and usage. Their meaning varies according to whether he is refering to a social substance or its material form, a structure or a process, elements at rest or in motion, an activity or its product.

Keeping this imagined object in the mind's eye—a three-dimensional cell-like thing with a surface and an internal structure connected by movement—how might it be modelled? The aim of modelling is to devise 'real definitions' and to ensure that relations between concepts constituting the model correspond to relations between elements constituting the postulated object. Capital, for Marx, is an 'organic whole'; 'capital', therefore, is intended to be an 'artistic whole' (Marx to Engels, 31 July 1865). The great difficulty in modelling organic things is that, since everything is interconnected, as one discovers a new element, one must reconceptualise the others. Once these interconnections are understood, they become the phenomena to be explained, and so one digs deeper and must reconceptualise the previously known in the light of new discoveries, and so on *ad infinitum*. Modelling is an unending quest. There is a constant, creative tension between vertical exploration and horizontal consistency. This is a partial explanation of why Marx left an assortment of manuscripts, drafted at different times over thirty years, containing fragments of 'capital', understood at different, and often unconnected, levels of abstraction.

I described the surface of capital—modernity—in Chapter 3. This remains the phenomenon to be explained. The rest of this chapter reconstructs the nucleus of Marx's explanatory model of this surface, focusing on its twin axes, first its structure (relations of production) and then its movement (mode of production). I pose these internal relations starkly to capture their essential characteristics. I elaborate their interconnections in the

next chapter using Foucault's 'disciplinary power' to explain the mechanics of this motion.

Capital's structure: relations of production

Let us freeze this cell, arrest capital's movement and examine the cross-section of its structure. Marx calls this structure 'relations of production'. It is the 'inner totality' connecting and unifying production, distribution and circulation (Marx 1857:264); these are internally-related moments of the same relations, 'members of a totality, distinctions within a unity' (ibid.: 99). Circulation (market-places) and production (work-places) subsist side by side, separate in time and space, but are nevertheless internally related. Similarly, production and distribution are opposite sides (back and front), expressions of the same relations (Marx 1863, Part 3:84; 1864:878). Capital's structure connects them all.

Although Marx refers to relations of production as an 'inner totality', they are internal to modern society, not to production. Relations of production are not workplace or 'industrial' relations. They are relations among people and things discrete in space and time, not among people and things working in the same place at the same time. They are relations *of* production because production is the material or substance constituting the surface of society, they are not relations *in* production, or social interactions among workers, managers and owners within workplaces.

Capital's structure connects society's interior with its surface. This structure is a set of interconnecting parts, a matrix of internal relations, held together by its moving force, value. The 'poles' of these internal relations are, for the most part, invisible to the naked eye and can be seen only through Marx's conceptual distinctions. [10] These distinctions derive from his critique of economic categories, by which he prised apart a series of elements within 'capital', principally, labour from labour-capacity, abstract from concrete labour, constant and variable capital, and absolute from relative surplus value. [11] These distinction allowed Marx to see more and differently.

Before continuing, I want to note a problem with Marx's use of 'capital'. Having skilfully made these conceptual distinctions, he then uses this concept both as a synonym for 'employer' or 'owner' and as a name for this nucleus of internal relations. The first usage implies that it is the behaviour of employers ('capital') which causes the behaviour of employees ('labour'), while it is the social relation of production (capital) which is the material cause of the actions of *both* employers and employees (Isaac 1987a). Using capital for both meanings conflates material and efficient causes. In what follows, therefore, I restrict 'capital' to its proper usage, a social relation between owners and workers, this organic whole, and substitute 'propertied' and 'propertyless' for 'capital' and 'labour'.

Owners and workers: differentially charged poles

The central internal relation within capital—its axis—is between owners and non-owners

of the means by which commodities are produced: tools, machines, buildings and land. Marx refers to workers and owners as ‘poles’. They are analogous to the north and south poles of a magnet at which the lines of magnetic force are concentrated. They are opposed, differentially charged, fixed points around which the ‘moments’ of capital revolve in a metamorphic circuit. Owners and workers are ‘poles apart’, that is, completely opposite to each other.

This internal relation between them is the prime material cause, that is, it causes the capacity to act of both owners and non-owners of the means of production, constraining and facilitating their actions. It is not the behaviour of the owner that causes the behaviour of the worker. Rather, the social relationship between them determines the capacity to act of both. These capacities are asymmetrical: ‘the capitalist is just as enslaved by the relationships of capitalism as is his opposite pole, the worker, *albeit in a quite different manner*’ (Marx 1866:990, my emphasis). Owners dominate workers. This internal relation, then, has a dominant and a subordinate pole. [12]

The capacity to work and its exercise: material and efficient causes

Capacities to act are usually exercised. That these particular capacities must be exercised is given by the very essence of capital: because it is a relation of exclusion, each pole has something the other wants and so there must be an exchange. Marx is particularly interested in the capacity to act of workers and their exercise of this capacity, a distinction between ‘labour-capacity’ and ‘labour’, between a material and an efficient cause. Workers’ capacity to act is exchanged for money and put to work on privately owned means of production. Exercise of these reciprocal, but asymmetrical, capacities to act, in other words, working, connects the two poles of this relationship and reproduces the axis of the internal relation. The asymmetry of the internal relation gives its poles a differential causal charge. This is the source of the energy propelling capital on its metamorphosis through its various modes of existence. It is because of this structural asymmetry that, under modernity, ‘nothing is constant but change’.

Concrete and abstract labour: organizing a productive power

The exercise of workers’ capacity to act, labour or working, may be conceptualised in two different ways, depending on whether one looks to the observable labour of individual workers, that is, concrete labour, or the average social labour of the organization, that is, abstract labour. The reduction of different kinds of labour to uniform, simple, homogeneous labour, of a uniform quality, whose only difference is quantity, Marx explains, ‘is an abstraction which is made every day in the social process of production’ (Marx 1859b:30). This daily abstraction, Marx adds, is ‘*no less real* than the resolution of all organic bodies into air’ (ibid., my emphasis). [13]

Intervening between concrete and abstract labour is the concept of productive power or ‘force’. Concrete or private labour is rendered ‘abstract’ or social as it is organized into a productive power. Marx suggests as much: creating a ‘definite organization of social labour’ (‘abstract labour’), he says, ‘*at the same time* develops new, and social,

productive powers of labour' (Marx 1867a:486, my emphasis) (productive 'force'). The same process that organizes labour into a productive power or 'force' makes labour 'abstract' and 'sets in motion labour of a socially average character' (ibid.: 441).

Dual-sided production relations: productive forces and civil society

The nature of these dominant/subordinate poles, owners and workers, gives relations of production their distinctive feature: they are dual-sided (Marx 1867a:799; 1847a). They simultaneously develop a productive power and a repressive power, they produce wealth and they produce poverty, they produce employers and they produce employees. 'In the same relations in which there is a development of the forces of production, there is also a development of a repressive force'. For this reason, forces and relations of production correspond to the two sides of the development of the social individual (Marx 1858:706).

These dual-sided social relations connect 'productive forces' and 'civil society', factory and street life. They simultaneously organize workers into a productive power and atomize their communities. This twin effect is achieved by the different organization of space, time and movement, within and without the workplace (Harvey 1989:226–39). Contrast the linear and homogeneous time and space, within the workplace, with the metabolic and heterogenous time and space, without. As these dual-sided techniques organize labour into a productive 'force' so they dissolve society into atoms. Productive forces (organization) and civil society (atomization) are two sides of relations of production, connecting the interior and the surface of capital, the twin products of one—yet to be explained—process.

The unity of production: the labour process and the valorization process

The production process contains two conceptually distinct sub-processes, the labour process and the valorization process. The labour process creates useful articles. Its chief elements, common to all forms of society are, one, purposeful activity, that is, work itself; two, the object on which that work is performed; three, the instruments of that work (Marx 1867a:284). The valorization process fixes the value or price of these articles, by a centrally organized scheme. 'Valorize' is derived from 'valor': 'the amount of money…that a thing is worth'. In this context the valorization process refers to the organization of concrete into abstract labour and the creation of a productive power or force. Only when the capitalist 'sets in motion' this 'labour of an average social quality' does the law of valorization 'come into its own' (Marx 1867a:441). The distinction between the labour process and the valorization process is purely conceptual. Empirically they cannot be distinguished, for these processes and their products are indissoluble, unified as the production process by people working (Marx 1866:991).

Absolute and relative value: abstract labour and exchange value

Value has 'mass'. Physicists take this to mean the quantity of matter a body contains and

often contrast it with the molecule or atom. Matter is the substance out of which an object is made or of which it consists. Value is embedded in the body of commodities. Its substance is abstract labour. Its magnitude is determined by labour-time (Marx 1867a:129). Marx is interested in the quantity of this social substance contained in commodities, for what it tells him about the motion of this mass and its impact on the monad of modernity, these 'atoms'.

Value is nonempirical and therefore cannot be known absolutely, only relatively in terms of another body. 'Relative' means in relation or proportion to something. The value of one commodity is expressed relative to the value of another commodity, by the proportions in which they are exchanged. Hence, exchange or relative value, which is in its simplest expression: x commodity A =y commodity B (Marx 1867a:187). [14] The substance of value, abstract labour, is manifest in the body, or use value, of the commodity with which it is exchanged. The concrete labour of the one commodity becomes the expression of the abstract labour embodied in the other, and its use value becomes the form of appearance of its opposite, value (Marx 1867a:148–50). When one commodity establishes itself as a universal medium of exchange, that is, as money, price becomes the quantitative measure of exchange-value. Price is exchange-value 'expressed in money' (Marx 1858:137). Money is 'the physical medium into which exchange values are dipped' (ibid.: 167).

Let us compare Marx's absolute and relative value to Newton's absolute and relative motion. For Newton, one can measure the motion of one object only relative to the motion of another. Just as motion can be measured, not absolutely, only relatively, so, for Marx, the value of one commodity can be expressed only relatively, in terms of the proportions in which it is exchanged. Exchange is like two passing trains: it is their relative motion that registers; the speed at which trains pass; the proportions in which commodities exchange.

But note this difference between Newton and Marx. The absolute for Newton is space, against which a body's motion is measured through units of time. The absolute for Marx is time, against which a commodity's value is measured in units of money. Time is money. Indeed, Marx regards 'the determination of value by labour-time' as a 'law' (Marx 1867a:436). Here the analogy is explicit: 'the labour-time socially necessary to produce [exchange relations between commodities] asserts itself as a regulative law of nature. In the same way, the law of gravity asserts itself when a person's house collapses on top of him' (ibid.: 168).

Use- and exchange-value: unity of opposites

The two sides of the commodity, use- and exchange-value, manifest the two sides of the labour by which it is created, concrete and abstract. They are fused in the act of exchange, as the substance of value, abstract labour, is transformed into its form, exchange-value. The single process of exchange is two-sided: the conversion of the commodity into money (C-M) and the reconversion of the money into a commodity (M-C) (Marx 1867a:203). A sale is a purchase. The antagonism between the use- and exchange-value of commodities generates the motion of the process of exchange (ibid.:

199).

Exchange connects society's interior, production, and its surface, circulation. Moreover, it projects an inner characteristic of production on this surface (Marx 1858:137) and gives it reciprocal independent form. The internal contradiction between owners and non-owners, within production, appears as an external contradiction between commodities, as use-values, and money, as exchange-value, that is, between the use-value of one commodity and the exchange-value of another. The commodity is a 'unity of opposities', exchange-value and use-value, which 'latently contains the opposition between labour and capital' (Marx 1858:248). The antithetical phases of the metamorphosis of the commodity (M-C-M) are the developed forms of motion of this immanent [internal] contradiction.

Juridic and economic forms: mirror images

Relations of production are manifest in twin forms, juridic and economic, which are fused as private property (Fine 1984:96). These forms are coterminous, but can be analytically distinguished thus. Economic forms are empirical things of a material nature, principally, commodities. Juridic forms are empirical things of a discursive nature (Denis 1989:348), principally, contracts. They are 'ideal' embodiments of relations of production, a discursive medium through which conflicting rights to material things are contested. The important distinction within Marx is not simply between the material and the ideal: it is between *social* relations of production and their *material*/economic and *ideal*/juridic forms.

Juridic and economic forms are mirror images, formed in the act of exchange. The exchange of the property of the buyer, money, for the property of the seller, a useful article of some sort, transforms the article into a commodity and their economic relation into a contract: the juridic form of a relation between abstract citizens 'which mirrors the economic relation' (Marx 1867a:178). Hence, 'the attributes of the juridic person' are 'precisely [those] of the individual engaged in exchange' (Marx 1858:246). The economic form and the juridic form are sinewed by money, which realises the prices of commodities, circulates titles of their ownership and 'becomes the universal material of contracts' (Marx 1867a:238).

Constant and variable capital

Constant capital is that part of productive capital which is used to buy the means and materials of production (Marx 1865:294). It breaks down into fixed constant capital, buildings, machines and so on, and circulating constant capital, raw and ancillary materials and so on (Marx 1865:472). Variable capital is that part of productive capital which is used to buy the labour-capacity of a definite number of employees, that is, that portion 'laid out on wages' (ibid.: 296).

Constant/variable capital is a conceptual distinction within the valorization process; these terms denote their contribution to this process. 'Constant' capital is so called because it does not undergo any quantitative alteration of value in the production process

(Marx 1867a:317). 'Variable' capital is so called because its quantity varies from the beginning to the end of that process (ibid.). What starts as the value of labour-capacity ends as the value of the product created by the exercise of that capacity. The difference between these two quantities is surplus value. The variable nature of this form of capital lies in the unique nature of labour-capacity: it is the one commodity 'that valorizes itself and creates value' (Marx 1865:296). The distinction within variable capital, between the capacity to work and its exercise, enabled Marx to show how that capacity could be both sold at its value and used to make a surplus.

Marx contends that the distinction between constant and variable capital contains 'the whole secret of surplus-value formation and of capitalist production, namely the circumstances that transfer certain values and the things in which they are represented into capital' (Marx 1865:296). The distinction is especially helpful for understanding the rate of surplus value and the rate of profit.

Necessary and surplus labour-time

Because the value produced by workers can be divided into that necessary to maintain their capacity to act and that surplus to it, so can the time they spend creating that value. Hence, the working day can be divided into two parts: necessary labour time, that portion of the working day during which workers reproduce the value of the food, clothes and shelter necessary to maintain their capacity to work, and surplus labour time, that portion of the working day during which workers produce a surplus for their employer. Hence: A <– necessary – B – surplus –> C. The existence of a surplus is not the issue for Marx, for 'capital did not invent surplus labour' (Marx 1867a:344). Marx's point is that under capitalism, the expenditure of surplus labour is hidden by its form of appearance.

The twin determinants of surplus value: abstract labour and labour-power

The imperative of capital, like all cells, is to reproduce itself and grow. This is the 'determining purpose', the 'compelling motive' of capital (Marx 1865:103). It grows by creating a surplus (capital is 'self-expanding value' (ibid.: 108)). It creates a surplus by employing the one commodity—labour-capacity—whose use-value is a source of value whose consumption (the exercise of that capacity) is itself a source of value (Marx 1867a:270). Marx's conceptual innovation of distinguishing between labour and labour-power, and between concrete and abstract labour, lies behind his concept of surplus value: 'the difference between the value of the product and the value of the elements consumed in the formation of the product' (ibid.: 317). He reasoned that abstract labour produces value and labour-power produces a surplus. Abstract labour and labour-power are the twin determinants of surplus value. Both are conditional upon private property. This relationship of exclusion, between people, over things, is the contradiction at the heart of the structure of capital which energizes this gravity-like substance, value, on its metamorphic circuit.

Absolute and relative surplus value

Like value, surplus value can be 'absolute' or 'relative'. [15] The distinction is based on that between necessary and surplus labour-time:

> I call that surplus value which is produced by the lengthening of the working day, absolute surplus value. In contrast to this, I shall call that surplus value which arises from the curtailment of the necessary labour time, and from the corresponding alteration in the respective lengths of the two components of the working day, relative surplus value.
>
> (Marx 1867a:432)

If the necessary labour-time (A-B) is fixed by a given intensity and productivity of labour, then 'the rate of surplus value can be raised only by prolonging the working day in absolute terms' (B-C) (Marx 1867a:646).

The 'absolute' of absolute surplus value refers to the 'unrestricted prolongation of the working day' (Marx 1867a:646). A given, fixed level of productivity and intensity of labour is the counterpart of Newton's certain constant speed. But when the length of the working day (A-C) is given or fixed, then 'the rate of surplus value can be raised only by a change in the relative magnitudes of the components of the working day' (Marx 1867a:646) namely by reducing necessary labour time (A-B) relative to the length of the working day (A-C). One does this by revolutionizing the process of production with the aim of increasing the productivity of labour.

The amount of surplus value depends on the rate of surplus value and the number of workers simultaneously employed. Herein lies a contradiction, for the rate of surplus value cannot be increased without diminishing the number of workers (Marx 1867a:531). This contradiction drives the capitalist to attempt to prolong the length of the working day (to increase absolute surplus value) and, when that is fixed by law, to intensify production by speeding up the machine system in order to squeeze out more labour in a given time (to increase relative surplus value) (ibid.: 536). 'The production of relative surplus value completely revolutionizes the technical processes of labour and the groupings into which society is divided' (ibid.: 645).

Formal and real subsumption

Marx aligns the two forms of surplus value, absolute and relative, to two forms of labour's subsumption to property, formal and real. The formal subsumption of labour, according to Marx, began in the period of 'simple cooperation', the 'simultaneous employment of a large number of wage-labourers in the same labour process' (Marx 1867a:448–9), a form of production which 'developed in opposition to peasant agriculture and independent handicrafts' (ibid.: 452). This marks the start of capitalist production, historically and conceptually (ibid.: 439). Labour is only 'formally' subsumed in simple cooperation because 'all that changes' is the *form* of compulsion to

perform surplus labour 'from what had obtained under the earlier mode of production' (Marx 1866:1025–6):

> what brings the seller [of labour power] into a relationship of dependency is *solely* the fact that the buyer is the owner of the conditions of labour. There is no *fixed* political and social relationship of supremacy and subordination.
>
> (Marx 1866:1025–6)

Property owners take over the labour process developed by 'different and more archaic modes of production'; the only difference is that now this process is between 'things that the capitalist has purchased, things which belong to him' (Marx 1867a:292). Labour is practically and conceptually subsumed within these property relations, or capital, as labour-power and the right to use it are sold to the capitalist: 'on entering the labour process they are incorporated into capital. As cooperators, as members of a working organism, they merely form a particular mode of existence of capital' (Marx 1867a:451).

> The labour process becomes the instrument of the valorization process, the process of the self-valorization of capital—the manufacture of surplus-value. The labour process is subsumed under capital (it is its *own* process) and the capitalist intervenes in the process as its director, manager… *It is this that I refer to as the formal subsumption of labour to capital.*
>
> (Marx 1866:1019)

Once labour is formally subsumed to capital, in simple cooperation, 'two developments emerge', in the period of manufacture, which 'revolutionise' the labour process and mode of production. [16] On the one hand, the productive power of social labour is increased:

> labour becomes far more continuous and intensive, and the conditions of labour are employed far more economically, since every effort is made to ensure that no more (or rather even less) socially necessary time is consumed in making the product.
>
> (Marx 1866:1026)

On the other hand, an economic relationship of supremacy and subordination is created, since in order to achieve this increase in productive power, workers must be trained or disciplined to renounce their desultory habits of work and forged 'into a single productive body' (Marx 1867a: 449) under the supervision and direction of the capitalist. 'The complaint that the worker lacks discipline runs through the whole of the period of manufacture' (ibid.: 490).

On the 'foundation' of the formal subsumption of labour under capital, Marx explains:

> *there now arises* a technologically and otherwise specific mode of production—capitalist production—which transforms the nature of the labour process and its

> actual conditions. Only when that happens do we witness the real subsumption of labour under capital.
>
> (Marx 1866:1034–5, my emphasis)

Labour is subsumed, practically and conceptually, in the sense that, when it is sold, it becomes a mode of existence of capital. Capital absorbs or subsumes labour through the exchange of labour-power for money. This 'brings capital into ferment and makes it into a process [of] production' (Marx 1858:301). It is because labour is *initially* or 'formally' subsumed within capital or property relations, and therefore subject to capital's imperative to make a surplus by enhancing the productive power of labour, that labour must be disciplined or subordinated. Only when and where labour is subordinate is capital profitable.

A labour theory of property: human versus property rights

I now want to focus on the centre of this nucleus of capital. This is usually understood in terms of the 'labour theory of value'. It is notoriously difficult to understand and is widely regarded as discredited, even among Marxists. [17] Recall, from Chapter 6, the remarkable fact that Marx never uses the expression—'labour theory of value'—traditionally attributed to him: he speaks of the *law* of value. This simple observation can be developed into an alternative—more coherent and relevant—formulation of value theory. A realist interpretation of Marx's model of capital, in terms of structure, surface and movement, resolves the ambiguity of 'value' by explaining the relationship between its substance and its form, and construes Marx's analytic as a labour theory of *property*. Let me explain.

As I have said, Marx's concepts were handed down through the generations and accepted with the authority of tradition. Realism, however, places a premium on conceptual precision. For this reason, it is important to scrutinize the components of the 'labour' 'theory' 'of' 'value':

Labour To repeat, there are not 'two different forms of labour but one and the same labour'—earning a living—which can be 'defined in different and even opposed ways' (Marx, cited in Rubin 1972:146–7 n. 20). Abstract labour is a conceptual phenomenon, which is used to define labour of average quality or intensity, which workers are trained to do, which, one way or another, they have to do (Marx 1859b:31). This interpretation sets aside the obscurity of much commentary on abstract labour and reveals the simple truth about concrete labour: it is purposeful, responsible, creative human action upon instruments, means of production and raw materials.

Theory Marx's theory should be understood in the realist sense, as a model of a nonempirical object developed via retroduction, rather than as a deductive-nomological argument. The law of value attempts to explain patterns of events on society's surface by modelling the generative mechanisms of its inner structure. It is a noncausal analysis, in the sense that it aims to define the capacity to act of these mechanisms; in itself, it does not explain how they operate in particular instances.

Of The two meanings of 'theory', one, realist or noncausal, and two, nonrealist or causal, correspond to two meanings of 'of': one, 'the material or substance constituting or

identifying a thing' and two, 'origin, cause or authorship' (COD). The relationship between 'labour' and 'value' should be understood in the first sense: labour is the material or substance *constituting* or identifying value: it is not the cause of value (which is private property).

Value Interpretations of the 'labour theory of value' usually founder on the elusiveness of 'value' and the problematic relationship between its substance and its form. Interpreting it in a realist sense renders it comprehensible. The substance of value is a relationship between people, expressed as abstract labour; the form of value is a relationship between commodities, expressed in exchange-value or price. Construed thus, abstract labour does not *cause* value, as the 'labour theory of value' suggests. Rather, abstract labour and (exchange-) value are sides of the same social relations, substance and form, inside and outside, in exactly the same way in which abstract labour/forces, and civil society/the state are internally related. [18]

A 'labour theory of value', considered as a causal relationship between the magnitude of value's substance (abstract or socially necessary labour) and the magnitude of its form (exchange-value or price), would reduce Marx's analytic to a theory of price. There are two main points to be made against this interpretation.

First, what labour actually (re-)produces is not 'value' or price, but social relations of production and their twin, coeval, economic and juridic forms. As Ellerman puts it: 'Capitalism is not a particular type of price system. Capitalism is a particular type of property system; the system which allows Capital…to appropriate the whole product of a production process' (Ellerman 1984:224). These economic and juridic forms are fused in the corporation, remarkable as 'the only major human organization in our present society which has owners who may buy and sell it as a piece of property' (Ellerman 1983:270). *The corporation is the modern site at which political economy and jurisprudence converge.* It is also, I shall argue, the site of those elusive 'essential relations' between civil society and the state: for property, let us recall from Chapter 4, mediates between them.

Second, the ambiguity of 'abstract' labour has obscured a startling fact about actual, 'concrete' labour. The law normally grants people rights and obligations for the positive and negative consequences of their intentional actions; in other words, it holds them responsible. This is the essence of the 'juridical principle of imputation' which is applied daily by the courts in every area of human conduct: except the workplace (Ellerman 1984). Although labour is purposeful, creative and responsible human action, workers have no legal responsibility for the positive and negative results of their labour (ibid.). This responsibility is transferred, by the contract of employment, from workers to the legal fiction, the joint-stock company or corporation, which thereby acquires the right to direct or manage the production process and to appropriate its product.

It is an everyday fact of life that when workers sell their capacity to work, by the same act, they sell the rights attached to it. In transferring these rights from the worker to the corporation, the contract of employment effectively reduces workers of the capitalist firm to the legal status of things ('hands'). If overnight the workers in capitalist firms became robots, 'the legal institutions of capitalism would hardly notice the difference' (Ellerman 1984:229). Yet this fact has been neglected by radicals and conservatives alike:

> One would scan the entire legal and philosophical literature in vain to find the simple observation that the actions of the employee in a normal capitalist firm are fully deliberate, intentional, voluntary, and responsible—but that the employees are assigned zero legal responsibility for the positive and negative results of these actions.
>
> (Ellerman 1984:230–1)

Construed in these terms, Marx's analytic comprises a labour theory of *property*, the essence of which can be distilled thus: (a) people are responsible for the positive and negative results of their intentional actions; (b) labour is intentional human activity, therefore; (c) workers should, therefore, legally appropriate the positive and negative fruits of their labour. This is an *inalienable* right, a right held by virtue of being a person: a *human* right. However, (d) these rights are transferred by the contract of employment to the corporation and it is these rights—to organize and manage production and to appropriate its product—that are bought and sold as property. [19]

The contradiction between labour's *de facto* responsibility and its lack of *de jure* responsibility, within the privately owned work organization—which together comprise the legal foundations of capitalist production—escapes our attention because they are as 'familiar and mundane as, say, slavery was in the ante-bellum South of the United States' (Ellerman 1983:288). They do so also, I suggest, because traditional, 'economic' readings of Marx obscure these issues by focusing on the production of a surplus (*surplus* value). The existence of a surplus is unremarkable. What matters, for Marx, is how the capitalist organizational form obscures the existence of this surplus and denies workers a *right* to it (namely surplus *value*).

Let me now turn from the structure of capital, relations of production, to its movement, the mode of production.

Capital's movement: mode of production

The law of value, to which I will shortly turn, Marx intends as the law of motion of modern society. Motion is 'the process of moving'. How does a body move? Motion can also mean 'a motive, a reason; a ground or cause of action'. Why does a body move? Clearly, the how and the why are related; for example, the mechanism of a watch moves to release the pentup energy of the wound spring. The 'movement' of a watch is both a mechanism and a cause. But if motion is the process of moving, what moves in capital?

