

Critical science and society: the geographer's interest

The career route in geography has nothing whatsoever to do with being oriented towards productive geography and everything toward 'playing the game' of personal career. It goes like this: At that point in their training where the student is supposed to do a significant piece of independent research, at last after starting in kindergarten as a total absorber of instruction, what does the typical geography graduate student do? He continues in his past pattern of trying to please his teachers. He cases the joint 'realistically' and rationalizes his sellout with the slogan 'after I get my union card'. Having conditioned himself into seeing his research as the symbol of his lack of integrity, to say nothing of his manhood, that is, having sold his thesis for his degree, he simply continues this pattern for the rest of his life. He publishes to keep from perishing. He sees tenure as the next 'union card'. And eventually he sees retirement as the goal of his existence. Along the way, he seeks out and finds a society of similar time servers, who rather than discussing what is wrong with themselves, the nature of geographers, they lash out endlessly, during marathon coffee hours, about the dismal nature of geography.

Bunge (1977: 36-7)

To those concerned with effecting social and political change, the central failing of the humanist critique of previous geographical practice was its inability satisfactorily to produce knowledge with the capacity to enable people to transform the social conditions of their existence. With its focus on understanding and reflection, the hermeneutic tradition, while providing a cogent theoretical critique of logical positivism, failed to create a sound basis for geographical practice concerned with emancipation (Habermas, 1974). It was therefore to radical traditions of social and political theory that geographers seeking to challenge the very foundations of capitalist society turned in their quest for a critical examination of the power relations that upheld it. The changing fortunes of this critical tradition in geographical enquiry closely reflect the social and political context in which it has emerged, and it is

therefore with a brief overview of this context that the present chapter begins.

7.1 The social context: geography in recession

Peet and Thrift (1989b: 6) note that radical geography began in the late 1960s

as a critical reaction to two crises of capitalism at that time: the armed struggle in the Third World periphery, specifically United States involvement in the Vietnamese War, and the eruption of urban social movements in many cities, specifically the civil rights movement in the United States and the ghetto unrest of the middle and late 1960s in the United States, Great Britain and elsewhere.

Thus, particularly in the United States it was among young political and social geographers that the first interest in a radically relevant geography emerged. However, the recessions of the mid-1970s and the early 1980s served to curtail the expansion of higher education that had taken place in the 1960s, and provided difficult conditions for the development of a radical critique. Peet and Thrift (1989b), for example, see four reasons why the initial optimism of the radical geography movement was tempered during the 1980s: the strengthening critique of mainstream Marxist thought; the uncertainty of revolutionary politics; the replacement of the laid-back academic style of the 1970s by narrow professionalism in the 1980s; and the incorporation of some of the early radicals into the very establishment against which they had battled. The result, they suggest, was that radical geography became more sober and less combative. However, it can also be argued that, as with the changes that took place in the humanistic approach to geography, the developments in radical geography during the 1980s reflected a growing understanding of the intellectual linkages between geography and other social sciences. In particular, instead of the simple importation of ideas from Marxist political economy, geographers began to develop a fruitful dialogue with political economists and sociologists, which led to a substantial reappraisal of the interconnections between social relations and spatial structure (Gregory and Urry, 1985b). More recently, this dialogue has been extended as geographers have also begun to grapple with the critiques of science and society offered by realism and postmodernism.