By 'motion' Marx does not refer to the physical movement of things; he means the movement of titles to their *ownership*, as they are exchanged (Marx 1865:226). This is why exchange, to use another biological analogy, is the metabolism of the social organism (Marx 1867a:198). Capital can, and regularly does, 'change hands' without going anywhere. Indeed, Marx's point is that material things stay put, discrete in space and time, and that this social force, value, moves through them.

Capital's kinetic energy: the abstraction of production

What energy drives this motion? The relevant type of energy for understanding movement is kinetic or motive energy, the power (latent or actual) to cause or produce motion, possessed by a body by virtue of the stresses which result from the position of its elements. The kinetic energy of capital is found in the contradiction inherent within the internal relation between owners and workers, and in the distinction between labour-power and labour, a distinction between a material and an efficient cause, between a capacity to act and its exercise. It is the exercise of this capacity, that is, people working, that provides the energy of capital as it embarks on its circuit of metamorphosis.

As individual workers exercise this capacity, their concrete labours are organized around a quantitative average or norm, rendering it 'abstract'. The 'abstraction made every day in the social process of production', which reduces different kinds of labour to uniform, simple, homogeneous labour, is the activity of organizing or 'training' labour to meet this quantitative rule. Organizing is the 'abstraction of activity' Marx speaks of in the *Grundrisse* notebooks (Marx 1858:693) and the 'abstraction of relations of production' he speaks of in the *The Poverty of Philosophy* (Marx 1847a:165). The *same* process that organizes labour into a productive power or 'force' makes labour 'abstract' and 'sets in motion labour of a socially average character' (Marx 1867a:441).

The key to understanding 'movement', then, is the exercise of the capacity to act, the mode of organizing production, for this provides the energy which propels capital on its circular motion.

Metamorphic moments of motion

The energy of the dialectic within capitalism's inner, organic core propels capital on its circular repetitive motion, as this social relation metamorphoses through a series of material forms. Metamorphosis, the action or process of changing in form, shape or substance, is commonly associated with transformation by magic or witchcraft. But the word also has a scientific use, in physiology, morphology, evolution, chemistry and geology, where it refers to the change of form in organic structures. A seed becomes a plant. A tadpole becomes a frog. Marx was a metamorphist, as well as a realist. He believed social relations pass through a series of material forms before becoming social relations once more. Ashes to ashes. Dust to dust.

Marx refers to the various modes of existence of capital in its circuit as 'moments'. For example, capital is 'not a simple relation, but a *process*, in whose various moments it is always capital' (Marx 1858:258). And purchase and sale, which 'appear as two mutually indifferent acts, separated in time and space', are the two essential 'moments' of circulation, 'both essential moments of a single whole' (ibid.: 198). The popular meaning of 'moment' is 'point in time'. But 'moment' is derived from the Latin 'momentum', meaning movement, moving power, cause or motive of action, a determining influence. It is widely used in mechanics where it is applied to certain functions serving as the measure of some mechanical effect (hence 'moment-um'). For example, the moment of a

force, the moment of inertia, the moment of momentum. *A moment is the turning effect produced by a force acting at a distance on an object.* Marx's use of the 'moment' of mechanics complements his interest in 'laws of motion'. Notably, these moments are often discrete in space and time and their mobile nature is hidden (Marx 1844a:340). Marx aims to understand the 'mutual interaction' between moments (Marx 1858:100), to grasp their 'inner necessity' (ibid.: 415).

The circuit of capital: space and time

In the repetition of its circuit, capital 'now assumes and now strips off three forms or moments: money—(M), productive—(P) and commodity-capital (C). Moreover, each form of capital, M, P and C, moves in its own circuit as it is reproduced:

money-capital:	M—C…P…C′—M
productive-capital:	P…C′—M′—C…P
commodity-capital:	C′—M′—C…P…C′

Each circuit presupposes the others and the 'repetition of the circuit in one form comprises the performance of the circuit in the other forms' (Marx 1865:104). As capital passes through these three forms it describes an 'aggregate' circuit (ibid.: 107) which unifies these interdependent circuits. Capital 'thus describes all three circuits at the same time' (ibid.: 106). One must distinguish, then, between the three forms which capital assumes in its circular movement, the circuits of these forms and the aggregate circuit which binds them together. Because capital describes a circuit linking three forms, its flow can be interrupted at each stage. M—C: money can be hoarded. P: labour can be unemployed. C′—M′: piles of unsold commodities can accumulate (ibid.: 50).

A given magnitude of capital, then, is divided into a succession of different forms, productive-capital, money-capital and commodity-capital. These fractional parts exist in their own circuits. One part of capital, continually changing, continually reproduced, exists as a commodity-capital which is converted into money; another as money-capital which is converted into productive capital; and a third as productive capital which is transformed into commodity-capital. The capital which assumes these different forms is 'industrial capital' (Marx 1865:50); it is 'the unity of the three circuits'. Every individual industrial capital is present simultaneously in all three circuits which 'are made continuously side by side' (Marx 1865:104).

'In a constantly revolving circle', Marx points out, 'every point is simultaneously a point of departure and a point of return' (Marx 1865:104). So, too, with the circuit of capital: 'all premises of the process appear as its result, as a premise produced by itself. Every element appears as a point of departure, of transit, and of return' (ibid.: 103). This multi-directional movement of capital occurs continuously and simultaneously. The circuits of individual capitals 'intertwine, presuppose and necessitate one another'. This 'interlacing' constitutes movement of the total social capital (ibid.: 358). It is the

movement within a circuit that links apparently 'independent kinds of capital whose functions form the content of likewise independent branches of industry separated from one another' (ibid.: 50). But 'all three circuits have the following in common: The self-expansion of value as the determining purpose, as the compelling motive' (ibid.: 103).

It is because capital travels in a circuit that it is advanced, not spent. It always returns to its starting point, usually enriched with a surplus. Capital's circuit ends when this turnover period has elapsed. It is then free to valorize itself afresh and again produce a surplus (Marx 1865:382). One way of increasing the rate of profit, therefore, is to accelerate capital's turnover in its circuit by reducing the time between its departure and its return (Marx 1864:70). The imperative to reduce turnover time entails that capital must strive to tear down every spatial barrier to commerce, for the time taken to traverse two places is more important than the space between them. Capital must 'annihilate this space with time, that is…reduce to a minimum the time spent in motion from one place to another' (Marx 1858:539). Hence 'spatial distance reduces itself to time' (ibid.: 538). Capital creates value by its movement in the process of production and circulation. The chief means of reducing the time of production is reorganizing labour in space to raise productivity. The chief means of reducing the time of circulation is reducing the time taken to traverse spaces by improved communications (Marx 1864:70–1). It is for these reasons that the economy of time is the 'first economic law' (Marx 1858:173).

What capital can do: the law of value

The movement of capital mediates between its structure (relations of production) and its surface (modernity). This movement is the mode by which commodities are produced and exchanged. Marx explains this movement in terms of the law of value, the law of motion of modern society. Rather than repeat the mistake of construing this as a (now discredited) 'labour theory of value', an expression Marx never uses, I want to interpret this law in the context of the realist concept of science in which it is embedded.

A model attempts to describe what an object is. A law attempts to describe what an object can do. To cite a law is to make a claim about the capacity to act of an object, about the mechanisms of its structure which generate empirical phenomena. But it is not to make a claim about the conditions under which the mechanism operates, or its actual activity on any particular occasion (Bhaskar 1978a:95). Social mechanisms are material causes, networks of internal relations among people. How these mechanisms act is contingent on efficient and final causes, the actions and motives of those who comprise these internal relations.

Marx refers to modern society's law of motion in the singular, but a review of the *Grundrisse*, *Capital* and *Theories of Surplus Value* reveals that this general law subsumes approximately thirty specific and interrelated sublaws. These include:

- The law of the determination of the magnitude of value by labour-time (Marx 1867a:168, 436)
- The law of the relative expression of value (Marx 1867a:193)
- The law of prices, velocity of circulation and quantity of money (Marx 1867a:219–

40:1858:789–90)
- The laws of commodity exchange (Marx 1867a:301, 332–4, 729, 730)
- The laws of surplus value (Marx 1867a:418–20)
- The law of competition (Marx 1867a:436; 1864:37, 882)
- The law of valorization (Marx 1867a:441)
- The law of the tendency of the value of labour-power to fall (Marx 1867a:470)
- The law of the value of commodities (Marx 1867a:476)
- The law of the efficiency of labour-power (Marx 1867a:535)
- The laws of the value of labour-power and surplus value (Marx 1867a: 656–8)
- The law of commodity production (Marx 1867a:731, 771)
- The laws of capitalist appropriation (Marx 1867a:734)
- The laws of the centralization of capitals (Marx 1867a:777)
- The law of population (Marx 1867a:783)
- The law of the regulation of demand and supply of labour by the alternative expansion and contraction of capital (Marx 1867a:790)
- The laws of wages (Marx 1867a:791–2; 1864:484)
- The law of capitalist accumulation (Marx 1867a: ch. 25:762–870)
- The law of productivity (Marx 1867a:798, 1037; 1865:227; 1864:262)
- The laws of commodity circulation (Marx 1865:192; 1865)
- The law of capital reproduction (Marx 1865:540)
- The law of the tendency of the rate of profit to fall (Marx 1864: Part 3; 1858:763)
- The laws of free competition (Marx 1864:238)
- The law of prices (Marx 1864:356)
- The law of rent (Marx 1864:667, 748–9, 820; 1863 Part 2:270)
- The laws of supply and demand (Marx 1858:200)
- The law of production costs (Marx 1858:776)
- The law of the production and distribution of wealth (Marx 1858:832)
- The law of cost-price (Marx 1863 Part 3:83)

They are all claims about the capacity to act of this object, capital, and the force holding it together, value. Each law is 'a necessary consequence of the law of value' (Marx 1867a:421). [20] But Marx does not explicitly state this law (just as he does not explicitly define the concepts that comprise his model of capital). [21] Given this list, it more accurate to speak of *laws* of value. [22] What joins them together is their common origin in the 'property laws of commodity production' (ibid.: 725), that is, those which separated labour from property (ibid.: 730). [23]

I do not have space to explicate and scrutinize Marx's claims in these laws. My interest here is in what these claims about what capital can do tell us about what capital is. To this end, I want to note the following characteristics of these laws and the mechanisms to which they refer. [24]

First, each law makes a claim about its own mechanism. Each mechanism has its own 'field of action' (Marx 1867a:792). These mechanisms are interrelated, ultimately, 'they condition one another' (Marx 1858:149), for they are different combinations of the elements comprising capital's structure, relations of production. As with all structures,

every force is counteracted by an equal and opposed force.

Second, these laws are ‘imminent’ (impending, about to happen), that is, they refer to the tendencies of mechanisms to act, not to their actual actions (Marx 1864:232). They act in ‘a very complicated manner’. Their ‘absolute actions’ may be ‘checked, retarded and weakened by counter-acting circumstances’ (ibid.: 235, 239). These circumstances must allow the mechanism to operate and ‘subsidiary movements may occur’ (Marx 1867a:658). Other mechanisms can counter-act or nullify their effects. Their operation can be influenced by the social antagonisms they engender, that is, by efficient and final causes. But even tendencies, Marx argues, win their way through and work themselves out with ‘iron necessity’ (Marx 1867b:91). [25]

Third, the analysis of the circumstances modifying the working of these mechanisms ‘does not concern’ Marx in *Capital*. He tries to portray them ‘in their purity’, by ignoring ‘sources of friction’, ‘as is the practice in mechanics where the frictions that arise have to be dealt with in every particular application of its general laws’ (Marx 1867a:1014). These laws ‘point toward a past’ (Marx 1858:461). Explaining the contingent modes of operation of these mechanisms is to write their history.

Fourth, while the workings of these mechanisms can be ‘modified’ by ‘many circumstances’ (Marx 1867a:798), Marx implies that these material causes cannot be overthrown:

> Even when a society has begun to track down the natural laws of its movement…it can neither leap over the natural phases of its development nor remove them by decree. But it can shorten and lessen the birth pangs.
>
> (Marx 1867b)

This interpretation is encouraged by his use of ‘natural laws of capitalist production’ and ‘social laws of nature’.

Fifth, these mechanisms are ‘invisible and unintelligible to the individual agents in production’ (Marx 1864:828). [26] Indeed, Marx’s laws of them seem to contradict ‘experience based on immediate appearances’ (Marx 1867a:421), but, he maintains, it is always these mechanisms which regulate phenomena, not vice versa (ibid.: 421–2; 1864:188).

Sixth, these mechanisms are ‘independent of the will of the individual capitalist’ (Marx 1866:1037), whom they confront as an external coercive force (Marx 1867a:381). Indeed, capitalists must subordinate their will to these mechanisms (ibid.: 284). It does not matter whether we believe in these mechanisms or not, they go on working regardless (Marx 1873).

Seventh, just as relations of production are dual-sided, some mechanisms are ‘double-edged’. For example: the same mechanism decreases the rate of profit and increases the absolute mass of profit; the accumulation of wealth and the accumulation of misery are hand-in-hand, there is an ‘intimate connection’ between ‘pangs of hunger’ and ‘extravagant consumption’ (Marx 1867a:799).

Let me conclude this review of capital’s movement by summarising the connection between the law of value and the law of the tendency of the rate of profit to fall, for,

according to Marx, ‘this is in every respect the most important law of modern political economy, and the most essential for understanding the most difficult relations’ (Marx 1858:748). One reason for its importance is the internal contradiction within the mechanism to which it refers, supposedly with a capacity to destroy the mode of production itself.

Like all cells, capital must reproduce and grow; Marx refers to this as ‘accumulation’. As capital accumulates—money is transformed into capital; surplus value is made through capital; more capital is made from surplus value—its movement ‘passes from the circular to the spiral form’, that is, it winds about a centre in an enlarging continuous circular motion (Marx 1867a:780; 1858:620, 746). Just as Newton’s law of gravitation refers to a centripetal force, a force acting on a body causing it to move about a centre, Marx’s law of value refers to a force which acts as the ‘centre of gravity’ (Marx 1864:178), maintaining the ‘social equilibrium of production amidst its accidental fluctuation’ (ibid.: 880).

Capital’s momentum on its spiral of accumulation is impelled by its inbuilt imperative to develop the productive powers (or productivity) of social labour (Marx 1864:259). This imperative contains a revealing contradiction: however much constant and variable capital may grow in absolute magnitudes, labour’s productivity can rise only by increasing capital’s organic composition, in other words, by a relative diminution, and at an increasing rate, of its variable part (Marx 1867a:772). [27] Since variable capital, namely, labour-capacity, is the source of surplus value, beyond a certain point (Marx 1858:750:1867a:772), there is a ‘dialectical inversion’ (Marx 1867a:798). [28] This quantitatively-caused qualitative change in capital’s composition creates a tendency for the rate of profit to fall, even though its mass, given capital accumulation, may continue increasing (Marx 1864:220). Since the rate of profit is the ‘motive power of capitalist production’ (ibid.: 259), its fall checks the formation of new capitals and threatens existing production. Accumulation itself, then, ‘has the tendency to check accumulation, and the law of the falling rate of profit …hangs ominously over bourgeois production’ (Marx 1863, Part 2:541).

This internal contradiction at the heart of capital—between the law of the tendency of its organic composition to rise and the law of the tendency of the rate of profit to fall—creates ‘really *modern* crises’ (Marx 1858:411, my emphasis; 1867a:258). During them, capital is ‘reduced to the point where it can go on’ (Marx 1858:750), by depreciation or destruction, the spiral of accumulation comes crashing down and the disturbed equilibrium is restored (Marx 1864:249). Capital accumulation itself thus produces, in direct relation with its own energy and extent, a relatively redundant working population, that is, one superfluous to capital’s average requirements for its own valorization (Marx 1867a:782). It is because, beyond a certain point, the development of the productive powers of social labour changes from a means of capital accumulation into an obstacle to it, that Marx maintains that ‘the real barrier of capitalist production is capital itself (Marx 1864:250).

The missing mechanics of capital's motion

To explain why is not to say how; this is fundamental to critical realism (Keat and Urry 1975:31). Explaining why a body moves is one thing; explaining *how* it moves is quite another. Every law of motion requires a mechanics. [29] Marx certainly has much to say on the 'why', the structural imperatives of capital, but where is the 'how', an explanation of the mechanics of the law of value, of the motion of capital? We should look for this mechanics, I think, in Marx's explanation of how one pole of capital's axis becomes dominant by subsuming the other, for here is the spring of the mechanism providing the energy of the capitalist mode of production: the distinction between a capacity to work and its exercise, which creates the differential causal charge at the heart of this relationship.

Marx introduces the concept of subsumption in the context of a discussion of absolute and relative surplus value, in Chapter 15 of *Capital* Volume One. Here he explains that absolute surplus value is produced exclusively by extending the length of the working day, but relative surplus value is produced by 'revolutionizing' 'the technical processes of labour and the groupings into which society is divided' (Marx 1867a:645). This requires the replacement of 'formal' by 'real' subsumption. We should note that 'formal' and 'real' subsumption are critical to Marx's explanation of the movement of capital. They are the pinnacle of those ascending conceptual dualisms I introduced when describing the elements of capital's structure. The imperative of that structure is for capital to move from the formal to the real subsumption of labour.

Marx discusses subsumption at greater length in the 'Results of the Immediate Process of Production' (the 'Resultate'), a late-discovered nineteen-page fragment which he had intended to include toward the end of Volume One of *Capital* (Marx 1866). Given its importance, it must be said that Marx's explanation of the relationship between the formal and the real subsumption of labour is distinctly ambiguous. He establishes that formal and real subsumption correspond to the production of absolute and relative surplus value respectively, but their relationship to the historical periods characterised by cooperation, manufacture and large-scale industry is unclear. Even allowing for the ambiguities and inconsistencies due to the disorganization of *Capital*, Marx's explanation of the movement between formal to real subsumption, from manufacture to factory production, absolute to relative surplus value production, is unsatisfactory. For these reasons the subsumption concept is widely rejected as inadequate for understanding both the workplace and the development of the capitalist mode of production. But, given its centrality, rather than reject it, I want to discover the cause of the problem and rectify it. To this end I want to utilise my earlier account of the internal relations of capital to reconstruct and piece together Marx's fragmented remarks on formal and real subsumption in Volume One of *Capital* and in the 'Resultate'.

The formal subsumption of labour is straightforward: 'what brings the seller [of labour power] into a relationship of dependency is *solely* the fact that the buyer is the owner of the conditions of labour. There is no *fixed* political and social relationship of supremacy

and subordination' (Marx 1866:1025–6). But Marx never satisfactorily explains the 'real' subsumption of labour, 'or the *specific* mode of capitalist production', as he puts it (ibid.: 1023, my emphasis). In the four pages in which it is briefly discussed in the 'Resultate', he claims it 'has already been argued in detail, so that we may be quite brief here' (ibid.: 1037). But this is not the case. There are only two pages of prior comment, which explain nothing (ibid.: 1023–5). We are told only that 'relations of production *themselves* create new relations of supremacy and subordination' (ibid.: 1022, my emphasis).

A semblance of an explanation is that once labour is formally subsumed to capital, in simple cooperation, 'two developments emerge', in the period of manufacture, which 'revolutionise' the labour process and mode of production. On the one hand, the productive power of social labour is increased. [30] On the other hand, an economic relationship of supremacy and subordination is created, since in order to achieve this increase in productive power, workers must be trained or disciplined to renounce their desultory habits of work and forged 'into a single productive body' (Marx 1867a:449) under the supervision and direction of the capitalist. [31] Marx does not explain these 'two developments', but I shall argue that they correspond to the dual-sided nature of the emerging capitalist social relations of production, which simultaneously empower and repress, organize and dissolve, produce wealth and produce poverty (Marx 1847a; 1867a:477).

On the 'foundation' of the formal subsumption of labour under capital, Marx explains:

> *there now arises* a technologically and otherwise specific mode of production—capitalist production—which transforms the nature of the labour process and its actual conditions. *Only when that happens* do we witness the *real* subsumption of labour under capital.
>
> (Marx 1866:1034–5, my emphasis)

Much depends on what 'there now arises' means, that is, on how the labour process is 'transformed'. If we construe productive forces as things, then only a technological determinist interpretation of this historical process is possible: machinery was 'introduced' and stimulated an adaptive response in social organization, necessitating the development of factories and deskilling workers. But if we interpret productive forces as a mode of organizing, as I have argued we should, then an entirely different reading of Marx follows.

Formal and real subsumption, I believe, are ideal types of modes of production: 'mode' understood as an organizing process, rather than a type of society. The movement between the formal and the real subsumption of labour is analogous to the movement of the mechanism of a watch or clock: it moves and causes other parts of the mechanism to move. The movement of this mechanism connects the two sides of production relations: it simultaneously empowers and represses, organizes labour into a productive power or force, within the workplace, and atomizes society into monads on the streets. This—yet to be explained—mechanism transforms the productive power of social labour into the power of owners of capital. This mechanism obeys a continuous logic which has governed the past, governs the present and may govern the future. Marx's concept of the

formal/real subsumption of labour attempts to capture, or model, the logic of capital, this historical process, the genesis and development of the capitalist mode of organizing production. [32]

Labour is subsumed, practically and conceptually, in the sense that, when it is sold, it becomes a mode of existence of capital. Capital absorbs or subsumes labour through the exchange of labour-capacity for money. It is because labour is *initially* or 'formally' subsumed within capital or property relations, and therefore subject to capital's imperative to make a surplus by enhancing the productive power of labour, that labour must be disciplined or subordinated. Only when and where labour is subordinate is capital profitable. It is because labour is (formally) subsumed under private property that the employer must intervene to organize workers' 'individual functions' 'into one single productive body' and to overcome their resistance to the domination of capital's imperative (Marx 1867a:449).

It was not the introduction of machines that subordinated labour. It was the ill-defined 'revolution' in the organization of production during the period of manufacture that facilitated the introduction of machines. [33] Society is not disciplinary because it is capitalist; rather, capital derives its profits from that which makes society disciplinary. Labour is not first partially or 'formally', then, through the introduction of machines, fully or 'really', subordinated or controlled. Rather, it is only because labour is formally subsumed that it must be subordinated, and only when and where 'factory discipline' is 'perfectly organized', (as Ure puts it), and the organization of production 'breaks down all resistance' (Marx 1867a:899), that machines are introduced and labour is ('really') subsumed within the material conditions of production. The causal sequence is, first, formal subsumption: as labour's capacity to act (labour-power) is exchanged for money, it is incorporated into capital. It becomes imperative for capital to produce a surplus by developing the productive power of social labour. Second is the simultaneous empowerment and repression (or subordination) of labour via its reorganization; and third comes real subsumption.

But here is the problem with Marx's model of capital: the relations and mode of production. He gives a compelling historical account of how labour is prised off the land and whipped and branded, as he puts it, on to the road that leads to the labour market, and of how labour is reduced to the status of a thing, or 'hand', by the relentless movement of machinery. But when it comes to explaining what happens to labour when it enters the 'hidden abode', how it is simultaneously empowered and repressed as it is organized into a productive power, and how the conditions which make possible the introduction of machines are created, beyond allusions to 'barrack-like discipline' and 'factory codes' (Marx 1867a:549, 550), Marx has remarkably little to say. He nowhere gives an adequate account of how this organization is achieved. Marx explains the necessity for capitalist control, to unify workers into a productive body or force, but he does not explain the means whereby it is accomplished. Put simply, he explains the 'why' of movement (the motive), but not the 'how' (the means). 'How' is precisely what realism demands of a causal explanation.

To say that Marx explains the why but not the how is to identify one more similarity with Newton. The law of universal gravitation allowed the motion of the Moon, the orbits

of the planets, and the revolution of the satellites of Jupiter to be predicted. But Newton could not explain action at a distance, that is, he did not know how the force of gravity reaches out across empty space from the Sun to hold the planets in their orbits. He could use 'gravity' to explain why bodies move, but could not explain *how* gravity works. This gap in his account, however, did not stop his ideas on gravity dominating science for the 250 years it took for an explanation of the mediating agent to develop. We know now that gravity, electricity and magnetism, as well as other forces, are transmitted through matter and space by 'quanta' (packets of energy) passing back and forth between force-carrying particles. As Newton had been led to suspect by alchemy, energy and matter can be converted into each other.

Let me relate this missing 'mechanics' to Marx's initial *explicandum*. The trajectory of Marx's retroductive line of argument certainly points to the 'inner organization of the capitalist mode of production' (Marx 1864:831) as the process, the 'essential relationship' between civil society and the state, this hallmark of modernity. But since Marx never made the return, upward journey, he never explained how, in what way? We can retroduce that this must be so, but *how* it is so we must work out for ourselves. It remains to explain how (a) labour is simultaneously empowered and repressed as it is organized, (b) this mode of organization is subsumed to the owners of capital, and (c) this mode of organization creates the internally-divided modern 'man', constituted by the essential relations between the mirror images, civil society and political state, and the associated conceptual dualisms of modernity.

Marx nowhere gives an adequate answer to these questions. I contend, in the remainder of this book, that Foucault does. In his work can be found the missing mechanics of Marx's law of motion, and the means by which we can make the return, upward journey.

Part IV
Capital

Society's law of motion and microphysics

many things are subsumed under capital which do not seem to belong within it conceptually.

Karl Marx, *Grundrisse* notebooks (1858:513)

8
How labour is organized into a productive force

Cost accounting, IR and HRM

> Development of the productive forces of social labour is the historical task and justification of capital.
>
> (Marx 1864:259)

> it is largely as a force of production that the body is invested with relations of power and domination…the body becomes a useful force only if it is both a productive body and a subjected body.
>
> (Foucault 1977:26)

Introduction

My argument concerning the relationship between Marx and Foucault can be stated simply. Marx explains 'why', that is, he describes the imperative of the social structure that facilitates and constrains social action, but he does not explain 'how', the mechanics of capital's motion. Foucault explains 'how', that is, he describes the mechanism of power, but he does not explain 'why', the motive or purpose of disciplinary power. [1] If Marx's *explicandum* is a cluster of conclusions in search of a premise, then Foucault's *explicans* is a cluster of premises in search of a conclusion.

Realism's understanding of the relationship between 'why' and 'how' mediates between Marx and Foucault in the following way. Answers to 'why' questions (requests for causal explanation) require answers to 'how' questions, which, in turn, require answers to 'what' questions, that is, careful description of the object and the mechanisms by which it acts, or object constitution (Keat and Urry 1975:31). To marry 'why' and 'how' it is necessary to explicate 'what': to synthesize Marx's description of relations of production and Foucault's description of the mechanisms of disciplinary power. This is my aim in this chapter.

Recognition of Foucault's relevance to Marx is inhibited by the micronature of his analysis. Foucault reasons that to understand the 'architecture' of power one must first know something of stone-cutting; hence, he analyses the 'political economy of detail', the

'microphysics of power', the 'calculus of the infinitesimal and the infinite' (Foucault 1977:140). To release the potential of Foucault's microanalysis of power it must be integrated with Marx's broad explanation of the law of motion of modern society. Foucault's relationship to Marx is analogous to the relationship of quantum mechanics to the general theory of relativity. The first 'deals with phenomena on extremely small scales', the second 'describes the forces of gravity and the large-scale structure of the universe' (Hawking 1988:11). Physics requires a theory that will incorporate these two types of analysis: so does social theory.

My argument is based on Foucault's statement that 'it is largely as a force of production that the body is invested with relations of power and domination…the body becomes a useful force only if it is both a productive body and a subjected body' (Foucault 1977:26). Productive 'forces', of course, are a key concept in Marxist thought. The contradiction between forces and relations of production is ordinarily regarded as the dynamic of the capitalist mode of production. Immediately, then, there is a connection between Foucault and Marx, between 'disciplinary power' and 'productive forces'. But what is it?

The first part of the chapter explicates 'relations of production' by developing some concepts sketched in the previous chapter, focusing on productive forces and abstract labour. I then explicate 'disciplinary power' and use it to explain how the techniques of cost accounting determine 'abstract labour', or labour of an average intensity or normal quality, and work in unison with those of industrial relations and human resource management to observe, examine and normalise employees' performance and behaviour at work in accordance with this quantitative standard. These techniques constitute 'what might be called the political technology of the body' (Foucault 1977:26). Together, they organize labour into a productive 'force', in accordance with the structural imperative of relations of production, and subsume it to private property.

Productive 'forces' and abstract labour

If it is 'largely as a force of production that the body is invested with relations of power' (Foucault 1977:26) then, in assessing the relationship between Marx and Foucault, on this point, much hinges on the meaning of productive 'forces'. Traditionally, a 'productive force' is construed as a property of an object or set of objects. This 'technological' interpretation is shaped by the 1859 *Preface*, where Marx speaks of '*material* forces of production' and '*material* productive forces of society' (Marx 1859a:20, 21, my emphasis). If one adopts this understanding of productive forces, then Foucault's remark is meaningless. But this understanding is mistaken.

While Marx's term *Produktivkräfte* is usually translated as 'productive force' a more exact translation, as both Cohen (1978) and Sayer (1987) argue, is 'productive powers'. This distinction is important for 'whereas a "force" can be conceived as a thing, a power is always *of* something' (Sayer 1987:27). If we look at the range of Marx's writing we find that he uses a variety of expressions as synonyms for what are normally referred to as 'productive forces', and these emphasize the social rather than the material. For

example: ‘the productive power of social labour’, ‘the productive forces of social labour’, ‘the forces of social production’, ‘the social productive power of labour’, and ‘the social productive force of labour’. [2] A productive force, Marx tells us, is the collective power of social production, brought about by organizing labour ‘into one single productive body’, for the purpose of improving its productivity (Marx 1867a:449). Simple cooperation ‘creates a new productive power, which is intrinsically a collective one’ (ibid.: 443); indeed, for Marx, the main force of production is the human being (Marx 1858:422). All of this suggests that productive forces are ‘an attribute of human beings in association, their collective capacities, not a set of things as such at all’ (Sayer 1987:27). Once this point is grasped, Foucault’s linking of ‘power’ and ‘forces’ becomes much more interesting.

I want to relate this discussion of productive powers to ‘abstract labour’, for I believe this concept holds the key to understanding Foucault’s relevance to Marx. One interpretation is that ‘abstract labour’ is ‘just a pair of words’ with ‘no genuine explanatory value’ (Steedman 1985:568, 573). Marx himself regards the distinction between abstract and concrete labour as one of his most important discoveries (Marx to Engels, 24 August 1867; Marx 1867a:132), and for this reason alone, we must take it seriously and try to fathom its elusive meaning.

Writing in the Soviet Union during the 1920s, that ‘Hegelian’ opponent of traditional Marxism, Isaak Illich Rubin, noted that those few who give attention to ‘abstract labour’ prefer ‘to confine themselves to a literal repetition of a few sentences which Marx devotes to this concept in the second section of Chapter 1 of *Capital*’ (Rubin 1972:134). This continues to be so. Since this section examines the commodity, the common impression is that abstract labour is a phenomenon of exchange. Geoffrey Pilling’s account is representative:

> in exchanging products men equalize them—that is, the market, as an objective process, abstracts from the physical-natural aspects in which one use-value differs from another; and in so doing the *market abstracts* from that which serves to differentiate this labour.
>
> (Pilling 1980:46, my emphasis)

On the basis of the much-quoted Chapter 1, Pilling concludes, ‘it should be clear that in the *formation* of abstract labour we are not dealing with a mental process, but *something that takes place in the actual process of exchange itself*’ (Pilling 1980:46–7, my emphasis). There are many variations on this theme but, in essence, Pilling’s is a typical, and, on the face of it, not unreasonable, account of abstract labour.

But is Part One of Volume One of *Capital* the best guide to ‘abstract labour? This volume was drafted last (Marx to Schott, 3 November 1877; Oakley 1983:103–4), so Marx must have worked out the concept well before this time. Rubin suggests that if we trace the development of Marx’s thought we will find in his work ‘enough elements for a sociological theory of abstract labour’ (Rubin 1972:135). Indeed, if we read Marx’s work in the order in which it was written, instead of the more customary order in which it was published, an entirely different understanding of abstract labour emerges. It is this

understanding I now want to develop, for it is helpful in rethinking the relationship between Marx and Foucault.

'Abstract labour' first appears in the *Grundrisse* notebooks (Marx 1858) and is developed in *A Contribution to the Critique of Political Economy* (Marx 1859b:29) where it makes its public debut. [3] In these texts, two things are clear. First, abstract, average and general labour are synonymous: 'This abstraction, human labour in general, exists in the form of average labour… It is simple labour which any average individual can be *trained* to do and which in one way or another he *has* to perform' (Marx 1859b:31, my emphasis). Second, while the existence of abstract labour can be deduced from exchange, it is a *creation* of production. The reduction of different kinds of labour to uniform, simple, homogeneous labour, of a uniform quality, whose only difference is quantity, Marx explains, 'appears to be an abstraction, but it is an abstraction which is made every day *in the social process of production*' (ibid.: 30, my emphasis). [4] 'Abstract labour' refers to one of those phenomena created in production but expressed, via exchange, on the surface of society, circulation. The act of exchange projects this inner characteristic of production to the outside (Marx 1858:137).

Marx confirms this interpretation in *Capital's* Chapter 11, 'Cooperation', and in the 'Resultate' (Marx 1866), where he manages to discuss the concept 'abstract labour' without using the term: in fact, Chapter 1 is the *only* place in *Capital* the term appears. We can derive an understanding of the problematic 'abstract labour' by explicating its synonym, 'average social labour', which is discussed at length in one of 'the most immediately readable' chapters of *Capital*—'Cooperation' (Marx to Kugelmann, 30 November 1867). Here Marx explains that:

> Any average magnitude…is merely the average of a number of separate magnitudes all of one kind, but differing in quantity. In ever industry, each individual worker differs from the average worker. These individual differences, or 'errors' as they are called in mathematics, compensate each other and vanish whenever a certain minimum number of workers are employed together. Edmund Burke, that famous sophist and sycophant, goes so far as to make the following assertion, based on his practical observation as a farmer: that 'in so small a platoon' as that of five farm workers, *all individual differences in the labour vanish, and that consequently any given five adult farm labourers taken together will do as much work in the same time as any other five.*
>
> (Marx 1867a:440, my emphasis)

This example conveys the meaning of the abstract/concrete labour distinction better than Marx's attempt to do so in Chapter 1. The first point I want to make is that abstract/concrete labour is a *conceptual* distinction. This is confirmed in the first German edition of *Capital*, where Marx says:

> a commodity does not possess two different forms of labour *but one and the same labour is defined in different and even opposed ways* depending on whether it is related to the use-value of commodities as to its product, or to

> commodity value as to its material expression.
>
> (Marx 1867:13, cited in Rubin 1972:146–7 n. 20, my emphasis)

There are not two types of labour, but *one* which may be defined or viewed in two different ways. Abstract labour is no less real for being conceptual. As I will later explain, it is measured, expressed in quantitative production norms and translated into rules of work behaviour and performance. These rules define labour of an average or normal intensity or quality (Marx 1867a:440 and 701–2), which workers can be 'trained to do', which, 'one way or another', they *have* to do (Marx 1859b:31). I believe this is what Marx has in mind when he says, 'Labour, thus measured by time, does not seem, indeed, to be the labour of different persons, but on the contrary *the different working individuals seem to be mere organs of this labour*' (ibid.: 30, my emphasis).

What is the connection between 'abstract labour' and 'productive forces'? They are connected by the activity of organizing. The 'abstraction made every day in the social process of production', which reduces different kinds of labour to uniform, simple, homogeneous labour, is the immutable abstraction of movement: the activity of organizing or 'training' labour to meet this quantitative rule. Construed thus, Marx's concrete/abstract labour distinction of *Capital* Volume One, parallels in meaning his private/social labour distinction, of the *Grundrisse* and of *Capital* Volume Three, where he discusses the 'organization of labour into social labour' (Marx 1864:266). Concrete or private labour is rendered 'abstract' or social as it is organized into a productive power or 'force'. The *same* process that organizes labour into a productive power or 'force' makes labour 'abstract' and 'sets in motion labour of a socially average character' (Marx 1867a:441). The rules of work behaviour and performance, centred on the abstraction, 'average labour', are devices by which private, concrete labour is organized and rendered social. Organizing is the 'abstraction of activity' Marx speaks of in the *Grundrisse* notebooks (Marx 1858:693) and the 'abstraction of relations of production' he speaks of in *The Poverty of Philosophy* (Marx 1847a:165). It is only when the capitalist 'sets in motion' this 'labour of an average social quality' that the law of valorization 'come[s] into its own' (Marx 1867a:441).

Productive 'forces' are often taken to be things because this mode of organizing is objectified in artefacts, via their design, architecture and construction (Marglin 1974; Foucault 1977). This is how 'an entirely objective organization of production…confronts the worker as a preexisting *material* condition of production' (Marx 1867a:508, my emphasis). This fusion of social and physical characteristics lies behind the common attribution of causal powers to inanimate objects. This is the problem of 'fetishism': an incapacity to detach the physical existence of something from the social characteristics amalgamated with it (ibid.: 1008). To understand the relationship between disciplinary power and productive forces, the physical and social characteristics of things must be prised apart (Marx 1858:881). This is a distinction between material and social attributes (or 'sides') of productive things, not between different kinds of phenomena: *social* relations of production and *material* forces or capital (Sayer 1987:57–8). This distinction is important, for a nonfetishistic concept of productive forces is essential to recognizing the potential of Foucault's 'disciplinary power' for Marx.

Because these social relations of production are between antagonistic parties, they are dual-sided (Marx 1847a:176). It is notable that labour process analysis found great difficulty explaining this 'dual character' of production, the coexistence of empowerment and repression, creation and alienation (Cressey and Maclnnes 1980; Edwards 1986) and this did much to discredit its central concept, 'control' (Cohen 1987; Cohen 1989; Burawoy 1985). This depiction of the internal relations between abstract labour and productive 'forces' establishes that labour is not simply 'controlled' into a productive power: it is *organized* into one. The *primum mobile* of capitalist production is not 'control' *per se:* it is the creation of a surplus by developing 'the productive forces of social labour.' This is 'the absolute motive and content' of the capitalist's activity (Marx 1866:990). This puts the techniques of work organization grouped under the rubric of 'control' in a different light. As Sheila Cohen explains: 'the organization of the labour process has very little to do with "control" in the sense of a power struggle, and everything to do with "*efficiency*" (Cohen 1987:42–3, my emphasis). 'Efficiency'—'production with minimum waste or effort'—is precisely the aim of organizing labour into a productive force and rendering it 'abstract'. This shifts the explanatory focus away from 'control' to how the dual-sided relations of production both empower and repress in the search for efficiency.

Before explaining how Foucault can explain the dual-natured organization of production, let me reiterate the structural imperative of relations of production, as governed by the law of value. For Marx, the price of a commodity is proportionate to the amount of labour deemed socially necessary to produce it, which, in turn, is determined by the productivity or productive power of labour. The relationship between the productive power of labour and exchange-value or price is an internal relation between value's substance and its form. 'Value' is neither abstract labour nor price: it is the social process, or force, connecting them. It is the 'centre of gravity' or 'prevailing tendency' of the process that renders concrete labour 'abstract' and organizes individuals into a productive power. The law of value is the 'law of motion' of the immutable abstraction of this organizing movement; an 'inner law' that maintains 'the social equilibrium of production' (Marx 1867a:880). This law draws attention to the following structural imperative of production relations:

> If the labour-time of the worker is to create value in proportion to its duration, it must be socially necessary labour-time. That is to say, the worker must perform the normal social quantity of useful labour in a given time. The capitalist therefore compels him to work at the normal social average rate of intensity. He will strive as hard as possible to raise his output above the minimum and to extract as much work from him as is possible in a given time. For every intensification of work above the average rate creates surplus-value for him…. The capitalist forces the worker where possible to exceed the normal rate of intensity..
>
> (Marx 1867a:987)

This structural imperative is important to note because it gives Foucault's techniques a

purpose and focus, which they otherwise lack, and it allows us to fathom connections between apparently discrete commonplace activities.

This summary of the law of value poses several questions. First, how is abstract labour conceptualized, that is, how is it observed, measured and calculated? Second, how is this quantitative production norm inscribed in rules of work behaviour and performance? Third, how do these rules define labour of an average or normal intensity or quality? Fourth, how are workers 'trained' to perform labour of an average or normal intensity or quality? In short, what kinds of techniques and what kinds of knowledge are necessary to organize labour into a productive power? How is the employee made an object of knowledge and a target of power? The following explication of Foucault's concept of disiplinary power provides the means of answering these questions.

Disciplinary power

Disciplinary power is constituted by three methods of organizing, each of which consists of several techniques, and three means of 'training': hierarchical observation, normalizing judgement, and examination, which combine to determine norms or rules of conduct and shape or 'normalize' people to fit them. Together, they control the operation of the body, in precise detail, by organizing its movement in space and time. They thereby constitute a power greater than the sum of its elementary forces, what Foucault calls the 'composition of forces'. The force in question could be the army, the hospital, the prison, or it could be the productive force of labour. Indeed, Foucault illustrates his description of disciplinary techniques with quotations from Marx and examples from production. These techniques, argues Foucault, originated in monasteries and were developed and refined as they constituted a variety of institutions, workhouses, asylums, hospitals, barracks, from whence they converged during the seventeenth and eighteenth centuries to form 'the blueprint of a general method' employed throughout society (Foucault 1977). (See Figure 8.1.)

Foucault argues that the privatization of property and the onset of the capitalist mode of production stimulated the privatization of power and the development of disciplinary society. He construes disciplinary power as a means of containing opposition to the privatization of property, the development of industrialism and the exploitation of labour, entailed by this process (Foucault 1977:85–7). Foucault (ibid.: 274) calls this opposition 'popular illegalities', but, in the light of the labour theory of property, sketched in the previous chapter, I prefer to regard them as the inalienable rights of labour, an indigenous form of law. When these rights clashed with the development of capitalist production and private property, they 'had to be punished' (ibid.: 85). [5]

These 'mechanisms of power', Foucault tells us, *'really exist'* (Foucault 1980a:164, my emphasis). Armstrong (1994:39) notes that this recalls Bhaskar's realist conception of 'mechanisms'. This is, I believe, exactly how Foucault regards them, as real entities. 'Panopticism' is 'a diagram of a mechanism of power in its ideal form' (Foucault 1977:205). This 'diagram' is regularly mistaken for a Utopian schema, but I believe it is a model, in the realist sense, that is, an attempt to depict the essential nature of these

Figure 8.1 Methods of composing forces

mechanisms, and is best imagined as analogous to the models of natural science. As Marx might have put it: it is an attempt to understand the cell form of society, the genetic code of the body politic.

The nucleus of this model of power is implicit in Part Three, 'Discipline', of *Discipline and Punish*, although it must be supplemented by drawing on Foucault's other work. It is seldom explicated, systematically developed and used in explanation of the organization of production, because it is seldom recognized for what it is. Foucault himself offers little guidance to enable the reader to detect the model's presence, because he became aware of the significance of models (or 'analytics') subsequent to the book's publication. [6] He tells us only that he is 'mapping' on a 'series of examples some of the essential techniques that most easily spread from one disciplinary institution to another' (Foucault 1977:139). To recognize these examples of disciplinary techniques as elements of a model, and to appreciate its significance and potential, one must, first, recognize and understand the significance of models, and second, recognize this *particular* model as the means of resolving a familiar, identifiable problem, such as those I have identified in Marx. These prerequisites are interrelated: the potential use of the model draws it out of the text in which it is embedded. It is this model (panopticism) I want to reconstruct here by abstracting it from the empirical material in which it is embedded. The model's presentation in *Discipline and Punish* is ambiguous, repetitive and inconsistent; for while Foucault's empirical researches contain a social theory, he was, as he maintained, no social theorist. My presentation aims to be clear, economical and coherent.

Before explicating the nucleus of Foucault's model, some preliminary comments may be helpful.

1 My order of presentation follows the order of the three chapters of Part Three of *Discipline and Punish:* 'Docile bodies', 'The means of correct training', and 'Panopticism'. The first chapter considers the elements of the model separately: it describes three methods of organizing space, movement and time. The second chapter considers the elements of the model in combination: it describes three instruments of 'training', which together synthesize these methods of organizing to produce a power or force greater than the sum of its constituent parts. These two chapters examine the same object, but in different ways, at rest and in motion. Finally, in the third chapter, Foucault shows how panopticism operates and how it spread throughout society during the seventeenth and eighteenth centuries (Foucault 1977).
2 Imagining this model in the shape of a pyramid helps us understand Foucault's order of presentation (Foucault 1977:177, 221). In each of the first two chapters, he examines this architecture of power from its base to its apex. The final technique of each method, described in the first chapter, organizes its predecessors; the 'means of correct training', described in the second chapter, synthesize the methods and techniques described in the first. Thus his analysis is cumulative. [7]
3 Explicating Foucault's model poses the same problem as explicating Marx's model: how to present sequentially a model in which every concept of every element of this 'organic whole' presupposes every other. Within 'every organic system' effects become causes and 'every economic relation presupposes every other…and everything posited is thus also a presupposition' (Marx 1858:278). So too for Foucault: power is a machine, a technology of parts that work in unison.
4 Foucault often employs the archaic meaning of many key terms such as 'docile' and 'gesture'. Where appropriate, I comment on the etymology of these words, for this tells us something of the history of the techniques they represent. [8]
5 Foucault presents the examples without explicating the model; here I present the model without Foucault's examples. In their stead, I provide examples taken from Marx, so as to illustrate areas of commona-lity between them, for later development.
6 Finally, although Foucault is clear that these techniques were 'organized from the starting point of local conditions and particular needs' and 'took shape in piecemeal fashion', over centuries, 'prior to any class strategy designed to weld them into vast, coherent ensembles' (Foucault 1980a:159), I use the imperative voice so as to stress their contemporary salience. I shall later argue that the techniques of engineering, cost accounting, industrial relations and human resource management are the modern form of these organizing techniques. Recognition of this potential of Foucault's work requires only a nonfetishistic concept of productive 'forces' and an appreciation that, in *Discipline and Punish*, Foucault does not write a history of the prison, but constructs a model of power.

How to organize movement, in space and through time

The art of distributions (organizing individuals in space)

ENCLOSURE

Create an 'enclosure'—a space 'heterogeneous to all others and closed in upon itself—and confine or enclose people within it. The enclosure is simply a homogeneous, well-defined space which can be further organized, observed and controlled to concentrate the forces deployed within it. Space is organized differently inside and outside the enclosure. 'Enclosure' is derived from 'encloister', meaning 'to shut up in a cloister or monastery'. The monastery is the ideal-typical enclosure. It is also the source of many contemporary organizational techniques. [9] The monastic model was gradually imposed on vagabonds and paupers (the workhouse), the mad (the asylum), armies (barracks), orphans (the orphanage), pupils (the school), criminals (the prison) and:

> side by side with the spread of workshops, there also developed great manufacturing spaces, both homogeneous and well defined: first, the combined manufactories, then, in the second half of the eighteenth century, the works or factories proper…. The factory was explicitly compared with the monastery, the fortress, a walled town.
>
> (Foucault 1977:142)

An enclosure is a prerequisite for 'simple co-operation': 'As a general rule, workers cannot co-operate without being brought together: their assembly in one place is a necessary condition for their co-operation' (Marx 1867a:447). Marx alludes to merchants drawing weavers and spinners 'from their home towns' and 'concentrating them in one place of work' (Marx 1858:510). Historically and conceptually: 'a large number of workers working together, at the same time, in one place…constitutes the starting point of capitalist production' (Marx 1867a).

It is worth noting that it is within the chapter 'Co-operation' of *Capital* Volume One, from which I derived an understanding of 'abstract labour' and productive 'forces', that Marx draws an analogy between factory and military organization (Marx 1867a:443, also cited in Foucault 1977:163–4). Marglin notes that 'military analogies abound in contemporary observations of the early factory' (Marglin 1974:46 n. 47). The army and the workforce are not simply analogous, however, but are organized using similar techniques (an explanation, perhaps, of the presence of military analogies in the industrial relations literature) (Dunn 1990, 1991; Keenoy 1991).

PARTITIONING (OR THE PRINCIPLE OF INDIVIDUALISING PARTITIONING)

Divide this enclosed, homogeneous space into linear partitions or 'cells': 'the disciplinary space is always, basically, cellular' (Foucault 1977:143). Allocate an individual to each: 'each individual has his own place; and each place its individual' (ibid.: 143). 'Place in each of the cells a lunatic, a patient, a convict, a worker or a schoolboy' (Foucault 1980a:147). 'Cell' originally meant 'a monastery or nunnery, generally of small size, dependent on some larger house'; it later came to mean 'one of a number of spaces into which a surface is divided by linear partitions' (OED). Initially these are conceptual partitions, marked by rules of behaviour; they are subsequently materialised, via the architecture and construction of buildings, to become physical partitions.

These partitioning techniques fragment tasks, distribute them in space and organize this spatial order of production. Let us note that the organization of the labour process, discussed by Marx in Chapter 14, 'Division of labour and manufacture', of *Capital* Volume One, which produced 'new, and social productive powers of labour', was accomplished by separating, making independent and isolating the operations of the various stages of production, and by allotting them to workers who were 'riveted' 'to a single fraction of the work' (Marx 1867a:418, 464, 469). [10] These techniques also break up group dispositions, prevent unwelcome communication and make possible a knowledge of the location of individuals by revealing their presences and absences. This facilitates the supervision of the conduct of each individual, 'to assess it, to judge it, to calculate its qualities or merits' (Foucault 1977:143).

THE RULE OF FUNCTIONAL SITES

Further subdivide, analyse and codify space and organize it horizontally in layers so that the same space can have different uses. In factories, for example, the distribution of bodies is articulated with the spatial arrangement of production machinery:

> In the factories that appeared at the end of the eighteenth century, the principle of individualising partitioning became more complicated. It was a question of distributing individuals in a space in which one might isolate them and map them; but also of articulating this distribution on a productive machinery that had its own requirements. The distribution of bodies, the spatial arrangement of production machinery and the different forms of activity in the distribution of 'posts' had to be linked together.
>
> (Foucault 1977:144–5)

Codifying space, in this way, constitutes 'a *real* table of juxtaposed and carefully distinct regularities' (Foucault 1977:144, my emphasis), a *tableau vivant*, which can more easily be supervised. In the factories that appeared at the end of the eighteenth century, for example, 'by walking up and down the central aisle of the workshop', it was possible to

observe the worker's presence and application, the quality of his work, to compare workers with one another, and to classify them according to skill and speed (Foucault 1977).

THE ART OF THE RANK (OR THE TRANSFORMATION OF ARRANGEMENTS)

Rank the occupants of these cells. 'Rank' is the conceptual place or location one occupies in this 'living table'. It is marked by the point of intersection between a column and a row. It defines the relationship between the part and the whole and is the product of 'examining' (described below). Because it may be done at the conclusion of every task, ranking makes the elements of the table movable and interchangeable. Individuals are distributed and circulated in a network of relations; there is 'a *perpetual movement* in which individuals replace one another in a space marked off by aligned intervals' (Foucault 1977:146, 147, my emphasis). Marx explains: 'After the various operations have been separated, made independent and isolated, the workers are divided, classified and grouped according to their predominant qualities' (Marx 1867a:468–9). 'The working personnel was sometimes divided into from twelve to fifteen categories, and these categories themselves *constantly underwent changes* in their composition' (ibid.: 403, my emphasis).

The techniques of the art of distributions transform 'confused, useless or dangerous multitudes', whatever they may be, 'into ordered multiplicities' (Foucault 1977:148), by organizing space, both material (architectural) and ideal (conceptual), to create both a living *(tableau vivant)* and a conceptual table. They organize people into ranks and files and express this organization conceptually as rows and columns on a table. The table functions as a concise and orderly list of contents, or index, of the enclosure. It exhibits relations between individuals in a distinct and comprehensive way. The Art of Distributions is 'both a technique of power and a procedure of knowledge' (Foucault 1977:148). It is 'the first condition for the control and use of an ensemble of distinct elements: the base for a microphysics of what might be called a "cellular" power' (Foucault 1977:149). (See Table 8.1.)

Table 8.1 Techniques of the art of distributions (organizing individuals in space)

Enclosure	Enclose a space heterogeneous to all others and confine people within it.	Enable space to be organized differently, inside and outside the enclosure.
Partitioning	Divide this enclosed, homogeneous space into linear partitions or cells	Fragments tasks, distributes them in space and organizes this spatial order of

	and allocate an individual to each.	production.
The rule of functional sites	Subdivide, analyse and codify space and organize it horizontally in layers.	Creates a *tableau vivant* of ranks and files.
The art of rank	Examine and rank the occupants of these cells.	Divides, classifies and groups groups individuals and renders them interchangeable. Creates a conceptual table of rows and columns.