7.1.1 Capitalist society in the 1970s and 1980s: power, recession and science

The apparent economic successes of the major capitalist states in the 1960s, and the superficial opening of access to the material benefits of that success in the burgeoning consumer society, opened the possibility by the end of the decade of a more reflective, less technically utilitarian,

form of science. Society could readily accommodate not only those who wished to lead alternative life-styles, smoke cannabis and believe in flower power, but it could also afford an expansion in the liberal arts and the social sciences. As with the flowering of the Renaissance in 15th- and 16th-century Italy, there was the opportunity for an explosion of artistic and intellectual talent. As Chapter 6 has elucidated, one effect of this on geography was an expansion of interest in humanist philosophy. However, two aspects of the capitalist expansion of the 1950s and 1960s rapidly led to an increased awareness of the underlying contradictions which sustained it. First, its success was in part enabled by an increase in inequality, not only within the capitalist states, where although many of the poor became richer they did so in general at a less rapid rate than did those who were already rich, but more importantly between the capitalist states and the nations of what became known as the Third World. Second, moreover, the rapid expansion in the mass media and the communications industry meant that the population of the capitalist states could be made aware of these inequalities much more rapidly and extensively. Mass protest, both organized and disorganized, thus became not only much more feasible, but also more effective as a means of influencing political power.

The combined effect of these influences was that many geographers were brought face to face with the failures of capitalism and the empirical-analytic science which provided its technical support, at a time when there was an opportunity for them to express their disquiet in radical ways that had previously been impossible. Although there was still a profound fear of communism among the establishment and the political leaders of the capitalist states, particularly in the United States and Britain, the apparent success of capitalism meant that Marxism was no longer seen as such a threat, and that Marxist intellectuals, if not welcomed with open arms, could at least be tolerated. In France, where the broadly defined left had for many years retained a stronger influence over public opinion than had been the case in Britain and the United States, this found its expression in the acceptance of a range of Marxist ideas which were to form the basis for the widespread student riots at the end of the decade. At one extreme, there were those such as Marcuse (1964, 1972) who, in the light of the mass killings that had taken place under Stalin, turned to a more humanist interpretation of Marx's writings, focusing on concepts such as freedom, alienation and humanity. On the other, were those following Althusser (1969; see also Althusser and Balibar, 1970), who decried such revisionist tendencies, and advocated a return to the scientific historical-materialist core of Marx's later writings, and their central interest in understanding as a guide to action. In particular, it was Althusser's symptomatic reading of Marx, and his distinction between the writings of the young Marx, whose ideological problematic he saw as being inherited from Feuerbach, and those of the mature Marx whose problematic he claimed to be scientific, that were to set the scene for both theoretical debate and political action during the early 1970s (Lock, 1972; Macintyre and Tribe, 1975). Such arguments were to form a fruitful

source of debate for a new generation of geographers entering the profession at this time (see Peet, 1977b; Castells, 1977; Gregory, 1978).

By the early 1970s, the capitalist global economy was in a period of crisis engendered by rising inflation and falling production. Following the devaluation of the US dollar in 1971 and 1973, and the 1973–74 hike in oil prices initiated by the Organization of the Petroleum Exporting Countries (OPEC), the crisis became a major recession. At first, this did not appear to have a great influence on higher education and scientific research other than serving to curtail the expansion of the previous decade, but with the second major rise in oil prices in 1978–79, which plunged the capitalist states further into recession, it became apparent that a substantial reorganization of higher education institutions was likely. Two trends were to coalesce in the early 1980s: on the one hand, the lack of graduate employment opportunities made many students focus attention much more directly on the career implications of their degrees than had previously been the case, while on the other governments became acutely aware of the need to fund research relevant to their needs and thus to the future success of capitalism. The subsequent economic revival under Reagan in the United States and Thatcher in Britain further encouraged the majority of students to forgo radical thoughts, to concentrate on learning useful knowledge, and to enter successful careers in banking, industry and finance. If in the 1970s Marx had appeared to students as exciting and even a little bit dangerous, by the 1980s he was seen by many as irrelevant. Indeed, by the end of the decade, with the collapse of the communist regimes in eastern Europe, mentions of Marxist theory in lectures were frequently greeted if not by derision, at least by total apathy.