The control of activity (organizing movement in time)

THE TIMETABLE (OR THE METHOD OF TEMPORAL REGULATION)

Within the enclosure, create and partition linear, homogeneous and continuous time. This can be contrasted with 'practical time, which is made up of incommensurable islands of duration each with its own rhythm' (Harvey 1989:253). Time is organized differently inside and outside the enclosure.

Monks were the first to measure and subdivide time carefully. They used sundials, the position of the stars or the the waterclock, when, outside the monastery, time was measured by the rising and setting of the sun and the waning and waxing of the moon (Kieser 1987:113). It was they who devised the timetable: 'a list of times at which events are scheduled to take place' (OED); a 'general framework for an activity' (Foucault 1977:151). The timetable establishes rhythm, imposes tasks, and regulates the cycles of their repetition. This method of regulating time's quantity reflects the principle of non-idleness—Do not waste time!—and is a means of ensuring time's quality: 'it is a matter of constituting a totally useful time' (Foucault 1977:150).

This method was refined, by developing smaller units or divisions of time, as it spread from monastic communities to schools, workshops, hospitals and poorhouses, which were often attached to monastic communities. According to Foucault, the framework of the 'factory-monastery' was imposed upon workers in seventeenth-century manufactories, which
had regulations that laid down the exercises that divided up the working day (Foucault 1977). As Marx notes: all economy ultimately reduces itself to economy of time (Marx 1858:173).

THE TEMPORAL ELABORATION OF THE ACT (OR THE CORRELATION OF THE ACTIVITY TO THE TIME)

Correlate the activity to the time. Subdivide movements of the body into their simplest elements; prescribe their order of succession; precisely define the position of the limbs; assign each movement a direction; and correlate with the temporal imperatives of the timetable. Time is extracted from the body by subdividing its movements. In this way: 'time penetrates the body and with it all the meticulous controls of power' (Foucault 1977:152). As Marx puts it: 'Not only is the specialised work distributed among the different individuals, but the individual himself is divided up, and transformed into the automatic motor of a detail operation' (Marx 1867a: 481). Manufacture 'mutilates the worker, turning him into a fragment of himself (ibid.: 482); '"to subdivide a man is to execute him… The subdivision of labour is the assassination of a people"' (ibid.: 484–5, citing Urquhart).

THE CORRELATION OF THE BODY AND THE GESTURE

Correlate the overall position of the body with the movement of the limb or 'gesture'. A 'gesture' is 'a significant movement of a limb or the body' (COD). Its original meaning referred to the manner of placing the body, 7 especially in acts of prayer or worship. This was important within monasteries, where visible behaviour is an indicator of inner attitude (Kieser 1987). As this technique became deployed in other contexts, such as the army and the factory, the movement of the limb (the 'gesture') was correlated with the overall position of the body to achieve the best efficiency and optimum speed. The efficient use of the body extracts time from it; nothing is to remain idle or useless: 'Teach him by experience how to obtain the desired effect with the minimum exertion' (Marx 1867a:458).

THE BODY-OBJECT ARTICULATION

Define the relationship between the parts of the body to be used and the parts of the object to be manipulated and establish the succession of these correlations: 'Over the whole surface of contact between the body and the object, power is introduced, fastening them to one another'. It is a 'meticulous meshing' (Foucault 1977:153). 'A worker who performs the same simple operation for the whole of his life converts his body into the automatic, one-sided implement of that operation' (Marx 1867a:458).

THE PRINCIPLE OF EXHAUSTIVE USE

To summarise the techniques for controlling activity:

1 Linear time is created and subdivided.
2 Movement of the body is subdivided and correlated with the temporal imperative of

the timetable.

3 Movement of the limb is correlated with the overall position of the body, to achieve the best efficiency and optimum speed.
4 The relationship between the part of the body to be used, and the part or parts of the object to be manipulated, is defined, and the succession of the correlations is established.

These techniques of correlating time and movement are synthesized according to the principle of exhaustive use: 'it is a question of extracting, from time, ever more available moments and, from each moment, ever more useful forces' (Foucault 1977:154). They extract time from the body by subdividing it and maximizing the efficiency of its movement These techniques ensure labour is employed economically and efficiently: 'every effort is made to ensure that no more (or rather even less) socially necessary time is consumed in making the product' (Marx 1866:1026). [11] (See Table 8.2.)

Table 8.2 Techniques of the control of activity (organizing movement in time)

The timetable (or method of temporal elaboration)	Within the enclosure, create and partition linear, homogeneous time.	Enables time to be organized differently, inside and outside the enclosure.
The temporal elaboration of the act (or the correlation of the activity to the time)	• Subdivide movements of the body into their simplest elements. • Prescribe their order of succession. • Precisely define the position of the limbs. • Assign each movement a direction. • Correlate with the temporal imperatives of the timetable.	Correlates the activity to the time.
The correlation of the body and the gesture	Correlate the overall position of the body with the movement of the limb.	Optimizes speed.
The body-object	Define the relationship	Fastens the body to

articulation	between the parts of the body to be used and the parts of the object to be manipulated and establish the succession of these correlations.	the object.
The principle of exhaustive use	Synthesize all the above.	Extracts time from the body by subdividing it and maximizing the efficiency of its movement.

The organization of geneses (training aptitudes)

The art of distributions organizes individuals in space. The control of activity extracts time from bodies by subdividing and increasing the efficiency of their movement. It is concerned with the movement of *individuals*, located in organized spaces, 'the position of the finger, the bend of the leg, the movement of the arms' (Foucault 1977:158). The organization of geneses is concerned with *groups* of individuals and with series of moves, 'teach in turn posture, marching, the handling of weapons, shooting' (ibid.), the integration of these moments of linear time and individual chronologies, 'one upon the other' (ibid.: 160) to form a 'composite', an 'evolutive' time. 'The time of each must be adjusted to the time of the other in such a way that the maximum quantity of forces may be extracted from each and combined with the optimum result' (ibid.: 164–5). As Marx puts it: 'the different stages of the process, previously successive in time, have become simultaneous and contiguous in space. Hence a greater quantity of finished commodities is produced within the same period' (Marx 1867a:464). 'The working day regarded spatially—time itself regarded as space—is many working days alongside one another' (Marx 1858:399).

The organization of geneses consists of these techniques:

1 Segment: divide the duration of the activity into segments.
2 Seriate: arrange these segments into a sequence, according to prescribed criteria.
3 Finalise: prescribe that each segment must end at a specific time.
4 Hierarchize: arrange these segments into small steps according to difficulty by combining tasks of increasing complexity.
5 Examine: conclude each step with an examination and require the correct response before allowing the individual to pass to another activity.
6 Rank: differentiate, correct, punish, eliminate.
7 Prescribe exercises: repetitive, different and graduated tasks that economise time and accumulate it in a useful form (Foucault 1977:161, 162). Their purpose is to

train: to exercise is to train.

8 Synthesize: organize these elements according to an analytical plan.

Individual chronologies and series of movements are analogous to cogs. These techniques organize them into a machinery of power—for producing, fighting, learning, healing, punishing-within which each individual, at each level, at each moment, is correctly combined and permanently utilized (Foucault 1977:165). This machine is simultaneously a productive power, a means of programmed learning or training, and a means of assessing skills, knowledge, and behaviour, or 'aptitudes': 'the quality of being fit for a purpose or position' (OED). (See Table 8.3.)

Table 8.3 Techniques of the organization of geneses (training aptitudes)

Segment	Divide the duration of the activity into segments.	
Seriate	Arrange these segments into a sequence, according to prescribed criteria.	
Finalise	Prescribe that each segment must end at a fixed time.	
Hierarchize	Arrange these segments into small steps according to difficulty by combining tasks of increasing complexity.	
Examine	Conclude each step with another activity.	
Rank	Differentiate, correct, punish, eliminate.	
Prescribe exercises	Impose repetitive, different, graduated tasks that economize time and accumulate it in an useful form.	
Synthesize	Organize these elements according to an analytical plan.	Creates a power or force greater than the sum of its parts.

Means of 'training'

Organizing the distribution of bodies in space, extracting time from them and

accumulating it to create a power or force greater than the sum of its parts (the organization of geneses) requires techniques of 'training'. To train is to 'bring or come into a state of physical efficiency by exercise' (COD). 'The chief function of the disciplinary power is to "train"…to bind [forces] together in such a way as to multiply and use them' (Foucault 1977:170). Training is a means of organizing.

Foucault presents three means of training: (a) hierarchical observation, (b) normalising judgement, and (c) the examination, which combines (a) and (b). But I believe there is only one, and that (a) and (b) are best understood as two dimensions of the *same* process, (c) 'examining': 'to look closely or analytically at' (hierarchical observation) and 'the act of testing or judging by a standard or rule' (normalising judgement) (OED). Foucault also presents three means of organizing: (a) the art of distributions (space), (b) the control of activity (time), and (c) the organization of geneses. But I believe there are only two, (a) and (b). Examining and the organization of geneses are sides of the same process. These elements are organized by being examined. This two-sided examining process produces an analytical plan by which to devise the tactics of organizing these elements into a productive power. I consider these two sides of examining in turn.

Hierarchical observation ('to look closely or analytically at')

Hierarchical observation is founded on the art of distributions. The geometry of the distribution of individuals in space is materialised via the architecture and construction of the buildings within which they are enclosed (Markus 1993). Such buildings are designed not to be seen, but to render visible those inside. They are microscopes of conduct, apparatuses of observation. Architecture itself organizes power relations. It facilitates a new kind of surveillance, the 'disciplinary gaze' or 'individualising observation'. Its ideal model is the military camp, but it is evident in urban design, hospitals, asylums, prisons, schools and also in the design of workshops and factories, which need 'an intense, continuous supervision' (Foucault 1977:174). Hierarchical observation is 'indissociable from the system of industrial production, private property and profit' (ibid.: 175).

Hierarchical observation has two components. The first is to observe, measure, compare and classify individuals' performance. [12] 'Note the aptitudes of each worker, compare the time he takes to perform a task' (Bentham, cited in Foucault 1977:203). This component makes each individual a 'case', a describable and analysable object; and arranges facts about them in a (conceptual) table. The second component of hierarchical observation is to calculate averages and inscribe them in norms or rules of conduct or performance. These rules function as 'a minimum threshold, as an average to be repeated or as an optimum towards one must move' (Foucault 1977:183).

Normalising judgement ('the act of testing or judging by a standard or rule')

On the basis of 'hierarchical observation', examine individuals in the second sense of the word, that is, judge them according to a rule. 'Normalising judgement' has two components. The first is to rank: to quantify the individual's performance, distribute it along a scale, around a norm and hierarchize individuals in relation to one another

(Foucault 1977:223). 'A penal accountancy, constantly brought up to date, makes it possible to obtain the punitive balance sheet of each individual' (ibid.: 180). The second is to train: to measure non-observance of the rule and correct it by 'training' or prescribing 'exercises': techniques which impose repetitive and graduated tasks on the body (ibid.: 161). Ranking and training work together. They compare and hierarchize; they punish and reward. In a word, they normalise. (See Figure 8.2.)

Panopticism

The two sides of examining, which distribute bodies in space, break up and rearrange their activities in time, to form a power greater than the sum of its parts, constitute an apparatus which Foucault (after Bentham) calls a panopticon.

I note the following characteristics of the panopticon.

First, disciplinary techniques are dual-sided: they simultaneously enable and repress, organize and atomize. It is this dual-sided process which simultaneously organizes people into a productive power, within the workplace, and severs them from their social roots, outside the workplace. It achieves this twin effect via the different organization of movement, space and time, within and without the workplace. This is a daily, tangible experience for most workers. I shall argue that these dual-sided techniques mediate between productive 'forces' and 'civil society'. As they organize labour into a productive power, or 'force', they dissolve society into atomistic monads: 'a reality fabricated by this specific technology of power that I have called "discipline"' (Foucault 1977:194).

Second, disciplinary techniques render each individual a 'case': an object of knowledge and a target of power. 'In becoming the target for new mechanisms of power, the body is offered up to new forms of knowledge' (Foucault 1977:155). 'Knowledge follows the advances of power, discovering new objects of knowledge over all the surfaces on which power is exercised' (ibid.: 204). Power and knowledge, or social relations and categories, are internally related. Categorization and individualisation are sides of the same, disciplinary process. Foucault's concept of panopticism gives political significance to categorization and historical meaning to the proposition that social relations are simultaneously ideal and material.

Third, power and knowledge are fused in rules. Foucault shows, for example, how the workshop, the school and the army operate according to rules governing time (lateness, absences, interruption of tasks), activity (inattention, negligence, lack of zeal), behaviour (impoliteness, disobedience), speech (idle chatter, insolence), the body (incorrect attitudes, irregular gestures, lack of cleanliness), and sexuality (impurity, indecency). These disciplinary rules are redolent of Marx's reference to the 'private legislator's' 'factory code', which he defines as: 'the capitalist caricature of the *social regulation of the labour process*' (Marx 1867a:550, my emphasis). Marx's characterisation, in *Capital*, is based on Engels's account of the despotic rules of the typical Manchester factory, in the 1840s, which notes that factory operatives 'are more sharply watched' than slaves (Engels 1969:207). Foucault construes these rules as an infra- or counterlaw to that of the state: the disciplines 'partitioned an area that the law had left empty' (Foucault 1977:178), and created within them 'a small penal mechanism' (ibid.: 177), with 'its own

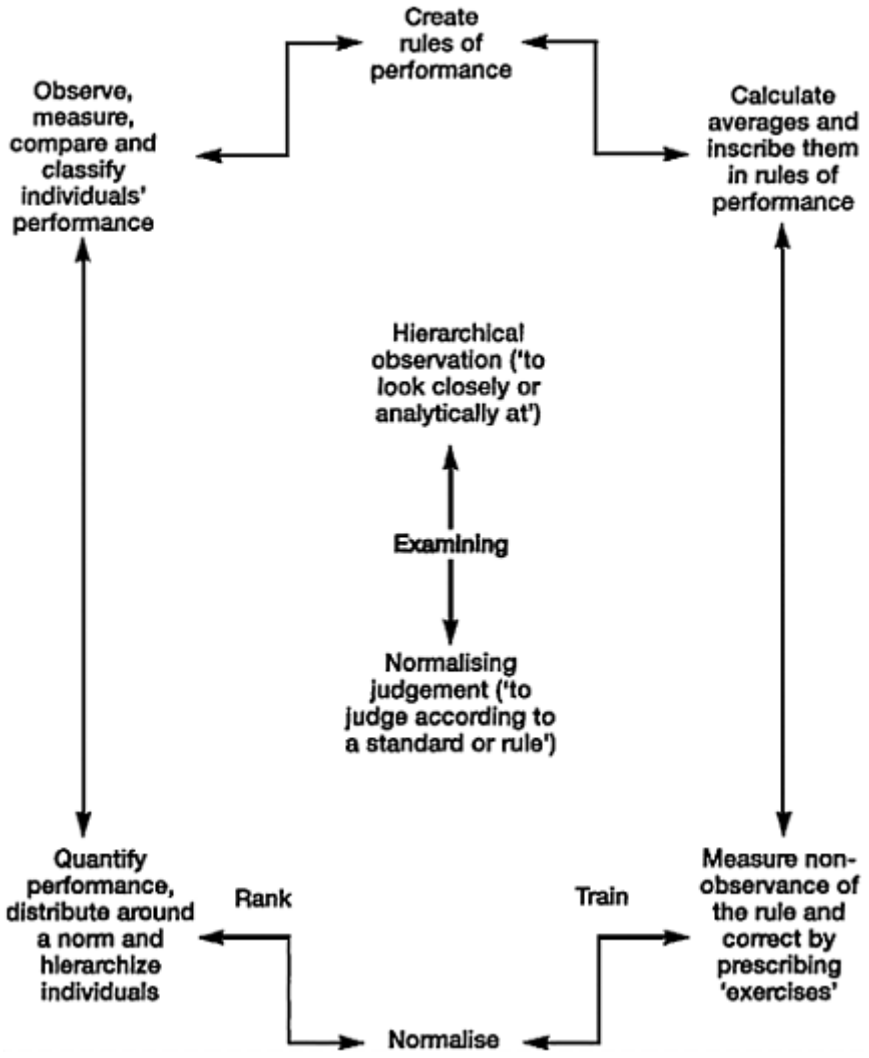


Figure 8.2 The dual-sided nature of examining

laws, its specific offences, its particular form of judgement' (ibid.: 178), and its own 'infra-penalties'.

The panopticon is 'the diagram of a mechanism of power reduced to its ideal form' (Foucault 1977:205). But what sort of power is it? In understanding Foucault's concept of power, it is helpful to recall the distinction between three types of cause: (a) material, the elements or matter from which action is produced; (b) efficient, the agency by which action is produced; and (c) final, the end or purpose for which a thing is done.

The material cause of action is the social structure which bestows individuals with a capacity to act. Its efficient cause is the exercise of this capacity. And the final cause is the intent or motive of the person (Isaac 1987). Foucault's 'disciplinary power' is a concept of material causes, that is, of the capacity of individuals to act, bestowed by this apparatus. It abstracts from efficient and final causes, that is, 'from any obstacle, resistance or friction' (Foucault 1977:205). Similarly, Marx portrays capital's mechanisms 'in their purity', by ignoring 'sources of friction', 'as is the practice in mechanics where the frictions that arise have to be dealt with in every particular application of its general laws' (Marx 1867a:1014). Disciplinary power is a relational power (Foucault 1977:177). This capacity, or power, is determined by the geometry and architecture of the internal relations of this apparatus; it exists independently of the particular individuals, and their motives, who exercise this capacity and constitute these relations. Because it is a machinery, its elements cannot fully be understood in isolation and at rest; only together, in motion.

I now want to knit together this social structure (relations of production) and its causal mechanism (the panopticon). I do so by establishing a connection between Marx's explanation of the 'law of motion of modern society' (Marx 1867b:92) and Foucault's explanation of the mechanism organizing people in space and through time (Foucault 1977).

A political technology of the body

To organize my argument about the relationship between this law of motion and microphysics, I shall use parallel remarks by Marx and Foucault regarding the distinction between divisions among elements of the labour process and divisions among the labour force:

> After the various operations have been separated, made independent and isolated, the workers are divided, classified and grouped according to their predominant qualities.
>
> (Marx 1867a:468–9)

> Production [is] divided up and the labour process [is] articulated, on the one hand, according to its stages or elementary operations, and, on the other hand, according to the individuals, the particular bodies, that [carry] it out.
>
> (Foucault 1977:145)

The articulation between the labour process and the labour force is fundamental to the organization of movement in space and time. This articulation is affected by the two sides of 'examining': 'to look closely or analytically at' (hierarchical observation), and 'to judge according to a rule' (normalising observation). These are not two processes (as Foucault suggests), but one, dual-sided process: creating abstract organizational spaces

(or cells) and assigning individuals to them. By explicating how they interrelate, we can begin to understand the organization of labour and answer the questions posed earlier by the structural imperative of relations of production. I consider hierarchical observation and normalising observation in turn.

'Looking closely or analytically at'

Hierarchical observation ('to look closely or analytically at') is rooted in the organization of individuals in space and time (the 'art of distributions' and the 'control of activity'). To explore their interrelationship, I want to turn away from *Discipline and Punish* and towards *The Order of Things,* where Foucault explains that:

> Order is, at one and the same time, that which is given in things as their inner law, the hidden network that determines the way they confront one another, and also that which has no existence except in the grid created by a glance, an examination, a language.
>
> (Foucault 1973:xx)

'Order' is 'the constitution or nature of the world, society, etc.' (COD). To constitute objects in thought we have to understand how they are *practically* constituted or ordered. What Foucault has to say on the 'order of things', therefore, is relevant to my task of constituting in thought the causal mechanisms of production.

Foucault explains how the elements of society are ordered by being categorized and counted, by the construction of taxonomia and mathesis. These are not two separate things, but one. Ways of categorizing and ways of counting constitute and support each other. What numbers are to a mathesis, words are to a taxonomy. Both are means of designating (Foucault 1973:202). Taxonomy is qualitative mathesis; mathesis is quantitative taxonomy (ibid.: 74). They form one thing: a 'table' or analytical plan which constitutes and manifests the order of things. [13]

Labour is ordered, in space and through time, by being counted and categorized. This is done via the techniques of cost accounting and human resource management, working in unison (Townley 1995). Together they constitute a table or analytical plan by which to devise the tactics of managing labour. We can deduce, *a priori,* how these techniques order labour from a basic principle of the law of motion of capital: capital needs to create a surplus by training workers to perform at (or above) a normal level or intensity. How is this done? Put simply: these techniques calculate 'abstract labour' and inscribe this quantitative production norm in rules of work behaviour and performance. Workers are then 'trained' to perform at or above this normal level of intensity. Let me explain.

How is abstract labour conceptualized?

That is, how is abstract labour observed, measured and calculated? I begin with the process of counting, or accounting. The type relevant to this inquiry is cost accounting.

'Cost' is that which must be expended—time, labour—to produce something (OED). Cost accounting reveals and analyses expenditures by assigning to them a monetary value, so that performance can be measured and activities controlled. In so doing, it renders them *visible*. To analyse performance, actual costs must be compared with standards by which the operation of a plant can be measured. A 'standard' is 'a rule for measuring…a standard for comparing' (Websters Dictionary, cited in Lang 1944:270). A standard cost represents a carefully planned and efficient method of making a product. 'Abstract labour', labour of a normal quality or intensity, is determined by the techniques of standard cost accounting: a (cardinal) number is a perfect abstraction (Crump 1992:7). These techniques calculate predetermined normal costs against which actual costs can be compared and from which plans can be devised to correct or normalise deviations. It is important, then, to understand how standard costing techniques work, and how they combine with other techniques for managing labour.

Standard (monetary) costs are based on physical standards by which the operation of a plant can be measured. These standards are based on engineering studies of the design, layout and operation of manufacturing facilities. The engineer uses the criterion of efficiency to decide the best method or design of these facilities and their proper level of performance. Efficiency is measured in units of time. (It is for this reason that 'economy of time' is 'the first economic law' of production (Marx 1858:173)). 'Labour-time… exists only in the form of activity' (ibid.: 171).

Time and motion study examines the articulation between the machine and its operator. It establishes the reasonable time, under normal conditions, for completing each operation of a job: the standard from which to measure deviations and assess efficiency. The discovery of engineers in the period of manufacture was that the productive power, or productivity, of labour can be increased by breaking down the labour process into its component motions and organizing these fragmented work tasks according to rigorous standards of time and motion study. Scientific management is but the perfected development of this basic principle of the division of labour, which can be traced back 'via Gilbreth's experiments of the 1890s, to the work of mid-nineteenth century writers like Ure and Babbage', which Marx found so compelling (Harvey 1989:125).

For Marx, the movement of production is 'symbolically reflected in imagination' by book-keeping, which he construes as 'the control and ideal synthesis' of the production process' (Marx 1865:136–8). Engineering (time-keeping) and cost accountancy (book-keeping) work in unison: greater calibration of time allows greater calibration of cost and more detailed control of activity. This is why developments in cost accounting were closely associated with the efficiency movement centred on the American Society of Mechanical Engineers.

How is this quantitative production norm inscribed in rules of work behaviour and performance?

How do these rules define labour of an average or normal intensity or quality?

I shall consider these two questions together.

On the basis of engineering studies, which determine the required standard of performance, other techniques (job analysis, description and classification) describe the nature of the job and prescribe when, where and how bodies should act:

> hold knife against first and third joints of the fingers. Place upper part of thumb, first joint, against lower blunt edge of knife and the lower part of thumb against upper edge of handle. Do not grasp knife tightly. Do not curl tip of finger into palm of hand.
>
> (Kenney, Donnelly and Reid 1981:80)

On this basis, rates of pay are graded for the various classes of work (job evaluation) and standard time allowances are established for each operation. Combining these two factors, wage rate and time, determines the standard labour cost of the operation. [14] Standard labour costs define labour of an average quality or intensity. The quantitative norms of cost accounting are inscribed, by these (human resource) management techniques, in rules governing workers' behaviour and performance.

These techniques of cost accounting and human resource management—categorization of performance by numbers (mathesis) and by words (taxonomy)—work together, counting and classifying people, creating a living table *(tableau vivant)* and a conceptual table (Townley 1995). This conceptual table can exist in loosely-related documents, for example, a contract of employment, a collective agreement, a bill of works, engineering and architectural plans, a cost report, a budget (Clegg 1975). It comprises a body of rules which define capacities to act, an index of an underlying reality to be negotiated, and an analytical plan by which to devise the tactics of organizing these elements into a productive power, and by which these tactics may be contested. [15] These are the ingredients of the everyday business of the politics of production.

'Judging according to a rule'

I now want to consider the other side of examining: to judge according to a rule. This process embraces two meanings of 'rule': (a) a minor law; and (b) to exercise power. Ruling is an activity rooted in cost analysis.

How are workers 'trained' to perform labour of an average or normal intensity or quality?

Standard costs are based on ideal conditions of efficiency. Variations of actual from standard costs indicate variations in efficiency relative to this ideal standard. Cost analysis compares actual with standard costs to discover deviations from the norm of efficiency, at the level of the individual, the unit, and the plant (Lang 1944:290). Cost accounting techniques, having rendered visible the activities of individuals, calculate the extent to which they depart from the norm of performance, and accumulate this information in files, so that individuals (who may be spatio-temporally discrete) may be compared, ranked and assigned to the abstract spaces of organizational structure. In short, they make individuals accountable (Townley 1996).

The starting point of *labour* cost analysis is a comparison of actual labour costs per unit for one period with that of another period, or with the standard labour cost per unit. Since labour cost is a function of two factors, wage-rates and time, the excess must be quantitatively broken down in terms of these factors (Lang 1944):

- Wage-rate variance: that is, 'the difference between the standard rate for the standard time allowance and the actual cost for the same time allowance' (Lang 1944:26):
    - wage rate changes
    - changes of payment plan, such as piece rate or measured day work
    - change in grade of labour used.
- Time or efficiency variances: that is, 'the use of an excessive number of labor hours to perform a given quantity of work' (Lang 1944:27):
    - selection of workers
    - training of workers
    - labour turnover
    - working conditions
    - working hours
    - selection of machines and tools
    - changes in design of product
    - changes in machinery, tools, or methods of production
    - adequate accounting or production records.

The aim of cost analysis is to discover the causes of labour's subnormal performance and to devise strategies for its correction. At this point, cost accountancy merges into the traditional concerns of industrial relations, for the two sources of labour cost variance, wage rate and time or efficiency, correspond to the wage- and effort-bargains found in every workplace and central to the study of industrial relations. 'Control by rule' (job regulation) is the essence of these practices, although in a Foucauldian, rather than a pluralist, sense (Hyman 1975; Wood 1976; Fox 1979). (See Figure 8.3.)

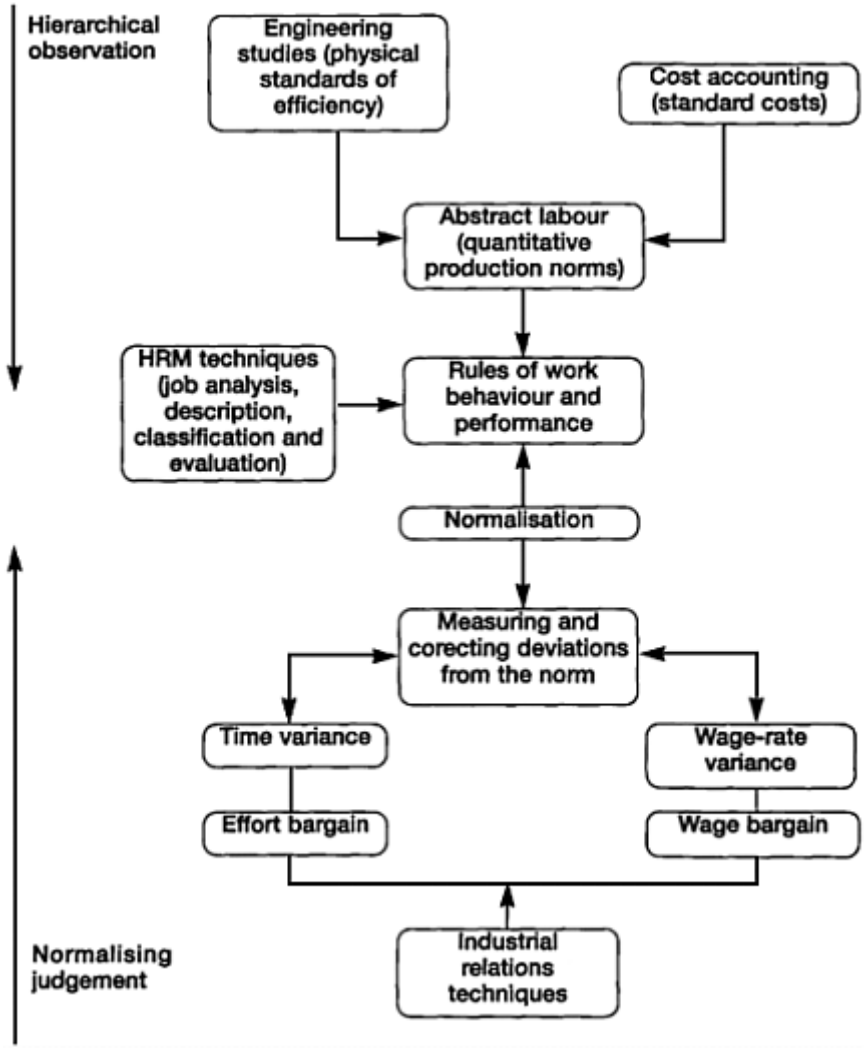


Figure 8.3 A political technology of the body

To reiterate: disciplinary techniques are means to determine abstract labour, that is, labour of an average intensity or normal quality (Marx 1867a:701–2; 1866:987) and to observe, examine and normalise employees' performance and behaviour at work, in accordance with this quantitative standard. The average becomes the norm, the norm becomes the rule, and labour is normalised according to this rule. These rules 'function as a minimum threshold, as an average to be respected or as an optimum towards one must move' (Foucault 1977:183). These techniques are the 'abstraction which is made every

day in the social process of production' (Marx 1859b:30). They reduce different kinds of labour to uniform, simple, homogeneous labour, and they are the immutable abstraction of movement (Marx 1847a): the activity of organizing or 'training' labour 'to work at the normal social *average* rate of intensity' (Marx 1866:987). In this way, disciplinary power organizes labour into a productive power or 'force'. This Foucauldian-Marxian analysis of the political technology of the body finds power in what may seem to be apolitical techniques and procedures. It stresses the practical, day-to-day activities of cost accounting, industrial relations and human resource management: practices which seem innocuous precisely because they make the organization of production seem normal.

This chapter places Foucault's concept of power at the heart of Marx's analytic. The logic of power and the law of value, the widening and ascending spirals of disciplinary technologies and capital accumulation, I suggest, interweave and adulterate each other:

> The two processes—the accumulation of men and the accumulation of capital—cannot be separated…the technological mutation of the apparatus of production, the division of labour and the elaboration of the disciplinary techniques sustained an ensemble of very close relations.
>
> (Foucault 1977:221)

Foucault's explanation of the logic of disciplinary power and Marx's explanation of the law of motion of modern society are mutually supporting. Foucault explains the mechanics of this motion.

9
The promised ‘connected whole’

Marx, critical realism and Foucault

> if the monarch is the abstract person who contains the state within his own person, this only means that the essence of the state is the abstract private person. Only in its flower does the state reveal its secret.
>
> (Marx 1843c:40)

> the representation of power has remained under the spell of monarchy. In political thought and analysis, we still have not cut off the head of the king.
>
> (Foucault 1981:88–9)

Introduction

The dual-sided relations of production mesh with the dual-sided disciplinary practices: they simultaneously empower and repress, organize and dissolve, create and alienate, produce wealth and produce poverty. This synthesis between Marx’s law of motion and Foucault’s logic of power is not merely conceptual. That ‘relations of production’ and ‘disciplinary power’ dovetail suggests to me that they model dimensions (structure and agency) of a common real object: capital, the cellular form of power, containing the genetic code of the body politic (Marx 1867b:90). In this chapter, I want to reflect on the implications of this argument for the belief that Marx and Foucault are fundamentally incompatible, to develop a realist reading of Foucault, and to suggest how my line of argument might be developed.

Marx and Foucault revisited

I hope to have provided grounds for questioning the common assumption that Marx and Foucault are incompatible. Students of critical accounting will know that much work has already used Foucault to show how cost accounting renders activities ‘visible’ and helps normalise workers’ performance (for example, Burchell *et al.* 1980; Hoskin and Macve

1986; Miller and O’Leary 1987; Hopper and Armstrong 1991; Loft 1988). And Barbara Townley’s use of Foucault to reconceptualise human resource management is precisely a sustained explanation of how it ‘organizes individual workers into a collective power or productive force’ (Townley 1994:52). Townley notes, however, that while Foucauldian studies have changed how accounting is viewed, they continue to regard accounting as what accountants do, and consequently treat accounting as if it is ‘a functionally autonomous sphere of practice’ (Townley 1995:557). Townley (1994, 1995 and 1996) has done much to connect an understanding of the techniques of accounting and human resource management. The import of the previous chapter is that this be extended to include engineering, architecture and industrial relations.

The task is to explain how this ‘political technology of the body’ works, for what purpose, in whose interests and what one does about it. Knowledge of this technology exists in ‘disciplinary’ compartments, principally, cost accounting, industrial relations and human resource management, which hinder an understanding of the unity of the techniques of which they are the knowledge. To understand Foucault’s political technology of the body, it is necessary to connect them. This compartmentalised knowledge explains ‘how’ labour is organized. Using Marx to understand ‘why’—to organize labour into a productive force in the interests of capital accummulation—connects them. [1]

If these connections between Foucault and Marx are sustained, then some of the grounds for Marxists’ criticism of Foucault are removed.

It is often said that Foucault neglects the ‘material’ world (Neimark 1990:107–8). Indeed, for Marilyn Neimark, the postmodern Foucault not only ignores, but is actively hostile to ‘the broader materialist emphasis of Marx’ (Neimark 1990:107). This may be true of some postmodern Foucauldians, but it is not true of Foucault’s own work. The essence of Marx’s conception of history is that the mode of organizing production and the tension between productive relations and forces determines the character of society. The central, most important source of motion or action within capitalist production, according to Marx, is the imperative to create a surplus by developing ‘the productive power of social labour’. As I have argued, Foucault explicitly links his concept of power to this *primum mobile* of capitalist production. The problem is not that Foucault neglects the ‘material’, but that students of Marx and Foucault have neglected this all too obvious connection between their work. Disciplinary practices, centred by the law of value, are the *mode* of organizing production.

It is also said that Foucault’s concept of power disempowers those subject to it by allowing no room for resistance and offering no scope for emancipation. It is power without people, a web without a spider; a concept which neglects the purposes for which docile bodies are produced (Neimark 1990:107; Armstrong 1994:32). This criticism misunderstands the nature of Foucault’s concept of power by conflating the three types of cause I outlined earlier, material, efficient and final. Power is a capacity to act, bestowed by real, if nonempirical, social structures and mechanisms, exercised by people, contingent on their motives, political skills and circumstances. It is not the behaviour of A that causes the behaviour of B. Rather, the relationship, R^{AB}, is the material cause of both A and B; the way in which they act out this relationship is the efficient cause; and

the subjective meanings through which each actively constructs, interprets and assesses this action is the final cause.

To understand who acts and why (efficient and final causes), one must first understand the social mechanism structuring their capacity to act (material causes). Foucault's 'disciplinary power' is a model of material causes, of mechanisms which 'really exist'. So too is Marx's model of capital. Marx is concerned with individuals to the extent that they are bearers of social relations, whose creatures they remain (Marx 1867b: 92); with how an 'entirely objective organization of production' causes the capacity to act of *both* employers and employees (Marx 1866:990). It does not follow that because Foucault's object is material causes, he does not allow for resistance. Capacities to act are one thing; how people *actually* act are another. The exercise of power is always negotiated and is contingent on peoples' motives, skill and the circumstances of its deployment. Like that of Marx, Foucault's work provides only an orientation to empirical work, not its substitute. Such empirical work will, no doubt, reveal 'the creativity with which workers cope with their situation' (Armstrong 1994:31). [2]

It is certainly true that Foucault's focus on the 'how' of power de-emphasizes 'the purposes for which "docile bodies" [are] produced' (Armstrong 1994:32), (although Foucault leaves us sufficient clues to figure out these purposes for ourselves). But this problem disappears once the connection is made between 'forces' and 'disciplinary power'. The purpose of rendering bodies docile is to organize them into a productive power in the interests of capital accumulation. The criticism by Marxists that Foucault cannot explain resistance to power deflects attention from a glaring deficiency of labour process analysis at the heart of much Marxist work since the 1980s: its failure to explain the dual nature of production, the coexistence of creation and alienation, empowerment and repression, cooperation and resistance (Cressey and Maclnnes 1980; Cohen 1987; Cohen 1989; Burawoy 1985). Foucault's dual-sided disciplinary power explains precisely this.

Is there any alternative to this political technology of the body? Is Foucault 'profoundly pessimistic' (Armstrong 1994:32)? Since Foucault explicitly links his concept of power to Marx's productive 'forces', there is an alternative to these disciplinary practices to the same extent that there is an alternative to the law of value. Foucault's 'disciplinary power' is no more pessimistic than Marx's 'natural laws of capitalist production' (Marx 1867b:92). Indeed, the conception of productive forces, implicit in his conception of disciplinary power, is less fatalistic than those fetishistic conceptions typical of much of 'the Marxist tradition'. It establishes that social relations of production, not things, have causal primacy: developing the productivity of labour, by stimulating technological and organizational innovation, is 'the historical task and justification of capital' (Marx 1864:259). This denies us recourse to technological determinism and compels us to enquire of the social character of the material things which we call 'forces' and capital. Their social character is that they are privately owned (Marx 1863, Part 3, 492, 495). [3] This is the 'specific social determination of capital and of capitalist production' (ibid.: 492). A productive power is capital only because it is private property. It is because the 'social productive power of labour' is objectified in material things, which are fetishized and privately owned, that capital is experienced by

workers as an alien and coercive force. These things are no longer the ‘force’ or power of the people who constitute them, but of the people who own them (Marx and Engels 1846:86).

This Foucauldian conception of ‘forces’ also changes the traditional understanding of the contradiction at the heart of capitalist production. The conflict between ‘forces’ and relations of production alluded to by Marx in the 1859 *Preface* (Marx 1859a:21), and made famous by its canonical status, is not between things and people: it is between an emerging set of social relations, capable of sustaining ‘a higher state of social production’ (Marx 1858:750) and the constraint of ‘the existing relations of production or—*this merely expresses the same thing in legal terms*—with the property relations within the framework of which they have operated hitherto’ (Marx 1859a:21, my emphasis). Put simply, it is a conflict between the owners and non-owners of things.

The ‘bitter contradiction, crises, spasms’ of history are caused by an incompatibility between the existing relations of ownership and the further development of the productive powers of social labour (Marx 1858:749). The coexistence of the opposing forces of empowerment and repression, explained by Foucault, is not a logical contradiction inherent in Marx’s explanation of production, but a real contradiction inherent in the dual-sided nature of relations of production and present within every worker, with the capacity to ‘blow this foundation of society sky-high’ (Marx 1858:706). Ultimately, one escapes this political technology of the body by escaping from the property relations to which it is attached, that is, by challenging relations of exclusion, between people, over things. How things are counted and measured is important, but so too is the question of who has a right to them. [4]

This said, there is one hurdle more to be overcome if this Marxian-Foucauldian synthesis is to be sustained. For Foucault to be of use to this realist reading of Marx, Foucault must be compatible with critical realism. To the best of my knowledge, the relationship between realism and Foucault has never been examined systematically. The typical postmodern reading of Foucault, as a relativist idealist hostile to metanarrative, and the close association between realism and the ‘materialism’ of its exemplar—Marx—has left a widespread impression that realism and Foucault are incompatible and has discouraged their cross-fertilisation.

Is a realist reading of Foucault possible then? I believe it is.

Foucault: a realist reading

Foucault is an empirical, historical researcher into the nature of power. He denies being a theorist of power (Foucault 1988:39); indeed, he seems averse to theorizing and declares himself an empiricist (ibid.: 106). Yet, as I have shown, deeply embedded within his detailed analyses of concrete historical situations and events there is a rich and complex model of the mechanisms of power which is of direct relevance to the problems in Marx’s *explicans*.

Because Foucault prioritizes empirical detail over conceptual precision, however, there is little conceptual coherence and development within and between his texts. As a result,

this implicit model of power is ‘exploratory rather than coherent and well-finished’ (Cousins and Hussain 1984:226). His empirical work can be described similarly. In Foucault’s own words, it is indecipherable, disorganized, inconclusive, repetitive and disconnected, a muddle that does little more than mark time: ‘it advances nowhere’ (Foucault 1980a:78). They are ‘just fragments’, it is up ‘to you or me to see what we can make of them’ (ibid.: 79).

The conceptual and empirical incoherence of Foucault’s work renders it susceptible to a variety of interpretations, each of which discerns, or imposes, some unity (Burrell 1988:222). There are two broad sets of responses to Foucault. Both are impediments, in my view, to understanding the significance of Foucault’s concept of power for Marx. Historiographers criticise Foucault for failing to meet the requisite standards of empirical evidence. They allege his evidence is insufficient and conflicting, he is careless over dates and places and his topics are not even ‘discussed in a temporal order’ (Giddens 1987:213). Postmodernists welcome his work as a celebration of heterogeneity and difference, fragmentation and indeterminacy, and as an alternative to the totalizing discourse or metanarrative of science (Cooper and Burrell 1988; Burrell 1988). Broadly speaking, the first group rejects his work for failing to meet modernist criteria, the second welcomes it for this very reason.

To counter these interpretations, I want to present an alternative reading of Foucault based on critical realism and to argue that Foucault seeks ‘to establish the ontological foundations of modern institutions’ (Clegg 1989:153). This reading is stimulated by several points of resemblance between Foucault and realism which suggest a *prima facie* case for their compatibility.

These can be stated simply:

1 They share the metaphor and terminology of depth.
2 Each is concerned, in different ways, with ‘object constitution’.
3 Both are critical of, and provide compatible alternatives to, positivism and empiricism.
4 They share a nonempiricist concept of causation and a similar approach to time and space.
5 They provide compatible alternatives to the positivist dichotomy between practice and theory.
6 They provide compatible critiques of, and alternatives to, conventional (pluralist and radical) approaches to ‘power’.

Foucault contends that his work is best understood not as a solution but as various ways of formulating a problem, that of explaining the relationship between experience, power and knowledge (Foucault 1988:71). ‘For my part’, Foucault explains:

> it has struck me that I might have seemed a bit like a whale that leaps to the surface of the water disturbing it momentarily with a tiny jet of spray and lets it be believed, or pretends to believe, or wants to believe, or himself does in fact indeed believe, that down in the depths where no one sees him any more, where he is no longer witnessed nor controlled by anyone, he follows a more profound,

coherent and reasoned trajectory.

(Foucault 1980a:79)

This metaphor of the whale is redolent of realism’s metaphor of ontological depth. Foucault is undoubtedly a skilled analyst of surface events, but his work does not preclude other analyses, such as those guided by critical realism. The idea I want to develop is that the set of problems Foucault attempts to formulate can better be understood if we explore the ontological underside to his empirical studies of these events. ‘Down in the depths’, Foucault does indeed follow a ‘coherent and reasoned trajectory’—a glimpse of which is revealed in his interviews—which realism can help explicate and develop.

Problematization: the nature of objects

Foucault’s purpose is to demystify the category of the ‘real’ by showing how objects of knowledge are constituted. He refers to this as ‘problematization’, the notion common to all his work since *Madness and Civilization* (Foucault 1988:257). Paraphrasing Foucault, problematization is not the representation of a preexisting object, nor the creation by discourse of an object that does not exist, but a concern with how objects are practically and conceptually constituted (ibid.: 257).

In considering the compatibility of Foucault, realism and Marx, however, much depends on the nature of ‘objects’. I want therefore to deduce something of their nature from Foucault’s comments on sexuality, madness and criminality. An object, for Foucault (1981:127), ‘is the set of effects produced in bodies, behaviours, and social relations’ by the deployment of a series of conceptual and practical operations, which he calls ‘disciplines’. Medicine and internment, for example, converge in the organization of the asylum. An object is a network of social relations organized or synthesized into empirical form by this complex disciplinary technology. It is also a form of experience, such as madness, illness, sexuality and criminality. Objects are real, historical constructs—like the objects of Bhaskar’s realism, they are concept- and activity-dependent—what Foucault calls the ‘historical *a priori*’ (Foucault 1980a:236).

These objects have an outside or a surface (observable behaviour, events) and an inside or structure, which is referred to by Foucault as the mobile system of relationships and syntheses between an object’s constitutive elements (Foucault 1980a:236). The surface corresponds to practice, the interior corresponds to the product of practice: its structure of interconnections. The latter is largely a hidden domain, for while social practices are conceptualized, their interconnections seldom are. As Foucault puts it, ‘people know what they do; they frequently know why they do what they do; but what they don’t know is what they do does’ (Foucault, cited in Krips 1990:173).

Foucault depicts the existence of these objects by detailed empirical descriptions of the practices constituting them (Foucault 1971b, 1976, 1977); by examining concretely and in detail the way in which power is exercised, its ‘great surface network’ (Foucault 1981:105). For the most part, he is concerned with the ‘how’ of practice, only latterly (in Foucault 1977 and 1981) with the ‘what’ of the product of that process, its structure or

'anatomy'. Foucault describes the exterior of the necessary relations comprising these objects, or in other words he empirically isolates necessary from contingent relations. Realism can assist in developing an understanding of the interior of these objects, that is, the nature of the causal connections between their heterogeneous, constitutive elements (Foucault 1980a:194).

Causality, time and space: archaeology and genealogy

Grasping the nature of these objects is the source of the chief difficulties of understanding Foucault, and particularly his methods of examining them. Convention distinguishes between Foucault's early archaeological and later genealogical work. This characterisation poses the problem of the relationship between discourse and power; is Foucault an archaeologist of discourse or a genealogist of power (Smart 1983)?. It is important to counter this interpretation, for it encourages an idealist interpretation of Foucault and mystifies his significance as an empirical researcher.

I want to examine Foucault's method by considering his work as the gradual formulation of a problem which is intelligible only if we use his later work as a retrospective vantage point. As Foucault says, 'one always finds what is essential after the event; the most general things are those that appear last' (Foucault 1988:257). I propose that we consider Foucault's texts, as he examines those of others, not laterally or horizontally, in terms of chronological periods, but as the laying down of epistemic sediments. On this basis, I shall argue, archaeology and genealogy are complementary methods working in different dimensions, not discrete methods representing different periods of his work.

To make sense of archaeology and genealogy, I want to introduce the idea that Foucault employs a realist concept of causality, and that this informs his approach to time and space. For Foucault, causally connected things need not occur in the same time and space; the 'here and now' is not necessarily epistemologically significant. This concept of causality is evident in his conception of power and history.

Power, for Foucault, is a quality of social relations which 'are perhaps among the best hidden things in the social body' (Foucault 1988:118). These relations are hidden, I suggest, because they are among people spatio-temporally discrete. They are nonempirical, but real, entities, transcending time, space and organizational forms. Similarly, the conventional view of history, as a chain of past events, and of historiography, as the narrative description of the sequence of these events, is based on a particular, constant conjunction, view of causation to which Foucault does not subscribe.

Foucault employs a two-dimensional view of time. It exists in a horizontal dimension as a sequence of events, and in a vertical dimension as 'layers of epistemic organization' of ideas of those events (Giddens 1987:213). Epistemic structure is the 'deep memory' of an historical process, which constitutes a history of the development of an object (Bollas 1987). These horizontal and vertical dimensions of time correspond to genealogy and archaeology, respectively; both methods synthesize spatio-temporally discrete material.

Archaeology is a method of unearthing from beneath the surface of ideas and categories ('local discursivities') the object which is the historical, materialist condition

of their existence (Foucault 1980a:233). We might recall Bhaskar’s words as an apt justification of this method:

> [knowledge] does not lie exposed on the face of the world prone to the gaze of the casual observer. Rather it is, for the most part, hidden encrusted in things, needing to be excavated in the theoretical and practical labours of the most arduous kind.
>
> (Bhaskar 1986:68)

Foucault chose the term archaeology to:

> suggest that the kind of analysis I was using was out-of-phase, not in terms of time but by virtue of the level at which it was situated. Studying the history of ideas, as they evolve, is not my problem so much as trying to discern *beneath them* how one or another object could take shape as a possible object of knowledge. Why, for instance did madness become, at a given moment, an object of knowledge corresponding to a certain type of knowledge? By using the word ‘archaeology’ rather than ‘history’, I tried to designate this desynchronisation between ideas about madness and *the constitution of madness as an object*.
>
> (Foucault 1988:31, my emphasis)

If we heed Foucault’s remarks concerning ‘level’ and ‘time’, archaeology should be regarded as digging beneath present categories to uncover the object they represent. It should not be regarded as digging back through chronological time, or the past, and the assemblage of its remnants in the ‘museum of modern knowledge’, as Harvey (1989:56) puts it.

Archaeology is a method of abstraction consistent with realism. While positivism generalizes from the particular and deduces an understanding of the local from general, covering laws, Foucault’s archaeology extracts knowledge of general causal mechanisms, diffuse throughout society, from their particular manifestations. As Burawoy (1985:18) puts it, ‘every particularity contains a generality; each particular factory regime is the product of general forces operating at a societal or global level’. Archaeology is a method of extracting ‘the general from the particular’ (ibid.: 18). [5] Its aim is to produce a model or analytics to grasp the situational logic of localities and contexts by explicating the rationale or microphysics of the infinitesimal mechanisms of power operating there (Atkinson 1972:174–9, van Velsen 1967:141–9; Foucault 1988:105).

True, Foucault abandoned the term archaeology (1988:31), but the *concept* remains. ‘Archaeology’ was replaced not by ‘genealogy’, as is commonly thought, but by ‘analytics’ (Foucault 1981:82): a model or ‘grid of analysis’ describing the nature and constitution of an object and grasping its logic and rationale. The shift from ‘archaeology’ to ‘analytics’ coincides with a shift in Foucault’s interest from the ‘how’ to the ‘what’ of power, from an uncritical acceptance of sovereign power to an attempt to

define disciplinary power (Foucault 1980a:92, 183–4). Foucault makes clear that this analytics of power can be constituted only if it frees itself from the juridicodiscursive representation of power (Foucault 1981:82); 'we must', he says, 'construct an analytic of power that no longer takes law as a model and a code' (ibid.: 90). Necessarily then, the excavation of power's 'microphysics' entails a critique of those systematizing theories and descending analyses which represent power in terms of law and the state. An analytic, therefore, is a model depicting the constitution or structure of objects and is developed through a critique of their constitutive categories.

Genealogy, on the other hand, is a method of determining the constitution of objects (Foucault 1980a:117) by means of a detailed empirical description of their practical, historical formation. Concrete events are conjunctures of a multiplicity of diverse practices, constituted by a 'mobile system of relationships and syntheses', which genealogy reveals through selecting material from the flux of empirical events. Like Marx, Foucault's empirical work is concrete 'because it is the concentration of many determinations, hence unity of the diverse' (Marx 1857:101). The 'syntheses' noted above are important, for the combination of these elements and processes 'qualitatively modifies each constitutive entity' (Urry 1985:26), and is one reason why for Foucault as for Marx, there can be no 'general' theory.

This realist interpretation recasts conventional understanding of Foucault's method. Rather than representing discrete periods of his life's work, archaeology and genealogy are methods of analysis operating in different dimensions: ontological depth and chronological time, theory and history, abstract and concrete. In Foucault's words:

> 'archaeology' would be the appropriate methodology of this analysis of local discursivities, and 'genealogy' would be the tactics whereby, on the basis of the descriptions of these local discursivities, the subjected knowledges which were thus released would be brought into play.
>
> (Foucault 1980a:85)

Moreover, these methods are complementary:

> it is a question of forming a different grid of historical decipherment by starting from a different theory of power; and, at the same time, of advancing little by little toward a different conception of power through a closer examination of an entire historical material.
>
> (Foucault 1981:90–1)

This interpretation of his methodology helps account for Foucault's retrospective description of all his work as genealogy (Foucault 1980a:85–6).

Against postmodernist and historiographic readings

Foucault's synthesis of material discrete in time and space, his explanation of the

practical and conceptual constitution of seemingly self-evident things, and his unearthing of the microphysics of objects beneath their surface flux of empirical events: all this is consistent with realism’s critique of, and alternative to, positivism’s conception of causality, explanation and theory. Certainly, genealogies are ‘precisely anti-sciences’ (Foucault 1980a: 83): but they are anti-*positivist* sciences.