7.1.2 Geography and the production of knowledge

Against this background, there were broadly four positions which could be adopted by geographers in the 1970s and 1980s. First, they could claim that they were pursuing pure value free science. This did not have to be seen as being of direct applied relevance, because all such science found its justification in the argument that it led to an advancement of knowledge that would eventually be of use to society. This empirical–analytic view of science, with its technical interest, was that frequently taken by physical geographers, who continued to pursue their explanatory research into the accurate description and modelling of physical processes (Clark, Gregory and Gurnell, 1987a). A second alternative was to seek to produce new knowledge, that would explain the recession and enable the social and economic problems associated with it to be resolved for the good of capitalist society. This was empirical–analytic research that the state and industry were eager to fund, and although not all of it was necessarily directed by the tenets of logical positivism (Bennett, 1985), much of it sought technical and empirical solutions to problems that more critical analysts argued lay at the very foundation of the capitalist enterprise (compare for example Bennett, 1980 with Massey and Meegan, 1982). For young geographers

keen to rise in the academic hierarchy this was a sure way to progress (Beaumont, 1987), whereas for those who began their careers in the late 1960s it offered the hope of renewed relevance (Wilson, 1970, 1989; Wilson and Bennett, 1985; but see also Hay, 1985). Third, it was possible to retreat into the transcendental option offered by humanism, and discussed in Chapter 6. Again, this offered an illusion of pure scholarship, and while it helped to develop an understanding of the human meaning of recession, repression and inequality, it generally failed to offer practical solutions to their replication. Finally, there was the radical alternative, which self-consciously sought to produce a revolution in geographical theory and practice (Quaini, 1982). As Peet (1977b: 64) has summarized, two central assumptions underlay its practice: 'first, and most obviously, . . . there is no such thing as objective, value-free and politically neutral science, indeed all science, and especially social science, serves some political purpose; secondly, . . . it is the function of conventional, established science to serve the established, conventional social system and, in fact, to enable it to survive'.

7.1.3 *The origins of radical geography*

The urban and racial unrest in the United States, together with the war in Vietnam, provided the context for young urban and political geographers, as well as those interested in development studies, to turn to Marxist political economy for a framework in which such expressions of capitalist structural contradictions could be interpreted. A new journal, *Antipode*, was launched at Clark University, in Worcester, Massachusetts, specifically as a forum for the publication of such self-proclaimed radical geography, and early issues capture both the fervour and commitment of its authors and editors (see Peet, 1977a). Its aim was 'to ask value questions within geography, question existing institutions concerning their rates and qualities of change, and question the individual concerning his own commitments' (Wisner, 1969: iii). Early issues of *Antipode* concentrated largely on the spatial manifestation of social welfare topics associated with such subjects as poverty, minority rights and access to social services, and as Peet (1977b) points out much of this adopted a methodology that had been developed within the existing framework of power relationships. It was not until the publication in 1972 of a paper by Harvey on revolutionary and counter revolutionary theory in geography in the context of ghetto formation that a new emphasis began to be revealed. This found its theoretical and practical grounding specifically in the writings of Marx, and from 1973 until the end of the decade radical geography became effectively synonymous with Marxist geography. As Peet (1977b) points out, this injection of Marxist theory came initially from Britain, where geographers had begun to explore Marx's writings in the late 1960s, and it was only during the 1970s that geographers in the United States really began to examine his corpus of work in detail.

Paradoxically, two of the strongest exponents of quantitative geography and logical positivism in the discipline during the 1960s, Harvey