Recognition of realism’s and Foucault’s common purpose is hindered by the different terms used to describe it and the different methods favoured. Their common purpose is to capture the causal mechanisms of social forms of experience. Bhaskar calls this ‘object constitution’; Foucault calls it ‘anatomy’. Their respective methods are critique and genealogy. Critique retroduces from categories to their constitutive social conditions, thereby creating concepts that map real, nonempirical social structures and their mechanisms. Genealogy uncovers the layers of epistemic organization of objects of knowledge through a reconstruction of the history of their formation.

Critique and genealogy are complementary moments of analysis, for they approach a common task from different directions. Theorists grant logical priority to critique over empirical research. They direct attention to relevant historiographic terrain. They theorize a thing and then leave the description of its formation to historians. Foucault—being no social theorist—reverses the order of priority. He presents a genealogy of the practical constitution of objects—madness, criminality, sexuality—*and leaves us the problem of theorizing about what he has done*. This is, perhaps, a partial explanation of the large volume of secondary literature on Foucault.

Realists and Foucault provide complementary critiques of positivism’s theory/practice dichotomy and of empiricist concepts of power.

Realism’s notion of the internality of social relations and categories, which it derives from Marx (Sayer 1979a, 1979b), is compatible with Foucault’s notion of power-knowledge. Foucault shows how the control of an object requires knowledge of its nature. The mechanisms of disciplinary power are simultaneously instruments for the formation and accumulation of knowledge. Disciplines simultaneously individualise and categorize. Power and knowledge, conceived by positivism as independent, are internally related and combine to form ‘power-knowledge’, a concept analogous to ‘space-time’ (Hawking 1988:15–34). Foucault thus dissolves the traditional, positivist, distinctions between power and knowledge, practice and theory. We should, says Foucault, ‘abandon a whole tradition that allows us to imagine that knowledge can exist only where the power relations are suspended and that knowledge can develop only outside its injunctions, its demands and interests’ (Foucault 1977:27).

Foucault’s concept of power developed in reaction to traditional Marxism’s implicit, radical concept of power and, its corollaries, real interests and ideology, base and superstructure. Foucault does not deny the reality of control and subordination: he claims only that power is more complex than prohibition and that an understanding of power cannot be deduced from an imputed motive (Foucault 1988:102). To understand who exercises power and why (efficient and final causes) we must first understand the structures and mechanisms which cause the capacities to act (material causes) (ibid.: 103). Efficient and final causes must be discovered empirically. While Foucault is often accused of a structural determinism which ignores human agency, I think this accusation

is mistaken. It is based on an impression left by Foucault's emphasis on material causes, the dearth of empirical applications of his model, and his preoccupation with empirical studies of forms of domination. [6]

The mechanisms of power obey a logic which Foucault's empirical studies attempt to describe. These studies of the 'how' of power contain an implicit model of the 'what' of power which is compatible with realism. Realists and Foucault can agree that power is a ubiquitous quality of social relations, exercised by individuals, that the mechanisms of social relations are nonempirical, and that while social practices are conceptualised their interconnections seldom are, and must therefore be revealed through abstraction and reconstructed through empirical history.

This realist reading of Foucault counters postmodern and historiographic interpretations, which, I maintain, obscure what he has to say and inhibit the practical deployment of his ideas.

Postmodernist interpretations of Foucault, distrustful of 'any narrative that aspires to coherence' (Harvey 1989:350), are fuelled by his criticisms of 'theory' and science and by his preoccupation with the microphysics of power. Because power is local and fragmentary it cannot be connected or represented by a metatheory: 'Incredulity towards metanarratives' is Lyotard's definition of the postmodern (Lyotard, cited in Harvey 1989:45). Foucault, however, claims to be unfamiliar with this interpretation: 'What are we calling post-modernity?' he asks of an interviewer. 'I'm not up to date.' 'I've never clearly understood what was meant in France by the word "modernity"', he says, 'neither do I grasp the kind of problems intended by this term—or how they would be common to people thought of as being "post-modern"' (Foucault 1988:33–4).

Characterising Foucault as a postmodernist is a mistake: he is no postmodernist. It is specifically *positivist* science, and its implicit empiricist ontology and conception of theory, that he opposes. He rejects 'the generalization of relatively specific and localised empirical develop ments into large-scale general laws of development' (Urry 1985:37) and, its corollary, the explanation of local events by appeal to some over-arching, general theory. Foucault opposes this positivist method for two reasons. It is unable to explain the microphysics of power and it disqualifies or discredits ('subjugates') local knowledges with the potential to do so. Foucault does not deny the existence of a general law of power—indeed he argues that the logic of power relations developed over time and across space—but denies only that a knowledge of this logic can be deduced from covering laws based on empirical generalizations. Certainly there are general laws, but they cannot be deduced from generalizations. The laws of power relations—their microphysics—are analogous to the laws of fluid dynamics: invariant in every river, but every river is different (Harvey 1989:343–4). How the logic of power unfolds in practice depends on its context; the exercise of the capacity to act is always negotiated and therefore contingent on political skill and the circumstances of its deployment.

This, then, is the basis of Foucault's opposition to 'general theory' which is used to sustain a postmodernist interpretation of his work.

Equally, historiographers' criticisms of Foucault are rendered redundant by this realist interpretation. Reading Foucault is uncomfortable for those accustomed to orthodox modes of writing history, for he does not provide a narrative of a sequence of events,

topics are not discussed in temporal order and there are breaks in the description when the reader expects continuity (Giddens 1987:213). Although true, these criticisms misunderstand Foucault’s work. Foucault’s aim is to delineate an object through a description of the practices, diverse in time and space, by which it is constituted; it is not to develop a narrative of the sequence of past events, ideas or institutions. An analogy with psychoanalysis is helpful. From the narrative of psychoanalysis the analyst retroduces a model of the structure of the analysand’s ego, an unconscious organizing process evolved from a dialectic between this inner core and the external environment (Bollas 1987:8). Ego-structure is the internalization of a process; a form of ‘deep memory’ (ibid.: 50); it constitutes a ‘history of the development of the person’ (ibid.). The aim of psychoanalysis is not to research the analysand’s biography, but to discern the structure of the ego from the ‘private logic of sequential association…implied in the patient’s discourse’ (ibid.: 1). This logic of association is unlikely to be confined to cojoining events within the same space and time. The relationship between events is more important than the details of their chronological sequence and location. The object of psychoanalysis does not exist within conventional understandings of time and space: nor does Foucault’s.

He is an historian of the constitution of objects, not a narrator of the sequence of events. Sexuality, for example, is an object in the sense that the ego is an object. ‘What I want to make apparent is precisely that the object “sexuality” is in reality an instrument formed a long while ago, and one which has constituted a centuries-long apparatus of subjection’ (Foucault 1980a:219). Just as the psychoanalyst uses knowledge of the analysand’s ego to inform understanding of his or her present and past, so Foucault’s work informs understanding of taken-for-granted objects by accounting for their historical formation. It is in this sense that Foucault is a historian of the present and a philosopher of the past.

A realist reading of Foucault is helpful in two ways. First, it helps explicate and develop his model of power by creating the theoretical space within which to imagine and explore the interior or underside of his empirical studies of power. This is necessary for, as Foucault acknowledges, his work refers to problems that could not be made explicit because of the way he posed them (Foucault 1988:243). Foucault’s problems were inadequately formulated, I suggest, because he lacked an alternative ontology to the empiricism he so thoroughly undermined. Second, by insisting on the necessity of substantive analysis, realism disentangles Foucault’s work from his epigones’ ‘overblown theory dressed up in unnecessary jargon’ and reveals it as ‘a perceptive guide to empirical research’, not a new language of armchair theorizing (Silverman 1985:82).

I do not claim, by this interpretation of his work, that Foucault was an overt critical realist (I doubt he had ever heard of the term, or its French equivalent). But I do think these realist fragments in his work are grounds for reflecting on the undisputed fact that Foucault was a student of the ‘foremost Marxist influence’ on realism (Bhaskar 1991:183), Louis Althusser.

Marx and Foucault: the promised 'connected whole'

The previous chapter considered only the most basic and obvious point of contact between Foucault and Marx, that between the political technology of the body and productive forces. I submit that these connections are interesting and plausible, but they are highly contestable; to assess its veracity, this Marxian-Foucauldian model must be critiqued theoretically and tested empirically. It is not a matter of merging two passive bodies of work, but of facilitating a dynamic interchange between them which changes the nature of each. A realist reading of their work turns them around to face each other, and renders their work complementary, indeed, mutually supportive, facilitating a rapprochement and synthesis between them. [7]

Much work, however, remains to be done on the relationship between Marx and Foucault. There are many other connections between their work to be discovered and developed. Here, I want to identify just a few.

First, both Marx and Foucault regard (a) civil society and the state as equally problematic, coeval phenomena, and (b) civil society as the basis of the state, not vice versa. Regarding (a), for Marx, 'the completion of the idealism of the state was at the same time the completion of the materialism of civil society' (Marx 1843d:166), and 'the establishment of the political state and the dissolution of civil society into independent individuals…is accomplished by one and the same act' (Marx 1843d:167). 'Civil society' and 'political state' are twin illusions. For Foucault, 'there is something…that bothers me about this notion: it's that the reference to this antagonistic couple is never exempt from a sort of Manicheism that afflicts the notion of "state" with a pejorative connotation while idealizing "society" as a good, living, warm whole' (Foucault 1988:167–8).

Regarding (b), for Marx:

> If power is taken as the basis of right…then right, law, etc., are merely the symptoms, the expression of other relations upon which state power rests. The material life of individuals…is the real basis of the state… These actual relations are in no way created by the state power; on the contrary they are the power creating it'.
>
> (Marx and Engels 1846:329)

For Foucault, the state 'can only operate on the basis of other, already existing power relations' (Foucault 1980a:122), that is, 'on the basis of a small-scale, regional, dispersed Panopticism' (Foucault 1980a:72). Disciplinary power is 'the lasting substratum for the transitory historical ediface of the state'. 'Nothing in society will be changed if the mechanisms of power that functions *outside, below and alongside* the State apparatus, on a much more minute and everyday level, are not also changed' (Foucault 1980a:60, my emphasis). Let us compare with Marx: the emancipation of private property from the community causes the state to 'become a separate entity, *alongside and outside* civil society' (Marx and Engels 1846:90, my emphasis). The similarity between their

prepositions is remarkable.

Second, Marx’s conception of the juridic self-understanding of the monad of modernity, and Foucault’s conception of the representation of power in terms of law and state are complementary.

One of the premises of Marx’s conception of history is that we should not set out ‘from what men say, imagine or conceive, nor from men as narrated, thought of, imagined, conceived, in order to arrive at men in the flesh’ (Marx and Engels 1846:36). This is a reference to citizens of the state who imagine themselves to be free and equal. Marx’s premises are people ‘not in any fantastic isolation and fixity, but in their actual, empirically perceptible process of development under definite conditions’ (Marx and Engels 1846:37). This is a reference to the ‘fantastic isolation’ of the ‘atom’ of ‘civil society’. Individuals err in treating ‘the political life of the state, an arena beyond their real individuality, as if it were their true life’ (Marx 1843c:159).

The legal conception that monads of civil society have of themselves is an important part of Marx’s *explicandum*. ‘Separate individuals’ are the basis of people’s juridic self-understanding, an understanding propogated by ‘statesmen in general’ and ‘ideologists of the state’. This understanding, not Hegel’s philosophy, is the problem to be explained. Hegel merely idealises the conception of the state held by the monads of civil society and popularized by political ideologists (Marx and Engels 1846:348).

In his critique of Hegel, Marx argues that the essence of the state is the abstract private person, and ‘the monarch is the abstract person who contains the state within his own person…[because]…the monarch is the one private person in whom the relation of private property generally to the state is actualized’ (Marx 1843c:40): ‘Only in its flower does the state reveal its secret’. The connection with Foucault is this. The King is the head of the state. He contains this imagined community, ‘the state’, ‘within his own person’. When Foucault argues, ‘the representation of power has remained under the spell of monarchy. In political thought and analysis, we still have not cut off the head of the king’ (Foucault 1981:88–9), he means we have yet to rid ourselves of the idea of the state, of the representation of power in terms of law: of the juridic self-conception of individuals that Marx identified as a problem in 1843 and which statesmen (beginning with Hegel) have idealised ever since.

Third, Foucault’s critique of the sovereign or juridic conception of power is tantamount to Marx’s intended, but never completed, critique of politics, law and state.

Foucault’s criticism of conceptions of power in terms of law and state is precisely a criticism of the juridic self-understanding of the monads of civil society. It complements Marx’s begun, but uncompleted, critique of jurisprudence. There is a striking resemblance between Foucault’s critique of the juridic concept of power, or the ‘ideology of right’, and Marx’s critique of the legal conception people have of themselves, or Hegel’s ‘Philosophy of Right’. The juridico-political theory of sovereignty continues to exist, according to Foucault, ‘not only as an ideology of right, but also to provide the organizing principle of the legal codes which Europe acquired in the nineteenth century, beginning with the Napoleonic Code’. Marx and Foucault are equally concerned with the juridic subject: for Marx, ‘the individual engaged in exchange’ (Marx 1858:245–6); for Foucault the target of the punishment of incarceration (‘deprive the individual of all

rights, but do not inflict pain').

These are reasonable grounds for suggesting that Marx would agree with Foucault's assessment that 'Marxists' simply mirror this liberal conception: they substitute economic for juridic subjects, a malign for a benign state. They are more concerned with defining 'class' than with empirically investigating the nature of the struggle (Foucault 1988:123). They have deduced an understanding of power from a motive ('why'), rather than from empirical investigation ('how'). 'Empirical observation must in each separate instance bring out empirically, and without any mystification and speculation, the connection of the social and political structure with production' (Marx and Engels 1846:35). 'The way power was exercised—concretely and in detail—with its specificity, its techniques and tactics, was something that no one attempted to ascertain' (Foucault 1980a:115–16). Foucault shows how the monad of civil society is no misconception, but a palpable, 'already socially determined' (Marx 1858), product of disciplinary techniques (Foucault 1977:194). In short, Foucault provides the critique of law and state which Marx began but did not complete.

Developing these connections between Marx and Foucault, I believe, is to write Marx's promised 'connected whole', that 'special work' which he was contracted to write in 1845, but never did.

10
Working capital to the surface

Explaining the here and now

> it was capital that first fed on the destructuration of every referential, of every human objective, that shattered every ideal distinction between true and false, good and evil, in order to establish a radical law of equivalence and exchange, the iron law of its power.
>
> (Baudrillard 1994:22)

Introduction

Let us return one last time to the form of a retroductive argument:

> Some surprising phenomena P_{123} are observed.
> P_{123} would be explained if H were to exist and act in the postulated way.
> Hence, there is reason to think H exists and acts in this way.

$P_{123,}$ in this case, is the core of modernity, the separation between civil society and the state. H is this Foucauldian-Marxian model of capital, this synthesis between disciplinary power and relations of production.

Discovery and proof are logically distinct processes. Retroduction suggest only what may be; it cannot tell us what is. P always controls H. Showing how capital (H) is the cause of modernity's (P) distinguishing characteristics is 'a work in its own right' (Marx 1858:460–1). But supposing H to exist should throw the welter of surface phenomena into an intelligible pattern. So what grounds are there for thinking that capital *may* be this cause? Let me now try, in one final imaginary experiment, to work this Foucauldian-Marxian model of capital to the surface.

My immediate aim is to use this model to explain Marx's initial *explicandum*, the modernity taking shape in the 1840s along the civil society-political state axis. But if David Harvey is right that modernity and postmodernity are cultural expressions of time-space compressions driven by the same mechanism, capital accumulation (Harvey 1989), then this Marxian-Foucauldian model ought to have something to say about the here and now.

The problem redefined

Let me recall, from Chapter 5, a tension between Marx's vertical and horizontal conceptions of the relationship between civil society and the state. [1] On the one hand, the 'state' is an idea or imagined community 'above' 'civil society' (Marx 1843c:41). We can represent this vertical conception in terms of the infamous, and much misunderstood, base-superstructure metaphor, by noting a neglected meaning of 'superstructure': 'a concept or idea based on others' (COD). Indeed, the idea of civil society is the foundation of the superstructural idea of the state: they stand, or fall, together. On the other hand, the 'state' is also a 'separate entity, alongside and outside civil society' (Marx and Engels 1846:90) that deals with concepts and rights which have acquired the 'semblance of independence' (ibid.: 36–7). In hindsight, the tension between these vertical and horizontal conceptions lies behind Marx's attempt to excavate an answer to this question: by what process does this imagined (but not imaginary) community become the institutional nexus recognised as 'the state', 'alongside and outside civil society'?

Problems are re-formulated as one retroduces. Let me reformulate this problem in the light of Chapter 8's account of the organization of space and time. Consider this analogy with distribution and exchange, for Marx's understanding of their relationship to production is remarkably similar to his concept of the relationship between civil society and political state. The juxtaposition of vertical and horizontal imagery pervades the three pairs of concepts: production/exchange, production/distribution, and civil society/political state. Exchange and distribution exist side by side with production, yet exchange is its surface and distribution its reverse side (Marx 1865:33). Similarly, 'the state has become a separate entity, alongside and outside civil society' (Marx and Engels 1846:90), and yet civil society is the 'foundation' or 'basis' of a 'legal and political superstructure' (Marx 1859a:20). The similarity between Marx's descriptions of civil society/political state and production/distribution, written thirteen years apart, is striking. The state stands to civil society, 'alongside and outside' (Marx and Engels 1846:90), as distribution stands to production, 'at the side of and outside' (Marx 1857:94).

Things appear to exist externally, alongside each other, I suggest, when they are separate in time and space and regarded as things at rest, for this leads us to miss the movement of the internal, essential relations between them, or the historical process sundering them into discrete spheres. This is true of 'the two determinants of exchange value' (Marx 1859b:169), the purchase and sale of commodities (Marx 1859b:197), production and exchange, production and distribution (Marx 1859a:99), and the circuits of capital (Marx 1864). [2] What is true of the production/exchange distinction within the 'economy' is true of the distinction between civil society and political state. 'What is at issue', wrote Marx in 1843, 'is the essential relationship of these spheres themselves' (Marx 1843a:6), rather than their 'external necessity'; this relationship 'has…to be more precisely defined' (ibid.: 5). But Marx never did define them precisely: this 'essential relationship' is an issue still.

Architectural interpretations of the base-superstructure metaphor and the belief that

Marx simply reversed the direction of causality between the material and the ideal have done much to impede understanding of this relation, this process. The state is not 'above' civil society, as 'base-superstructure' suggests. Rather civil society and political state are twin illusions atop a substratum: capital. At rest, it is a social structure (relations of production); in motion, a process (mode of production). This civil society/political state couplet corresponds to the twin forms of capital, economic and juridic, fused as private property (Fine 1984:96). There are not 'economic' relations here and 'legal' relations there. There is one network of relations of production with juridic and economic forms (ibid.: 97). This is why Marx intended to critique both jurisprudence and political economy, and to synthesize them in a 'connected whole' (Marx 1844b: 231). The important distinction within Marx is not simply between the material and the ideal: it is between social relations of production and their material/economic and ideal/juridic forms. Recognition of the coeval nature of juridic and economic forms is an important corrective to traditional Marxism, for it is the neglect of the 'early' Marx's intentions towards the juridic that encourages the association of relations of production with 'economic' relations and the consequent belief that the state is a subordinate and secondary superstructure.

All these mysteries resolve into the nature of capital. But what sort of an object is it? Capital is the cell of society. It is real, not because we can see it, but because it has causal powers. It has a *modus operandi:* a practical, situational logic (mode of production), which regulates the mechanism mediating between the object's internal structure (relations of production) and its surface (modernity). It has a *primum mobile:* the internal contradiction within the dual-sided relations of production/disciplinary practices, which simultaneously create and alienate, organize and dissolve, empower and repress, create wealth and create poverty. This cell is a nexus of social relations governed by analytic divisions. Its twin axes are the line of infinity and the arrow of time; they intersect at the eye of the calculating, rational monad. The distinguishing characteristic of capital's surface is a series of conceptual dichotomies centred on the separation between civil society and the state. The distinguishing characteristic of capital's structure and mechanism is that they are dual-sided.

It remains to explain the connection between interior and exterior, between Marx's *explicans* and *explicandum*. So, how does the vertical relationship between capital (this substratum) and its economic/material and juridic/ideal forms (these mirror-images) become recognized as a horizontal relationship between two apparently separate institutional realms, civil society and the state? I believe this to be a complex process with a simple explanation. I will argue that the same process—a mode of producing, governed by the law of value—that organizes labour into a productive power and subsumes it to private property, causes the materialism of civil society and the idealism of the state, and that this process results in the dichotomies—private/public, economic/political, subject/ object, agency/structure—widely thought to be the defining characteristic of modernity.

The materialism of civil society and the fetishism of things

Individuals are organized into a productive power by regulating their movement in space and through time. The other side of prescribing exercises, regulating the movement of bodies in time, is shaping spaces within which this movement can be observed and further regulated. The cell, that basic disciplinary space, is also a basic unit of architecture.

An architectural cell can grow in two ways: by sub-division, to produce a building, and by aggregation, to produce a settlement (Hillier and Hanson 1984). As every architect knows, buildings are designed according to a brief or conceptual system. Architects organize people, things and ideas in space, so as to make conceptual systems concrete, and thereby influence the conduct of those within. For example, 'The division of children into classes according to age, gender, level of attainment or subject of study, and their location in "classrooms" according to pedagogical rules, is an overt statement of educational philosophy' (Markus 1993:19).

There is a correspondence, then, between the creation of conceptual or cellular spaces of organizational structure, to which individuals are assigned, and the creation of architectural spaces. The geometry of the distribution of individuals in space is materialised via the architecture and construction of the buildings within which they are enclosed. Architects not only shape and arrange the physical layout of buildings, then, but also support organizational hierarchies through the partitions they install and the open spaces they establish between individuals, departments and buildings (Hillier and Hanson 1984). Architecture itself organizes power relations. In this way, power acts on people without any physical instrument other than geometry and architecture (Foucault 1977:207): 'stones can make people docile and knowable' (ibid.: 172).

Modernity and postmodernity, we should note, are terms originally used to describe types of buildings. Marx witnessed the buildings of early modernity in Paris during the mid-1840s. All too often, these were apparatuses of observation, facilitatators of a new kind of surveillance, the gaze of hierarchical observation, which became 'indissociable from the system of industrial production, private property and-profit' (Foucault 1977:175). We, at the close of the twentieth century, are amid the building site of postmodernity. These are different embodiments of an organization of time and space, but both are connected to the imperatives of capital accumulation.

A similar process of objectification is active in the design and engineering of commodities (Petroski 1992a and b). They carry the code of the social relations which conceive them. Commodities, buildings, even towns and cities are all material forms of relations of production (Clarke 1992). Capitalism develops through the 'urbanization of the country' (Marx, cited in Clarke 1992:21). It is this collection of designed and engineered objects which we recognize as the 'economy'. The materialism of social relations by the design, architecture and engineering of things, is, I believe, how 'an entirely objective organization of production …confronts the worker as a pre-existing material condition of production' (Marx 1867a:508). It is also, I think, what Marx is

getting at in his concept of the movement between the formal and the real subsumption of labour to capital. Subsumption, meaning to incorporate or to absorb, is precisely the word for this objectifying process (Marx 1867a:1056, 527, n. 62). The organized power of social labour is literally incorporated or absorbed into things via their architecture, design and construction.

It is because of this process of obj edification that productive forces are so often taken to be things. As social relations of production become 'bound to the various material elements of the production process' (Marx 1864:830) in this way, the productive power of social labour acquires the semblance of the productive power of 'capital' (Marx 1863, Part 1:378; 1867a:451). As Marx puts it, the social relation is transformed into a thing and the thing embodies, absorbs or 'subsumes' the social relation (Marx 1863, Part 3:483). Capital 'appears to be a mere thing, and to coincide entirely with the matter in which it is present' (Marx 1858:513). This understanding of subsumption helps explain the connection between workers, productive forces and private property:

> on the one hand, we have the totality of productive forces, which have, as it were, taken on a material form and are for the individuals themselves *no longer the force of individuals but of private property*, and hence of the individuals only insofar as they are owners of private property.
>
> (Marx and Engels 1846:86, my emphasis)

It helps also to explain the strange fetish of attributing causal powers to inanimate objects (Marx 1867a:1008). The power of labour is subsumed to the owners of these artefacts, the 'economy'. The structural imperative of these property relations energises these objects, giving them 'legs', as Marx puts it: a process becomes a thing and a thing becomes a person, the materialisation of people and the personification of things. This is a 'dialectical inversion' (Marx 1867a:734) between subject and object, agency and structure. The structural imperative of property relations is the basis of the attribution of causal powers to these inanimate objects.

As these techniques organize people into a productive power, within the workplace, they sever them from their social roots, destroy their communities and render them the monads of civil society. They achieve this twin objective by organizing space, time and movement differently, inside and outside the workplace (Harvey 1989:226–39). People are isolated from their communities, like bees from their hive (Marx 1844a:204). The counterpart to the organization of individuals into a productive force is the dissolution of society into atoms: 'a reality fabricated by this specific technology of power that I have called "discipline"' (Foucault 1977:194). Foucault prefaces 'atom' with the adjective 'fictitious'. But it is no fiction. People really are atomized, divorced from their social roots.

The same process, then, that organizes labour into a productive power and subsumes it to private property, also destroys the social connections among people, gives them the semblance of independence and bestows things with the semblance of agency (Marx 1867a:255). This dual-sided process is the basis of the abstraction 'civil society' and the fetish 'the economy'. The materialism of civil society and the fetishism of things are not

conceptual errors, but dimensions of the same process, falsely conceptualised. It was active during the 1840s in creating modernity. It was active in the 1990s in creating postmodernity.

The idealism of the state and the reification of concepts

To answer the question 'What is the state?' and to explain its 'idealism', I utilize Santos's answer to the question 'What is law?' (Santos 1987). A law is a map. Santos intends this metaphorically. But I believe recent developments in the sociology of cartography allow us to mean it literally. [3] Law-making summarises and codifies knowledge of social action in space and time. Informal laws are mental maps; written laws are cartographic maps. To represent a large three-dimensional object within a small, two-dimensional space, laws (like all maps) are constructed according to scale and around a point of projection (ibid.). Law is a hierarchy of nested, interpenetrating, mental and cartographic maps of different scales (ibid.). Law maps the same social space as disciplinary rules, but on a smaller scale. The disciplines map closely, they lower the threshold of describable individuality: 'they extend the same type of law on a different scale, thereby making it more meticulous and indulgent' (Foucault 1977:222). Where the disciplines see detail, law sees patterns and relationships. The disciplines are a counter- or infra-law to that of the state, its dark underside. They exist 'at the point where the law is inverted and passes outside itself.' They are 'the effective and institutionalised content of the juridical forms' (Foucault 1977:224).

It is a characteristic of all maps that they abstract information and organize it around a centre or point of projection (Santos 1987). The organizing centre of law is contract, the juridic form of the act of exchange. Exchange produces a characteristic feature of law which is important to an understanding of the idealism of the state. By abstracting from material differences among the monads of civil society, buyers and sellers, it transforms socially differentiated individuals with concrete needs into juridic citizens with abstract rights. The needs of strangers become the rights of citizens (Ignatieff 1984). As Marx puts it, exchange 'makes an abstraction of real men'. It abolishes 'distinctions of birth, social rank, education, occupation…when it proclaims, without regard to these distinctions, that every member of the nation is an equal participant in national sovereignty' (Marx 1847a:153). 'The state' is peopled by such abstractions. It is an idea created by the abstraction of exchange, carried in law: an imagined community of juridic persons with abstract rights 'divorced from the…circumstances which concretely make them what they are' (Sayer 1987:104). This is idealism: the abstraction of categories from the social relations 'which are their lord and master' (Marx 1858:164; Marx and Engels 1846).

People must live in an imagined community, a 'state', because the disciplinary practices that atomize civil society and subsume the productive power of labour to private property, an 'economy', destroy their real communities. The idea of the state is the juridic self-understanding of the seemingly free and independent monad of civil society. This is why 'this man, this member of civil society, is the basis, the precondition, of the political

state' (Marx 1843d:166). This is why 'civil society' is the basis of the state, not vice versa. 'It is…not the state that holds the atoms of civil society together, but the fact that they are atoms only in imagination… Only political superstition still imagines today that civil life must be held together by the state, whereas in reality, on the contrary, the state is held together by civil life' (Marx 1844d:120–1).

I now want to consider how the idea of the state is reified. Reification is the mental conversion of a concept, an abstract idea, into a thing (OED). To reify is to materialise a concept. Once again, this is a common, everyday process. The idea of the state is reified in myriad ways. For example, every time Americans recite the 'pledge of allegiance' and affirm that they are all citizens of an abstract United States of America and that there is 'liberty and justice for all' (Gabel 1980:27), they bestow the state with a factitious concreteness. But since the idea of the state is carried in legal discourse, it is typically reified through the multifarious practices, ceremonies and rituals of law (Corrigan and Sayer 1985:4). The idea of the state, at the heart of the categorical framework of legal discourse, is regularly invoked in adjudication of all manner of disputes: drawing the line, for example, between private, economic and public, political spheres (Klare 1982). Law is a 'language of power' (Foucault 1980a:201), a discursive medium through which political claims are contested and defined: for the landowner, enclosure, for the cottager, common rights; for the mineworker, a political struggle, for the Government, an economic dispute.

The idea of the state is ingrained in the body of civil society much as the idea of femininity is ingrained in the body of a women. The state enmeshes, controls, regulates, superintends and tutors civil society from its most comprehensive manifestations of life down to its most insignificant stirrings, from its most general modes of being to the private existence of individuals' (Marx 1852:62). The idea is embodied in the thing observed so that the appearance of that thing matches our perception and it appears perfectly natural. As we reify the abstraction, 'the state' conceptually and institutionally organizes our thoughts and actions, converting real class inequality into the abstract egalitarianism of citizens.

Discovering liberties: inventing disciplines

The idealism of the state and the materialism of civil society are coeval, internally-related, everyday phenomena, sides of the same social relations and process. As Foucault (1977:222) puts it, liberties were discovered (the idealism of the state) when the disciplines were invented (the materialism of civil society). The idealism of the state is a product of the abstraction of exchange, and, 'behind the great abstraction of exchange, there continues' the abstraction of production, 'the meticulous, concrete training of useful forces' (ibid.: 217). The public citizen, formed by the abstraction of exchange, is the counterpart of the private civilian, formed by the abstraction of production; the contractual relations between juridic citizens are the counterpart of the private (disciplinary) relations between real individuals. The civilian of society and the citizen of the state, then, are twin abstractions from social circumstances, formed in production and

exchange, respectively.

The private civilian, this 'isolated monad', is a 'fictitious phenomenon' (Marx 1843d:154). People are atoms 'only in imagination, in the heaven of their fancy' (Marx and Engels 1844d:121). In reality, they are the play-things of 'alien powers' (Marx 1843e). The public citizen is 'only abstract, artificial man' (Marx 1843d:167), an 'idealist of the state', an 'imaginary member of an illusory sovereignty' (ibid.: 154). People can be members of a state only as individuals, not as communal, social beings (Marx 1843c: 77). Private civilians, who imagine themselves independent, and public citizens, who imagine themselves free, are abstractions integral to the state, for it 'is based on the contradiction between public and private life' and is 'inconceivable without it' (Marx 1844c:198 and 205). Through the medium of law, the private/public distinction is internalized. The individual is partitioned into a private person ('a fictitious phenomenon') and a public person ('an imaginary member of an illusory sovereignty'). Just as private civilians think themselves independent of social forces while being reduced by them to a thing, a 'hand', so public citizens think themselves free while being reduced to the legal status of a thing (Ellerman 1984:198). Truly, people lead a two-fold life, 'not only in thought, but *in reality*' (Marx 1843d:154, my emphasis).

Private civilians, who imagine themselves independent, and public citizens, who imagine themselves free, are allegorical figures, marionettes of a process taking place behind their backs (Marx 1843c:40). To grasp this process, Marx took the isolated monad of civil society, declared its essence the 'ensemble of social relations' (Marx 1845:4) and sought an explanation of the 'socially determined production of individuals'—the 'point of departure' of his 'economics' (Marx 1857:83)—via a critique of economic categories, thereby revealing 'the economic law of motion of modern society' (Marx 1867b:92). In 1843, Marx understood that 'the relation of the political state to civil society is just as spiritual as the relation of heaven to earth' (Marx 1843d:154). By 1858, he had fathomed that wage-labour 'has replaced the very earth as the ground on which society stands' (Marx 1858:276). Marx's 'society', then, is not peopled by atomistic individuals, but by the internal relations among real people in 'their actual, empirically perceptible process of development' (Marx and Engels 1846:37), as they act, produce or—in a word—labour. The 'essential relations' between civil society and the state, the basis of these 'abstractions', are social relations of production: a nonempirical, but real, social structure, between people spatio-temporally discrete, which simultaneously enables and constrains their actions.

People might lead a two-fold existence (private and public), but they do not do things twice. They do not build a society, then create a state (or vice versa). The same process that produces the institutional separation between 'distribution' and 'exchange', which we recognize by the fetish 'the economy', also produces the institutional nexus which we recognize by the reification 'the state'. Prisons and army barracks (the 'political state') exist side by side with factories and offices ('civil society')—'alongside and outside'—just as market places and work places exist side by side within the economy of civil society. But they are social forms of the same production relations, driven by one and the same process, the mode of production, or more prosaically, 'earning a living' (Marx 1847a:166). 'Civil society' and 'political state' are not two different things (Marx

1844a:197). Like distribution and exchange, they are forms—Janus-faces—of the same thing 'seen from a different point of view' (Marx 1863 Part 3:84). [4] Sometimes we see civil society, sometimes the state. Both seem to be everywhere, then nowhere. No wonder they are so hard to define (Jessop 1990; Frisby and Sayer 1986; Denis 1989:328–30).

The materialism of civil society/fetishism of things and the idealism of the state/reification of concepts are sides of Foucault's disciplinary practices and Marx's relations of production: of capital. The first (materialism/ fetishism) inverts the relationship between the social and the material; the last (idealism/reification) inverts the relationship between the social and the ideal: the violence of things, the violence of abstractions. They are active in myriad social forms of production, dividing and segregating—practically and conceptually, through time and across space—economic from political, private from public, subject from object, agency from structure. This dual-sided process is hidden from view because it disappears in its results: diverse, spatio-temporally discrete phenomena and our concepts of them. These are real dichotomies, falsely conceptualised. [5] To paraphrase Marx (1857:90), the rupture between civil society/the state, economy/polity, private/public, subject/object, agency/structure did not make its way from the textbooks into reality, but from reality into the textbooks. Once there, and therefore part of our conceptual framework, all trace of this movement is concealed. Without a realist ontology it is impossible to grasp the inner connections beneath this multiplicity of outward forms. We see only 'external collisions' between them, and, as Marx puts it, we are left knocking wooden concepts together in the hope that they will eventually ignite (Marx 1847b:320). 'To resolve the visible, merely external movement into the true intrinsic movement is a work of science' (Marx 1864:313). To this we must add: to understand and practice this science, one must understand the realist ontology upon which it is based.

Capital and postmodernity

Capital, I have argued, is constituted by the causal connections between the organization of labour, the atomization of civil society and its fetishized material and reified ideal forms, economy and state. This is a nexus of causal relations, with a common, unifying logic. As labour is organized, society is atomized, production relations are materialised and fetishized; as commodities are exchanged, the state is idealised and reified.

Lest it have escaped notice, this book's *a priori* discussion of Marx and Foucault contains not one iota of contemporary empirical material. It is a synthesis between a concept immersed in the theoretical work of a German man living in Berlin, Cologne, Kreuznach, Paris, Brussels and London during the middle years of the nineteenth century, and a concept immersed in the empirical investigations, up to 1830, of a French man living in Uppsala, Warsaw, Hamburg, Clermont-Ferrand, Tunis, Vincennes and Paris during the second half of the twentieth century. [6] Let no one doubt, however, that this causal mechanism, discovered by Marx during the middle of the last century, is all around us, as we enter the twenty-first century. These dual-sided relations of production and disciplinary techniques are still hard at work. Capital has developed apace even if our

understanding of it has not.

It is most transparent during those periodic crises of over-accumulation so characteristic of capitalism. It was in the midst of one such crisis, that of 1847–8, that Marx famously asserted capitalism's impending demise, in the *Communist Manifesto*. On the eve of the crisis of 1857–8, he wrote in his private *Grundrisse* notebooks that capitalism's crises of over-accumulation would be repeated on a progressively higher scale, leading 'finally to its violent overthrow' (Marx 1858:750). But, as Berman points out, Marx's own analysis provides 'no apparent reason why these crises can't spiral on endlessly, smashing people, families, corporations, towns, but leaving the structures of bourgeois social life and power intact' (Berman 1983:103). As, indeed, they have.

Perhaps I may nail one more of Marx's devices to ingratiate himself to the Prussian censor, his declaration that mankind creates only such problems as it can solve (Marx 1859a:21). This is not true. The interactions among the structure of capital (this material cause) and the efficient and final causes of the people who constitute it, are capable of generating a seemingly infinite range of outcomes. (And 'capital' remains a potentially powerful final cause). But that capital has become 'an alienated, independent, social power, which stands opposed to society as an object' (Marx 1864:264), may well be a problem which can only be managed, not solved.

Discoverers of mechanisms are often spectacularly wrong about how they work. Darwin believed that variations within species are caused by environmental stresses on the developing embryo. It was not until the 1930s that Mendelian genetics and Darwinian natural selection were synthesized in a theory capable of explaining how the environment controls gene-combinations. While there may be a tension between what Marx wanted and what his analysis will sustain—they were all, let us recall, 'under the spell of… France' (Engels 1895:12)—the fact that what he wanted did not happen does not invalidate his analysis of the nature of capital. Marx may have been wrong about communism, but he was right about capitalism.

We cannot be surprised at capitalism's persistence. Structures resist a load by pushing back at it with an equal and opposite force (Gordon 1991). The tension stresses generated by its internal contradictions have not destroyed capital's structure, but creatively destroyed its remarkably elastic surface, through periodic waves of time-space compression. An explanation for this lies at the heart of Marx's analytic: the structural imperative to transcend crises of over-accumulation by accelerating the turnover of capital, in production and circulation (Marx 1864:70–1). Capital's pressure to reduce turnover time is constant, but marked accelerations tend to be bunched in periods of crisis, when resistance to them is at its weakest. Crises are 'always the starting-point for a large volume of new investment' and this provides 'a new material basis for the next turnover cycle' (Marx 1865:264).

In the 1840s, this imperative conjured into being railway networks, the telegraph, canals and the steamship. [7] In the 1990s it conjured up the information superhighway, mobile telephones and communication satellites. All are means by which capital tears down spatial barriers to commerce by reducing the time spent in motion from one place to another (Marx 1858:538–9). Capital creates, then, not only commodities and productive powers, but an experience of time and space, the twin coordinates of how we

see, embedded in what we create: literature, art, buildings, movies, and our own identities. Capital's surface has certainly changed much since the 1840s, but 'the underlying logic of capitalist accumulation and its crisis-tendencies remain the same' (Harvey 1989:189). The most striking testimony to the persistent power of capital is that which supposedly marked the death of Marx's ideas, the condition of postmodernity itself.

The counterpart of the development of productive powers by reengineering business processes in time and space, is an intensification of the atomization Marx and Engels identified as a problem in the 1840s. A contemporary definition of 'civil society' would include the self-absorbed, hedonistic, channel-hopping, net-surfing postmodern monad, 'demanding instant gratification and ever-escalating doses of stimulation' in a world of 'I want' which recognizes few limits to what can be commodified (Brown 1995:80). As Marx would put it, they are restricted individuals withdrawn into themselves, monads increasingly torn from their real communities, by the transformation in the organization of space and time, seeking out others in virtual communities, living in imagined communities constructed out of television, video and film images. [8] To all this one can add that the inculcation of a reactionary commonsense during the 1980s, which made the ascendancy of marketing possible, rested on a belief nicely condensed by Margaret Thatcher's famous remark that 'there is no such thing as society', only individuals.

Few things remain to be commodified and taken to market. The fetishism of commodities is actively cultivated by postmodern marketing. It is especially fond of recycling and sanitizing the past. *Les Misérables*, Hugo's moral critique of the injustice of modern society, rough-drafted 1845–8, toured the world as a musical, whose cost of admission would support today's *misérable* for a week. Hugo's *Notre-Dame de Paris*, in which the modern world struggles to emerge from the medieval, is now a Disney cartoon. The hump-backed, deaf bell-ringer, Quasimodo, is now the shy, dorsally-challenged teenager 'Quasi', who stares out from all manner of merchandise (Robb 1997:541). Those Parisian arcades, created by Haussmann out of the ruins of the barricades on which thousands were butchered in 1848, are now the model for history-less shopping malls from which the poor are excluded. The accumulation of wealth and the accumulation of misery, extravagant consumption and pangs of hunger, continue to be, as Marx puts it, 'intimately connected' (Marx 1867a:811).

The idea of the state, that abstraction of exchange, remains the most potent political force in the world (Anderson 1991). Established nations (including Canada) are increasingly challenged by sub-nationalisms and almost every year the United Nations admits new members. It was this imagined community, not capitalism, let us note, that destroyed the Union of Soviet Socialist Republics and left nothing but rival, sometimes warring, republics (Yakovlev 1993:72).

All of this, let me conclude, has been brought about by the adventures of a most postmodern phenomenon, the ultimate simulacrum, fictitious capital: nominal representations of proprietary claims to non-existent capitals, driving an increasingly autonomous global financial system (Marx 1864:477).

Notes

1 Marketing postmodernity

1 ‘Disneyland is presented as imaginary in order to make us believe that the rest is real’ (Baudrillard 1994:12).
2 For a critical assessment of reengineering, see Grint (1994), Grint and Case (1998) and Willmott (1995).

2 Postmodernity and capital

1 By ‘traditional Marxism’ I mean that over which the variants of Marxism disagree: the interpretation and relative weight given to Marx’s texts. These disagreements centre on the 1859 *Preface*, from which is derived the problematic relationship between the early philosophical and the mature economic Marx. They translate into practical political differences over the proper relationship between the economic ‘base’ and political ‘superstructure’.
2 These words are found on the back cover of Callinicos (1989). His line of argument is complemented by Meiksins Wood (1986) and Miliband and Panitch (1990), which I discuss later.
3 As Meiksins Wood (1981:66) acknowledges, ‘Marxists have, in various forms, perpetrated the rigid conceptual separation of the “economic” and the “political” which has served bourgeois ideology so well’.
4 Foucault notes an important exception: Marx’s historical texts.

3 Retroduction and realism

1 I am aware that ‘empiricism’ and ‘positivism’ are contested. My concern here is to present a clear and accessible account of realism, not to engage the debate over the meaning of these terms. To this end, I employ the basic distinction between the ontology of empiricism and the epistemology of positivism. All positivists are empiricists, but not all nonpositivists are nonempiricists.
2 Given their frequent appearance in this book, these terms are worth defining. *Explicandum:* ‘The fact, thing or expression to be explained or explicated’. *Explicans:* ‘The explanatory part of an explanation; in the analysis or explication of a concept or expression, the part that

gives the meaning' (OED).

3 I have developed the following argument from an observation by Derek Sayer: 'there is, I think, a clear connection between the realist view of explanation as the elucidation of (real) structures and mechanisms and the retroductive account of theory construction developed by Pierce and Hanson' (Sayer 1979a:174, n. 15). Sayer admits to not having 'worked out' this connection. I attempt to do so here.

4 This is adapted from Hanson (1958:1086–7).

5 These criteria come from Hanson (1958 and 1961), by way of Sayer (1979a).

6 A parallel distinction is between vertical explanation (retroductive, theoretical work) and horizontal explanation (retro- and pre-dictive empirical work).

7 The distinction between causal and perceived things is not rigid. Imagined, but non-perceived, entities often become perceptible as the concepts by which perception is mediated are developed and, related to this, instruments of perception (such as telescopes and microscopes) are invented. As Bhaskar puts it: 'the hypothetical mechanisms of yesterday may become today's candidates for reality and tomorrow's phenomena' (Bhaskar 1978:159).

Bhaskar identifies three main differences between social and natural structures. Social structures, unlike natural structures: (a) 'do not exist independently of the activities they govern' (Bhaskar 1978:38); (b) 'do not exist independently of the agents' conceptions of what they are doing in their activity.' (ibid.); (c) 'may be only relatively enduring (so that the tendencies they ground may not be universal in the sense of space-time invariant)' (ibid.). Following Collier (1994:242), however, I do not accept 'some of the distinctions that Roy Bhaskar draws between the natural world and the social or human world'. I refer the reader to Collier on this point.

My own view is that Bhaskar's three qualifications to the possibility of naturalism correspond to the three types of cause, material, efficient and final, which I outline later. The 'activities' to which he refers (qualification a) are efficient causes, the agency which intervenes to trigger the causal mechanism of a structure. The 'agents' conceptions of what they are doing in their activity' (qualification b) are final causes; they are reasons which function as causes. And qualification c, Bhaskar's belief that social structures may be only relatively enduring is a comment on material causes.

Bhaskar's three qualifications are related to his tendency, evident in his terminology, to equate the real with the structural. This leaves the impression that material causes are everything, that society is only a multiplicity of structures and a realist social science is concerned principally with these structures. Sociology, for example, 'is concerned, at least paradigmatically, with the persistent relations between individuals (and groups), and with the relations between these relations (and between such relations and nature and the products of such relations) (Bhaskar 1978:28–9). But society is also constituted by agency and reasons and, presumably, a realist social science is also be concerned with these.

8 These come from Aristotle, via the OED.

4 Beyond good and evil

1 Why would Marx do this? The *Encyclopaedia*, like the *Philosophy of Right*, consists of numbered paragraphs to be explained and expanded in Hegel's lectures. Since the *Encyclopaedia* has few headings and sub-headings, in this 'plan', Marx attempts to discern

some rationale among the numbered paragraphs.

2 'The doubts which assailed me' comes from Marx's reflections in the 1859 *Preface* (Marx 1859a).

3 For Marx's views on communism see one of his first articles as editor, 'Communism and the *Augsburg Allgemeine Zeitung*' (Marx 1842b).

4 During the French Revolution, 'opinion' came to mean a counter-balance to despotism centred at Versailles, developed by men of letters centred in Paris, who judged matters of state in the name of the public. The literary life of Paris became the centre of opposition to the Versailles bureaucracy of the monarchy. Marx wanted the German radical press to play a similar role in the reform of the despotic Prussian State based at Berlin.

5 Marx's response to the government decree is set out in 'Marginal Notes to the Accusations of the Ministerial Rescript' (Marx 1843b). For a discussion of the calibre and effectiveness of the paper see McGovern 1969.

6 I paraphrase Marx's reflections in the 1859 *Preface:* 'The first work which I undertook to *dispel the doubts assailing me* was a critical re-examination of the Hegelian philosophy of law' (Marx 1859a, my emphasis).

7 Hegel's section on 'The State' actually begins at paragraph 257. But Marx's first sheet is missing, and the extant text strongly suggests that it dealt with paragraphs 257–60, i.e., the beginning of this section.

8 The link between Marx's critique of Bauer and his critique of Hegel is that the 'decomposition of man into Jew and citizen' is only one form of the basic division between private, egotistical man and the public citizen, 'of the universal secular contradiction between the political state and civil society' (Marx 1843d:159–60).

9 In 'Introduction' to 'Contribution to the Critique of Hegel's *Philosophy of Law*' Marx talks of the 'fantastic *reality* of heaven' (Marx 1843e:175, my emphasis).

10 Later in the manuscript, Marx refers to these as 'the premises of political economy' (Marx 1844a:270).

11 These are the only headings of Marx in these 'Paris Manuscripts'. Those appearing in published versions are creations of their editors.

12 The movement from 'man' to 'alienation' is affected by 'labour': 'sensuousness,' activity, process. Labour is materialised, embodied or objectified in its product (Marx 1844a:272). Labour is the subjective essence of private property. Capital is 'private property in the product of other men's labour' (Marx 1844a:246).

13 Presumably, the justification for this editorial action is Marx's remark in the Preface to the 'Paris Manuscripts': 'I have deemed the concluding chapter of this work—a critical discussion of Hegelian dialectic and philosophy as a whole—to be absolutely necessary' (Marx 1844a:232).

5 Everything pregnant with its contrary

1 'On the Jewish Question' is a critique of Bruno Bauer's *The Jewish Question*. 'Critical Marginal Notes' is a critique of Ruge's 'The King of Prussia and Social Reform', published in *Vorwärts!*, 27 July 1844. *The Holy Family* is a critique of the Bauer brothers (Bruno and Edgar) and their followers. It responds to Bruno Bauer's review of Marx and Engels' 'On the Jewish Question'. It rebuts Edgar Bauer's review of Proudhon's *What is Property? The*

German Ideology is a critique of Bruno Bauer and Max Stirner. It responds to Bruno Bauer's response to *The Holy Family* (which labelled Marx and Engels 'Feuerbachian dogmatists'). But mainly it responds to Stirner's book *The Ego and its Own* (which criticized Marx and Engels as 'communist disciples of Feuerbach'). *The Poverty of Philosophy* is a critique of Proudhon's *System of Economic Contradictions or the The Philosophy of Poverty*. 'Moralising Criticism and Critical Morality: A Contribution to German Cultural History Contra Karl Heinzen', which I do not have space to examine here, is a critique of Karl Heinzen, particularly a response to Heinzen's attack on Engels published in *Deutsche-Brüsseler-Zeitung*, 26 September 1847. Ruge, Bauer, Stirner, and Heinzen were all Young Hegelians and one time allies and friends of Marx. Via these attacks, one by one, Marx severs his earlier relationships and forges his own theory.

2 Political emancipation abolishes people's isolation from statehood by admitting them as members of 'the political community, the state' (Marx 1844c:204) (an 'imaginary member of an illusory sovereignty'), but does nothing for their isolation from their real community. It achieves the 'rights of man', the right to remain an isolated monad. Social, or real, practical emancipation, 'starts out from the point of view of *a separate real individual*' (Marx 1844c:205, my emphasis).

3 Marx describes his former friend as an 'alleged' Prussian, as 'super-clever', a 'literary charlatan', who exhibits 'rare naivety' and lacks familiarity with the history of the social movement.

4 See Marx to Feuerbach, 2 October 1843, and 11 August 1844.

5 Here I refer to Engels's edited version of Thesis 9. This point can be related to *The German Ideology*'s assessment of Feuerbach that he:

> only conceives of him ['man'] as an "object" of the senses, not as "sensuous activity"… He gives no criticism of the present conditions of life. Thus he never manages to conceive the sensuous world as the total living sensuous activity of the individuals composing it.
>
> (Marx and Engels 1846:41)

6 In the quote from Thesis 10 I refer to Marx's original.

7 That Engels received an advance copy of this book encourages us to think that the review is his work.

8 Indeed, in this supposed 'work of the break', Marx and Engels are quite explicit that 'the illusions about the state and the rights of man had already been adequately exposed in the *Deutsche-Französische Jahrbücher*' (Marx and Engels 1846:197): a reference to 'On the Jewish Question' and the 'Contribution to the Critique of Hegel's Philosophy of Right: Introduction' (Marx 1843d and 1843e).

9 Marx's most read publication had to be dragged out of him. His delay stimulated this communication from the Central Committee in London to the regional committee in Brussels, dated 26 January 1848. 'The Central Committee charges its regional committee in Brussels to communicate with Citizen Marx, and to tell him that if the Manifesto of the Communist Party, the writing of which he undertook to do at the recent congress, does not reach London by February 1st of the current year, further measures will have to be taken against him. In the event of Citizen Marx not fulfilling his task, the Central Committee requests the immediate return of the documents placed at Citizen Marx's disposal. "In the name of and by order of the Central Committee."'

10 ‘Please do not argue with us by using *your* bourgeois notions’ (Marx and Engels 1848:47). ‘Proletarians have nothing to lose but *their* chains. *They* have a world to win’ (ibid.: 68, my emphasis).
11 ‘It was found that the state institutions…offer still further opportunities for the working class to fight these very state institutions’ (Engels 1895:21).
12 ‘Modern’ is the most common adjective of the first section, ‘Bourgeois and Proletarians’.
13 Marx was so taken with Balzac, whom he praised for his ‘profound grasp of real conditions’, that he planned a full length study of his work.
14 The classical and modern Prometheus, as one might expect, are connected. The classical Prometheus steals fire from the Gods. Victor Frankenstein describes his discovery of the principles of life in terms of the imagery of light: ‘from the midst of this darkness a sudden light broke in upon me—a light too brilliant and wondrous’ (Shelley 1994:80).