and Bunge, were also at the forefront of the introduction of a radical critique during the 1970s. Harvey (1973) recounts the way in which his theoretical and practical emphasis changed in the introduction to his book *Social justice and the city*, which rapidly became the flagship of the new radical geography. Having completed his examination of methodological problems in *Explanation in geography*, Harvey turned his attention to issues of social and moral philosophy, and to the ways in which they could be related to geographical enquiry. As he recounts, 'Since I had just moved to Baltimore, it seemed appropriate to use that city, together with other cities with which I was familiar, as a backdrop against which to explore questions that arose from projecting social and moral philosophical considerations into the traditional matrix of geographical enquiry' (Harvey, 1973: 9). Central to his developing ideas was the way in which social processes and spatial forms are related, and in *Social justice and the city* these are examined in the context of four particular themes: the nature of theory, the nature of space, the nature of social justice, and the nature of urbanism. For Harvey (1973: 17) the appeal of Marx's analysis was that it enabled him to achieve a reconciliation between such disparate topics, collapsing the 'dualisms without losing control over the analysis'. In conclusion, Harvey (1973: 286) suggested 'that the most important thing to be learned from the study of Marx's work is his conception of method. And it is out of this conception of method that theory naturally flows'. Subsequently, radical geographers began to examine a range of Marx's methodological and theoretical work, addressing in particular issues of underdevelopment-imperialism, rent theory, cultural evolution and spatial inequality (Peet, 1977b).

If Harvey's work can be seen as being seminal in the development of the theoretical and methodological implications of Marx's writing for the intellectual world of geography, Bunge's life from the mid-1960s, and in particular his efforts to bring geography to the poor, reflects the very different world of practical action. 'In 1967, Bunge was refused tenure at Wayne State University in Detroit on the grounds of obscenity (swearing during lectures)' (Peet, 1977a: 14), and in the following year he founded the Society for Human Exploration, designed to reinject into the discipline what he saw as the true meaning of exploration. He sought to encourage contributive explorations, rather than exploitative expeditions, and research that was community-people oriented rather than campus-career oriented. In practice, he was instrumental in arranging for courses directly relevant to central-city blacks to be offered at Wayne State University and in 1970 at Michigan State University (Horvath, 1971), but soon afterwards the principles of community control and free tuition which underlay this Expedition to Detroit proved to be unacceptable to the university authorities and the project was terminated (Peet, 1977b). Subsequently Bunge was forced to leave the United States, and moving to Canada he resurrected his agenda in the form of the Toronto Geographical Expedition which was established in 1972 (Stephenson, 1974). Bunge's tradition of radical practice, however, was by its very definition always going to be attacked by the

establishment. For those willing to coexist within the present institutional structures of capitalist society, a new forum for debate was therefore necessary, and in 1974 a Union of Socialist Geographers was established to provide a more conventional forum for the organization of socialist practice within the discipline.

By the end of the 1970s, once the initial engagement with Marx's ideas was over, many geographers turned increasingly to other structuralist interpretations of the relationship between social and spatial structures, to realism, and eventually in the late 1980s to postmodernism. It is on these differing strands of a radical geography that attention now focuses.

7.2 *Radical geography and a structuralist alternative*

One of the key features of the development of a radical tradition of geography was that it brought geographers into close contact with other left wing social scientists. Radical geography thus formed but a part of a wider radical social movement. However, deeply embedded within it was a profound tension between its theoretical and practical interests.

7.2.1 *Marxist geography*

While Marx's work has been used by geographers in a substantive way to provide insights into the workings of capitalism, its greatest influence has been methodological. In establishing dialectical materialism as a form of scientific practice, Marx provided a framework in which much radical geography has subsequently been pursued. In its original form, the dialectic method as practised by Zeno, a disciple of Parmenides (Russell, 1961) in the 5th century BC, was simply the way of seeking knowledge through continuous questioning and answering, with one answer providing the basis for a subsequent question. It was used later in works such as Abélard's *Sic et non*, composed in 1121–22, but the dialectic achieved its fullest development in Hegel's philosophy, and particularly in his *Phenomenology of spirit*. In Hegel's almost mystic idealism, the aim of philosophical enquiry was the pursuit of the Absolute Idea, a form of self-consciousness in which subject and object are one. For Hegel nothing is ultimately real except the Whole, and knowledge of the Whole is reached through the dialectic method, involving the passing over of concepts or thoughts into their opposites, and eventually through continued reiteration of this method achieving a higher unity. Hegel's dialectic is usually characterized as being based on the triad of *thesis*, *antithesis*, and *synthesis*, but although much of his philosophical exposition did involve the use of triads, as in the instance of need–labour–enjoyment, he did not actually use this particular terminology. While recognizing that the concept of the dialectic had been used before, Hegel's innovative contribution was to insist that it