6 The inner connection

1 Here I quote from the Moscow translation of the *Introduction*, set out in an appendix to Marx (1859b). That by Nicolaus (1973, p. 83) reads: ‘Individual producing in society—hence socially determined individual production—is, of course, the point of departure’. The German original is: ‘In Gesellschaft produzierende Individuen-daher gesellschaftlich bestimmte Produktion der Individuen ist natürlich der Ausgangspunkt’.
2 We find it also in the ‘Paris Manuscripts’ (Marx 1844a:299 and 317).
3 Given its canonical status, we should note: the *Preface* was written after the text of *CCPE*, in February, 1859, and dispatched by Marx to his publisher, Duncker, without comment or ceremony: ‘The “Preface” enclosed herewith’ (Marx to Duncker, 23 February 1859).
4 See Marx to Lassalle, 22 February 1858, and Marx to Engels, 2 April 1858. It was not Marx’s ‘intention to elaborate to an equal degree all the 6 books into which I am dividing the whole, but rather to give no more than the broad outline in the last three’ (Marx to Lassalle, 11 March 1858).
5 See Marx to Engels, 29 March 1858.
6 ‘By “instalments” I mean fascicles’ (Marx to Lassalle, 22 February 1858). Fascicle: ‘a separately published instalment of a book’ (COD).
7 ‘This is the substance of my first instalment’ (Marx to Engels, 2 April 1858). This is confirmed in a letter to Weydemeyer, 1 February 1859.
8 The very first paragraph of the *Preface* to *CCPE* makes clear that Marx was at that point still working to a six-book plan (Oakley 1983:81), and that *CCPE* is only a part of Book One: ‘The present part consists of the first two chapters’ of ‘the first part [i.e. ‘Part One: Capital in General’] of this first book’ (Marx 1859b:19). He adds that ‘the entire material’ is before him in the form of monographs: which cannot have been true.
9 That the structure of the *Grundrisse* notebooks corresponds to that between the two chapters of *CCPE* and the missing third chapter on capital, is evident if we compare the following. In the *Grundrisse*, towards the end of the chapter ‘On money’, Marx writes: ‘this first section… points beyond itself towards the economic relations which are posited as relations of production. The internal structure of production…forms the second section[‘On Capital’]’. In a footnote on the last page of *CCPE*, Marx writes: ‘The conversion of money into capital will be examined in chapter three, which deals with capital and concludes the first section [of this

work]'.

10 Marx said of its reception in Germany: 'so far as I am aware, nobody inquires after the thing or gives a straw for it' (Marx to Lassalle, 20 October 1859).

11 Perhaps commentators accept Marx's own rationalisation, but this is a tangle of contradictions. He tells Lassalle (11 March 1858) and Engels (2 April 1858) that the chapter is the most important part of this first instalment and Duncker, who is convinced of this, tells Marx that if this does not sell he will not publish subsequent instalments. There can be no doubt that all concerned regarded this chapter as an integral part of *CCPE* and vital to its success. However, Marx gradually backs away from this position. He tells Lassalle (12 November 1858) that because 'undue brevity would render the thing indigestible to the public' he is expanding the first two chapters and for this reason 'capital in general' is 'likely to run to two instalments'. Given 'their intrinsic coherence', however, it was imperative that these instalments appear simultaneously; indeed, 'the whole effect depends on it'. In this same letter, Marx implores Lassalle not to inform Duncker of this development. Why?

We can only conclude that, having convinced Duncker of the importance of 'capital' to the success of the first instalment, Marx was afraid that he might not publish it without this chapter. Only a few days before the manuscript was to be dispatched to the publisher, Marx prepares Engels for the shocking news that this first instalment of 'capital in general' will contain nothing about capital in particular (Marx to Engels: 13–15 January 1859). Marx presents this omission as a conscious strategy on his part; indeed it is now a positive virtue: if the first instalment succeeds then the chapter on capital can follow 'very quickly' and the 'serious and scientific' nature of the first instalment will compel the reader to take the second seriously. Thus, Marx had moved from his earlier position that the two instalments ('money' and 'capital') should appear together; now the first was to pave the way for the second. 'Capital' was now conditional upon the success of the first instalment, whereas before it was a condition of this success.

Two weeks later Marx's rationalisation changes again. He claims to Weydemeyer (1 February 1859) that he has 'held back' the chapter for 'political motives'. Marx repeats this to Lassalle (28 March 1859), claiming that the 'principal chapter, i.e., the third, on capital' is omitted because 'it seemed to me better not to frighten people at the outset'. And yet Marx later claims to Lassalle that he 'expected' *CCPE*—which he had described to Engels as 'serious and scientific'—to be 'attacked and criticised'. Finally, in October 1859, with no sign of this missing chapter—which, recall, was to follow 'very quickly', indeed, which he 'held back'—Marx is reduced to hoping that this second instalment will at least appear under the same imprint as the first (Marx to Lassalle, 2 October 1859).

12 By not publishing the chapter on capital as part of the first instalment, Marx risked that (a) Duncker would not publish it, because Marx had convinced him that its inclusion was vital to the success of this instalment; (b) even if it was published the instalment would fail; and therefore (c) Duncker would not publish subsequent instalments and therefore Marx would be denied the outlet in Prussia he had sought for so long and which he regarded as essential to keeping his name in the public eye, in anticipation of his return to Germany. In the event, apparently, Duncker *was* prepared to bring out the second instalment.

13 Marx returned to the capital chapter at this point.

14 It adds plausibility to my argument on this point that when Marx restored the organic link between 'money' (circulation) and 'capital' (production), severed by *CCPE*, he also planned to restore the omitted 'Introduction'. This is evident in his draft plan for *Capital*, written in January 1863, which is reproduced on pp. 414–16 of *Theories of Surplus Value, Part 1:*

> The first section ‘Production Process of Capital’ to be divided in the following way:
>
> 1. *Introduction.* Commodity. Money.
> 2. Transformation of money into capital.
>
> (Marx 1863, my emphasis)

and so on. It is speculative to suggest that the ‘Introduction’ was dropped once again when Marx was unable to publish Books One and Two together in one volume.

15 Within ‘every organic system’, effects become causes and ‘every economic relation presupposes every other in its bourgeois economic form, and everything posited is thus also a presupposition’ (Marx 1858:278).

16 Once Volume One was published, Marx then intended to combine in Volume Two of *Capital* everything that was subsequently included in Volumes Two and Three.

17 Remarkably, Frenhofer’s theory of line, light and colour anticipates Cézanne’s practice fifty years later (Balzac: 15–16). Like Frenhofer, Cézanne faced incom- prehension and ridicule; like Marx, he strongly identified with this fictitious painter (Robb 1995:199).

7 The nature of capital

1 Consider these examples of his reading in the natural sciences. In a letter to Lion Philips (his uncle), 14 April 1864, Marx reveals that he has been reading on the theory of light. In a letter to Engels (4 July 1864), he remarks that he has read Carpenter’s *Physiology*, Spurzheim’s *The Anatomy of the Brain and the Nervous System*, Schwann and Schleiden’s *Microscopical Researches into the Accordance in the Structure and Growth of Animals and Plants*, and Lord’s *Popular Physiology*. In another letter to Philips (17 August 1864), he comments:

> I had recently an opportunity of looking at a very important scientific work, Grove’s *Correlation of Physical Forces*. He demonstrates that mechanical motive force, heat, light, electricity, magnetism and CHEMICAL AFFINITY are all in effect simply modifications of the same force, and mutually generate, replace, merge into each other, etc.

In a letter to Lange (29 March 1865), Engels comments: ‘The modern scientific theory of the interaction of natural forces (Grove’s *Correlation of Forces*, which I think first appeared in 1838) is…only another expression or rather the positive proof of Hegel’s argument about, cause, effect, interaction, force, etc.’

2 ‘Everything is a cell. The cell is the Hegelian “Being-in-itself” and passes through the Hegelian process as it develops, until at the end the Idea, the particular completed organism, results’ (Engels to Marx, 14 July 1858).

3 Marx distinguished between the cell and the social body, between individual capitals and the

aggregate social captial; ‘the circuits of the individual capitals intertwine, presuppose and necessitate one another, and form, precisely in this interlacing, the movement of the total social capital’ (Marx 1864:357).

4 Marx’s discovery is open to other analogies. Arguably his penetration of the surface of capital during the winter of 1857–8 is analogous to Thomson and Rutherford’s penetration of the surface of the atom with their discovery of the electron and the nucleus, in 1897 and 1910 respectively.

5 See Lewontin (1991) for a critique of the ideology of biological determinism implicit in the claim that all of human existence is controlled by our DNA.

6 In fact, this was one of Marx’s objections to Darwin’s use of Malthus:

> Darwin, at whom I have had another look, amuses me by saying that he applies to the ‘Malthussian’ theory also to plants and animals: the whole point about Malthus was that it was to be applied not to plants and animals, but only to men—in geometric progression—in contradistinction to plants and animals.
>
> (Marx to Engels, 18 June 1862

7 This conception of motion is particularly evident in the early chapters of Volume Two of *Capital*, which were revised *after* this letter, in July 1878.

8 Newton’s idea of relative and absolute motion would have been brought home to Marx via his experience of the movement of the trains on which he travelled (on which I comment in Chapter 5). One’s own train stands still, while a train on the next track starts moving; but the impression is opposite, that one’s own train has started. Only after a while does one notice the illusion.

9 Absolute and relative value and surplus value are the key conceptual dualisms of Volume One’s Parts One and Two, ‘Commodities and Money’ and ‘The Transformation of Money into Capital’, and Part Three, ‘The Production of Absolute Surplus Value’, Part Four, ‘The Production of Relative Surplus Value’, and Part Five ‘The Production of Absolute and Relative Surplus Value’.

10 Engels’ analogy between value and oxygen illustrates the significance of conceptual innovation. ‘Marx stands in the same relation to his predecessors in the theory of surplus-value as Lavoisier stood to Priestley and Scheele’ (Engels 1956:16).

11 I am following Marx’s usuage in the ‘Resultate’ by using ‘labour-capacity’ rather than the more traditional ‘labour-power’, which he uses elsewhere, because ‘capacity’ better expresses the idea of an unexercised, potential power. The capacity to work and the exercise of that capacity are both causes (or powers), material and efficient.

12 ‘Within this antithesis the private property-owner is therefore the conservative side, the proletarian the destructive side. From the former arises the action of preserving the antithesis, from the latter the action of annihilating it’ (Marx and Engels 1846:36; this comment is Engels’).

13 ‘Resolution’, in this context, means the replacing of a single force by two or more jointly equivalent to it (COD). This force, abstract labour, develops into the opposition of commodity and money (considered later). The distinction between abstract and concrete labour is ‘crucial to an understanding of political economy’ (Marx 1867a:132).

14 This distinction, between absolute and relative value, is at the heart of Chapters 1 and 2 of Volume One of *Capital*. Marx advised that these were the most challenging chapters for readers. They would be *less* challenging had Marx indicated the literal core of his

unacknowledged analogy.

15 The distinction between absolute and relative surplus value is the conceptual core of the bulk of Volume One of *Capital*. On this basis, in Parts Three, Four and Five, Marx introduces the key concepts of his model of capital: the labour process and the valorization process, constant and variable capital, the rate of surplus value, the working day, cooperation, division of labour and manufacture, formal and real subsumption, the price of labour power. Understanding those concepts is contingent on understanding of the distinction at their core and the analogy on which it is based.

16 The period of manufacture, for Marx, is between the middle of the sixteenth century and the last third of the eighteenth century.

17 For example, Cohen's defence of Marx's theory of history does not extend to a defence of his labour theory of value, as is evident in its concluding words: 'The theses of the labour theory of value are not presupposed or entailed by any contentions advanced in this book' (Cohen 1978:353). It is notable too that Cohen's critic Derek Sayer does not find it necessary to explicate or defend this theory in either his account of Marx's method (Sayer 1979a) or his reconstruction of the main categories of traditional Marxism (Sayer 1987). This central problem of Marxist theory surfaces amidst the labour process debate, whose participants balk at accepting the labour theory of value, but otherwise make use of the categories attached to it. Littler sums up the predicament:

> many labour process writers try to have their cake and eat it: that is to say, they recognise the problem [of the labour theory of value] but do not deal with the theoretical implications [the abandonment of labour process theory]. Instead, they tend to side-step the problem.
>
> (Littler 1990:79)

Side-stepping the problem, however, is the source of the impasse in Marxist theory. It must be confronted and resolved.

18 Cohen (1988) makes a similar point:

> value is *defined* as socially necessary labour time. But a stipulative definition of a technical term is not a theory, and when value is defined as socially necessary labour time, it cannot also be a central theoretical claim of the labour theory that socially necessary labour time determines value.
>
> (Cohen 1988:210)

This interpretation explains the 'central claim of the labour theory of value' (ibid.): 'the exchange value of a commodity varies *directly and uniformly* with the quantity of labour time required to produce it under standard conditions of productivity' (ibid., my emphasis). Indeed it does, for they are sides of the same thing.

19 It is in this sense, I suggest, that alienated labour is 'the essence of private property' (Marx 1844a:317). Only when this is recognized 'can the economic process as such be analysed in its real concreteness' (ibid.).

20 The law of value is explicitly mentioned at Marx 1867a:421, 476, 676, 702, 1038; Marx

1865:293; Marx 1864:177, 179, 180, 845; Marx 1858:844: Marx 1863 Part 1:79, 87, 88; Marx 1863 Part 2:36, 163, 174, 194, 398, 399, 427; Marx 1863 Part 3:29, 70, 72, 73, 74, 83, 85, 89, 90, 91, 96, 99, 105.

21 But this comes close to capturing the basics of the law: 'the law of value—according to which equal quantities of labour are exchanged for one another' (Marx 1863 Part 3:99).

22 Marx refers to laws of value in Marx 1863 Part 2:427.

23 The worker:

> sells himself as an effect. He is absorbed into the body of capital as a cause, an activity. Thus the exchange turns into its opposite, and the laws of private property—liberty, equality, property—property in one's own labour, and free disposition over it—turns into the worker's propertylessness.
>
> (Marx 1858:674)

24 As Bhaskar notes, 'the term "law" is customarily used to refer both to statements of law and to what such statements designate' (Bhaskar 1978a:251). In the following summary, I sharply distinguish between laws and mechanisms, just as I have distinguished between models and their subjects, that which they model. Marx tends to conflate them (as, I think, does Bhaskar) (see the post-script to the second edition of Bhaskar 1978a). Laws are statements which make claims about independently existing real mechanisms.

25 The most well-known tendency is the law of the tendency of the rate of value to fall (Part Three of Volume Three of *Capital*). Marx devotes a chapter (Ch. 14) to its counteracting influences.

26 For example, 'surplus-value and rate of surplus-value are…the invisible and unknown essence that wants investigating' (Marx 1864:43).

27 This is the 'law of the progressive growth of the constant part of capital in comparison with the variable part' (Marx 1867a:773).

28 Re 'dialectical inversion' in another context, Marx says: 'Here, as in natural science, is shown the correctness of the law discovered by Hegel, in his *Logic*, that at a certain point merely quantitative differences pass over by a dialectical inversion into qualitative differences' (Marx 1867a:423). To this he appends the footnote: 'The molecular theory of modern chemistry…rests on no other law' (ibid.: 423–4).

29 I am using 'mechanics' here in the realist, rather than the applied mathematical, sense (although they are related). Explanation of empirical phenomena, for the realist, requires not only the discovery of objects but an explanation of the mechanisms which generate that which we are trying to explain (Keat and Urry 1975:30). Mechanics proper is: 'That department of applied mathematics which treats of motion or tendencies to motion: comprising…kinematics, the science of abstract motion, and dynamics (including statics and kinetics), the science of the action of forces in producting motion or equilibrium in bodies' (OED).

30 'Labour becomes far more continuous and intensive, and the conditions of labour are employed far more economically, since every effort is made to ensure that no more (or rather even less) socially necessary time is consumed in making the product' (Marx 1866:1026).

31 'The complaint that the worker lacks discipline runs through the whole of the period of manufacture' (Marx 1867a:490).

32 While I concentrate here on aggregate social capital, the movement between the formal and the real subsumption of labour has contemporary significance: every new capital, I believe,

must pass from one mode to the other (formal to real) if it is to survive.

33 This interpretation, I believe, is supported by Marglin's observation that the creation of the factory was an organizational, not a technological or industrial revolution. The first factories he argues, predated by many years the introduction of power to the labour process and technological changes in machine design (Marglin 1974). Marglin's article is relevant because it asks 'is work organization determined by technology or by society?' (ibid.: 33). It also asks 'why, in the course of capitalist development, the actual producer lost control of production?' (ibid.: 34). Marx explains why; the next question is *how*.

My line of argument runs counter to traditional, technological determinist, readings of Marx but it was advanced by commentators in explanation of the first factories and was endorsed by Marx himself. For example, in 1835 Andrew Ure, a nineteenth century apologist for the factory system and a big influence on Marx and Engels, made a comment on the introduction of the 'water frame' to the cotton industry which confirms this interpretation. The water frame was invented by John Wyatt, but Arkwright gets the credit. Ure explains why:

> The main difficulty (faced by Arkwright) did not, to my apprehension, lie so much in the invention of a proper self-acting mechanism for drawing out and twisting cotton into a continuous thread, as in…*training human beings to renounce their desultory habits of work,* and to identify themselves with the unvarying regularity of the complex automation. *To devise and administer a successful code of factory discipline, suited to the necessities of factory diligence, was the Herculean enterprise, the noble achievement of Arkwright.* Even at the present day, when the system is perfectly organized, and its labor lightened to the utmost, it is found nearly impossible to convert persons past the age of puberty, whether drawn from rural or from handicraft occupation, into useful factory hands. After struggling for a while to conquer their listless or restive habits, they either renounce the employment spontaneously, or are dismissed by the overlookers on account of inattention.
>
> If the factory Briareous could have been created by mechanical genius alone, it should have come into being thirty years sooner; for upwards of ninety years have now elapsed since John Wyatt, of Birmingham, not only invented the series of fluted rollers, (the spinning fingers usually ascribed to Arkwright), but obtained a patent for the invention, and erected 'a spinning engine without hands' in his native town… Wyatt was a man of good education, in a respectable walk of life, much esteemed by his superiors, and therefore favourably placed, in a mechanical point of view, for
>
> maturing his admirable scheme. But he was of a gentle and passive spirit, little qualified to cope with the hardships of a new manufacturing enterprise. *It required, in fact, a man of Napoleon nerve and ambition, to subdue the refractory tempers of workpeople accustomed to irregular paroxysms of diligence…* Such was Arkwright.
>
> (Ure, cited in Marglin 1974:46)

Marx uses only the first three sentences of this quotation, at p. 549 of Volume One of *Capital*, where he talks of the factory code as 'the caricature of the social regulation of the labour process' (Marx 1867a:550). The ambiguity of Marx's

explanation of the direction of causality between discipline and the introduction of machines renders it susceptible to the conventional interpretation that the second facilitated the first. (The passage I have in mind is this: 'The technical subordination of the worker…gives rise to a barrack-like discipline, which is elaborated into a complete system in the factory…' (Marx 1867a:549).) But the message of the full quotation is the precise opposite. Arkwright succeeded in introducing the water frame into the factory because he had the personal resolve and organizational ability necessary to impose his will on workers. His technical contribution was nil.

8 How labour is organized into a productive force

1

> Let us not…ask *why* certain people want to dominate, what they seek, what is their overall strategy. Let us ask, instead, *how* things work at the level of on-going subjugation, at the level of those continuous and uninterrupted processes which subject our bodies, govern our gestures, dictate our behaviours etc.
>
> (Foucault 1980a:97, my emphasis)

2 These terms come from Marx 1866, Part 3:377; Marx 1865:232 and 259; and Marx 1858:37, 98 and 540, respectively.

3 Note: the concept, 'abstract labour', but not the term, appears in *The Poverty of Philosophy* (Marx, 1847a:127).

4 Most commentaries grant that abstract labour is a real not a mental abstraction, but wrongly construe it as the abstraction of exchange. This ignores the fact that commodities have prices before they go to market and that the magnitude of these prices is proportionate to socially necessary labour which is caused by the abstraction of production.

5

> With the new form of capital accumulation, new relations of production and the new legal status of property, all the popular practices that belonged either in a silent, everyday tolerated form, or in a violent form, to the illegality of rights were reduced by force to an illegality of property.
>
> (Foucault 1977:86–7)

These tolerated, popular practices are similar those natural rights Marx discovered and defended while editor of the *Rheinische Zeitung*.

6 He became aware of 'models' (or 'analytics', as he calls them) in *The History of Sexuality*, Volume One (Foucault 1981).

7 For example, 'the examination', in 'The Means of Correct Training', parallels 'the composition of forces', in 'Docile Bodies'.

8 The archaic meaning of 'docile', for example, is 'teachable' or 'easily managed'. This meaning may now seem strange, but it was employed in Marx's time. This usage is evident in this quotation from Lord Ashley, cited in *Capital*, Volume One, which explains why employers prefer to employ married females: because 'they are attentive, docile' (cited in

Marx 1867a:526, n. 60).

9 For example, many personnel management and accounting techniques originated in monasteries. See Kieser 1987.

10 'The principle of the factory system, then, is to substitute…the *partition* of a process into its essential constituents, for the division or graduation of labour among artisans' (Andrew Ure, *The Philosophy of Manufactures*, London, 1835, p. 20, cited in Marx 1867a:502, n. 17, my emphasis).

11 Marx is referring to two developments that revolutionize the labour process during the period of manufacture. I discuss them below.

12 Individuals may be observed in two senses: literally and figuratively.

13 'Table': 'that enables thought to operate upon the entities of the world, to put them in order, to divide them into classes, to group them according to names that designate their similarities and their differences' (Foucault 1973:xvii).

14 'Among workers, it [panopticism] makes it possible to note the aptitudes of each worker, compare the time he takes to perform a task, and if they are paid by the day, to calculate their wages' (Bentham, cited in Foucault 1977:203).

15 For an account of what I have in mind by rules, how they are negotiated and how they may be studied empirically, see Clegg (1975).

9 The promised 'connected whole'

1 Peter Armstrong criticises 'disciplinary power' for 'obliterating' the role of material sanctions in the production of outward conformity and inner acqui-escence (Armstrong 1994:39). He argues that 'accounting, whether in the form of standard costs, budgetary controls or financial reports' does not mould 'the actual details of individual conduct' (Armstrong 1994:31). This may be true of accounting considered alone, but once one looks at the inter-relationships between accounting, industrial relations and human resource management techniques the grounds for these criticisms are removed. Cost accounting specifies standards, human resource techniques specify performance and behaviour, via rules of employment, and industrial relations techniques manage sanctions when these rules are infringed.

2 I suggest that this distinction between different types of cause helps explain Armstrong's observation of a tension between 'Foucault's empirical recognition of resistance' and apparent inadequate theorization of it (Armstrong 1994:37).

3 The 'social determination of capital and of capitalist production…is expressed juridically in capital as property' (Marx 1863, Part 3:492).

4 'Accounting is the language in which the rights (or, rather claims in the traditional accounting lexicon) of people to resources are expressed' (Gangolly *et al.*, 1996:383). It is for this reason, I suggest, that the debate over Foucault and Marx has arisen in—of all places—a journal of accounting *(Critical Perspectives on Accounting)*.

5 For an example of this method of abstraction in the natural sciences, see how Michael Faraday shows how the laws of the universe are at work in the burning of a candle (Faraday 1920). I owe this point to Erna Dominey.

6 Re 'the dearth of empirical applications of his model', I am thinking of Peter Armstrong's (1994) observation of a tendency for Foucauldians to use his work as a rhetorical or

theoretical resource from which they depart to the empirical but to which they seldom return and which they seldom attempt to revise.

7 Let me anticipate one possible objection: Marx's concern is with production, Foucault's concern is 'with people situated outside the circuit of productive labour' (Foucault 1980a:161). Does this not render their work incompatible? I think not. It is important to recall Marx's comments in the 'Paris Manuscripts', where he switches from the critique of jurisprudence to the critique of political economy. He touches on 'the interconnections between political economy and the state, law, ethics, civil life, etc. …only to the extent to which political economy itself expressly touches upon these subjects' (Marx 1844a:231). But, as he explains, political economy does not touch on these subjects at all. It:

> does not recognise the unemployed worker, the workingman, insofar as he happens to be outside this labour relationship, the rascal, swindler, beggar, the unemployed, the starving, wretched and criminal workingman—these figures who do not exist for political economy but only for other eyes, those of the doctor, the judge, the grave-digger, and the bumbailiff, etc.: such figures are spectres outside its domain.
>
> (Marx 1844a:284)

Marx is saying only that these spectres are beyond the scope of his particular, 'economic' enquiry, his critique of political economy; he is *not* saying that they are beyond the compass of relations of production. The worker exists for the capitalist only when he exists for capital; Marx adheres to this theoretically as the capitalist does practically. He intended later to encompass these other figures within his promised 'connected whole', *Critique of Politics and Political Economy*, which would examine 'the interconnections between political economy and the state, law, ethics, civil life, etc.', but never did. These figures beyond the scope of political economy's restricted vision are precisely the figures Foucault is concerned with: 'the insane, prisoners, and now children' (Foucault 1980a:161).

10 Working capital to the surface

1 This dual conception develops in *The German Ideology* (Marx and Engels 1846).

2 'The three processes of which capital forms the unity are external; they are separate in time and space… Despite their inner unity, they exist independently alongside one another, each as the presupposition of the other' (Marx 1858:403).

3 For an account of maps, see Monmonier (1991), Hall (1992) and Buisseret (1990). For an account of how law maps social space using the mechanisms of scale, projection and symbolisation, see Santos (1987).

4 Marx's comment on France at the time of the Paris Commune is apposite here: the political character of the state changed 'simultaneously with' and 'at the same pace as' the economic changes of society (Marx 1871:517). Indeed, they did: because they are forms of the same thing.

5 I owe this point to Richard Hyman.

6 *Discipline and Punish* 'is limited to an investigation covering the period up to about 1830', it

is not a description of modern society (Foucault 1991:37).

7 ‘The two large centres of the crises of 1825–57, America and India, have been brought from 70 to 90 per cent nearer to the European industrial countries by this revolution in transport’ (Marx 1864:71).

8 The most popular TV show in the United States during the 1990s, *Seinfeld*, followed the lives of four postmodern monads and was known as a show about nothing.

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Abbreviations

COD Concise Oxford Dictionary
CW Karl Marx and Frederick Engels (1975) *Collected Works.* New York: International Publishers. Cited as CW plus vol. no.
OED Oxford English Dictionary

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To be consistent with my chronological-bibliographic reading, I cite works of Marx by their date of original composition rather than their first publication.

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