included a conception of necessary movement. Other vital notions in his view of the dialectic included those of negation, scepticism and reason. Hegel also applied this dialectic procedure to the progress of society, arguing that 'the history of Civil Society was simply the progressive realization of the Idea' (Gregory, 1978: 109). Two key ideas that Marx developed from Hegel's dialectic were his insistence on the conception of necessary movement, and the idea of the dialectic as historical process. However, he rejected Hegel's suggestion that the driving force of the dialectic was Spirit. Marx's seminal contribution was to replace Hegel's idealist conception of the progress of society as determined by the human mind, with a dialectic materialism which reflected the materialist conditions of human life. For Hegel people thought; for Marx they laboured.

Six related theoretical abstractions underlay Marx's conception of history, and these can be found most clearly expressed in the preface to his *Critique of political economy* originally published in 1859. First, it was underlain by a concern with *relations of production*. He thus argued that things are always seen as objects, what he termed the fetishism of commodities, rather than as the social relationships which they embody. Second, his theory was *materialist*, focusing on the economic structure of society constituted from the totality of these relations of production. Third, this involved a particular conceptualization of *structures*, in which the economic structure, or infrastructure, is seen as providing the foundation for the particular expression of legal or political structures which form the superstructure and to which correspond particular types of social consciousness. In turn, fourth, he argued that the forces and relations of production constitute a *mode of production*, of which there have been four: the Asiatic, the ancient, the feudal and the modern bourgeois (Howard and King, 1985). It is at this junction that, fifth, the *dialectic* enters his argument, because Marx envisaged that each mode of production has its own internal dialectic of change. Each has its particular contradictions between the forces and class relations of production, and it is through the resolution of these that a new mode of production is forged. The aim of his research was thus, sixth, to identify the *historically determined laws* governing such processes, and it was this that he set out to do in *Capital*. Underlying these theoretical constructs, Marx had a clear practical interest: that of revealing to the proletariat the contradictions in the modern bourgeois, or capitalist, mode of production, in order to hasten the advance of global socialism through the forcible overthrow of existing social conditions.

Such ideas have found their clearest relevance in four main areas of geographical enquiry. First, in historical geography Marx's own writings had clear relevance to the study of the transition from feudalism to capitalism, in the rise of industrial capitalism, and in the colonial and imperialist extension of capitalist relations of production from their European hearth to the remainder of the world. Good examples of such work include Dunford and Perrons's (1983) account of the historical development of capitalism in Britain, which combines the work of a human geographer with that of a social economist, Gregory's (1982b,

1984) examinations of industrial change and class conflict particularly in the Yorkshire woollen industry, and Blaut's (1975) survey of Marxist theories of colonialism and imperialism. The second broad area in which geographers have built on Marx's ideas has been in an urban context. Two particular works stand out as being of early prominence in this field: Castells's (1977) *The urban question: a Marxist approach*, first published in French in 1972, and Harvey's (1973) *Social justice and the city*. Subsequently, Marxist approaches have been used in the planning context (Dear and Scott, 1981), in developing theories of rent (Harvey, 1974; Harvey and Chatterjee, 1974), and in housing (Boddy, 1976; Duncan, 1977). Third, a Marxist framework has been used in an attempt to understand regional inequalities associated with industrial restructuring (Massey and Meegan, 1979, 1982; Carney, Hudson and Lewis, 1980). Finally, although Marx himself wrote little about the Third World, his ideas on the development of capitalism, and its implications for social and regional inequality have had a considerable influence on research on the poorer countries of the world. This is typified by the work of Slater (1973), Santos (1974) and Buchanan (1972) on underdevelopment and empire.

What unites this work is its interest in class conflict, its focus on modes of production, and its pursuit of historically determined laws. More recently there has been a somewhat more critical appraisal of the links between Marx's arguments and the potential geographical contribution to radical science. In particular, Harvey (1982, 1985a, b) has drawn attention to Marx's lack of spatial awareness, and has sought to extend his analysis to include a comprehensive examination of the spatial implications of some of his theoretical statements, with particular reference to the urban context.

7.2.2 *The place of radical geography*

The different paths followed by Harvey and Bunge reflect a central tension within radical geography: that between theory and practice. As Bunge's experiences illustrated, a practice designed overtly to overthrow the institutions of capitalism will be challenged systematically by the establishment against which it is arrayed. In contrast, a purely intellectual critique, without a corresponding practical commitment can lay claim only to self-indulgence. For those seeking to pursue a truly radical geography, designed to overthrow the social and economic repression of capitalism, three alternative paths are open. First, a radical geography might be created outside the higher education institutions of the capitalist states. Such a path, however, assumes that geographical teaching and research have something to contribute to revolutionary practice, and there have been few, if any, clear attempts to substantiate such a claim. Nevertheless, taken to its extremes, and once again returning to Strabo's connection between geography and the requirements of military commanders, such practice would involve trained geographers leaving the safe confines of universities and entering the uncertain and dangerous world of armed revolutionary struggle. A

second alternative is for geographers to remain within their institutional contexts, satisfying the requirements of their capitalist paymasters through teaching and research, but at the same time becoming involved in local or national political action. Although this represents a much safer strategy, and while a number of geographers are indeed active, particularly in local politics, it is remarkable how few geographers have actually entered national political arenas. The third alternative is to continue within the institutional structure of higher education, but to use that structure to reveal the contradictions of capitalism through teaching and the practice of research.

At an undergraduate and postgraduate level, teaching designed to challenge the basis of capitalism continues to take place, but during the 1980s it faced increasing pressure from four directions: the apparent economic success of capitalism encouraging students to participate in the material benefits associated with the Thatcher and Reagan era, typified by the 'yuppie' syndrome; increasing government intervention in higher education, through the tighter monitoring of courses and systems of repressive staff appraisal; a secondary education system designed increasingly to propagate useful, largely technical, knowledge, rather than critical enquiry; and the collapse of communism in Eastern Europe and the former Soviet Union. The full influence of the last of these factors has yet to be realized, but the abortive attempt by hard-line communists to stage a coup in the Soviet Union in August 1991, and the subsequent swing to capitalist relations of production, under the guise of democracy, has presented a fundamental challenge to radical social scientists and philosophers. The central problem here is that Marx, while providing a substantial critique of capitalism, largely failed to outline the economic, social and political framework within which he envisaged socialism as being practised; the shape of socialism was to be determined by the revolutionary practice of the proletariat. Consequently, in the minds of most people in capitalist society, the political, economic and social experiences of the Soviet Union between 1917 and 1991, under the name of communism, have erroneously become equated with Marxism. However, the collapse of communism does not necessarily mean that capitalism is in any way the only, or best, form of economic system, nor does it mean that Marx's writings are irrelevant as an analysis of contemporary capitalism. The challenge facing radical geographers in the 1990s is to lay bare the contradictions still present in capitalism, and to reveal them to their students and those among whom they conduct research.

The central failing of much Marxist geography has been its focus on theoretical and philosophical critique rather than on practical action. This is typified by the arguments of many radical geographers in the 1970s decrying direct involvement in the implementation of social and economic change. In reviewing the field of development studies at the end of the 1970s, Harriss and Harriss (1979: 576), for example, suggested that there were only two approaches then current:

on the one hand, varieties of the liberal position entailing at best a multidisciplinary approach in analysis and committed to intervention

through 'planning'; and on the other, radical positions acknowledging various connections with Marxian theory and generally critical of interventionism, even when this involves practical programmes with the apparent objective of ameliorating conditions of poverty.

For most radical geographers, practical intervention or 'the practice of development by national and international agencies' (Harriss and Harriss, 1979: 582) was shunned because of its links with capitalism. A second factor influencing the lack of a practical content in radical development studies was that Marxist and other radical critiques of logical positivism were in part built upon a critique of its predictive capacity. If radical geographers were criticizing logical positivism for its failed efforts to explain and predict, it was difficult for them therefore to justify any predictions of their own.

Nevertheless, one area of substantial theoretical and also practical importance where a radical stance has begun to reach fruition has been in the development of a feminist approach to geographical enquiry, focusing on issues of gender inequality and the oppression of women (Bowlby *et al.*, 1989; Peake, 1989). This has been concerned both with substantive research themes and also with the institutional reconstruction of the discipline. Thus, although professional geography is still dominated by men, there has been increasing recognition of gender bias in the profession, and a number of bodies, such as the Association of American Geographers and the Institute of British Geographers, now have equal opportunities statements as part of their constitutions. Moreover, the sexist language that has dominated modern geographical writing and that is evident in many of the quotations cited in this book, is increasingly being replaced by a more gender aware vocabulary. In terms of research agendas, feminist geographers have also opened up a wide spectrum of issues that have previously been ignored, and the 1980s have seen the emergence of a strong tradition of such research exemplified by McDowell's (1983) analysis of the gender division of urban space, Mackenzie's (1986) examination of women's responses to economic restructuring, and Momsen and Townsend's (1987) edited volume entitled the *Geography of gender in the Third World*. While the rise of feminist geography has had substantial repercussions for the discipline, the same can not be said of concern with other forms of oppression and inequality. In particular, the dearth of black geographers in the profession, and, with a few notable exceptions (see for example Jackson, 1987), the lack of substantial research on racism are matters for continued concern.

Overall, though, and as a result both of the countering effects of the establishment, and of its inability to achieve practical results, radical Marxist geography has had a relatively small effect on the discipline. As Johnston (1986b: 386) has commented, 'Although very active, those committed to radical geography have not made great inroads into the discipline's establishment, in part because of their revolutionary aims, their overt political goals and their threat to the status quo.' By the early 1980s the initial somewhat naïve engagement of geographers with

Marxist theory had given way to a much broader examination of the wider context of the social theory of which it was a part. In particular this has led geographers such as Gregory (1978) and Sayer (1984) to examine Marxist theory within the broader context of structuralism and realism.

7.2.3 *Structuralist alternatives*

The exploration of Marxist political economy during the 1970s introduced geographers to a range of different structuralist philosophies. In particular Peet and Thrift (1989b) note the contrasts between Castells's (1977) adoption of Althusser's structural Marxism, and Harvey's (1973) more eclectic combination of Piaget's (1971) structuralism with Marx's political economy. Moreover, Gregory (1978) draws attention to the assumptions and procedures which Piaget's epistemology shares with that of Lévi-Strauss, and thus reintegrates his discussion of structuralism with the debate between Vidal de la Blache and Durkheim over the relationships between geography and sociology. What the wide range of structuralist philosophies hold in common is that the empirical world of observable phenomena is determined by underlying structures. In contrast to systems, which are concerned with empirical reality, structures cannot be touched and measured, but are nevertheless assumed to be real. Structuralism therefore offered geographers another source of ideas with which to counter the empiricism of the logical positivist version of geography that dominated the 1960s. Moreover, this property of structures also provided geographers with a neat solution to the problem of description and explanation, because if such structures exist then explanations of surface phenomena can be achieved through a description of the underlying structures. In particular changes in the spatial distribution of surface features could be explained through recourse to a description of their underlying structural transformations. However, there remains considerable debate over the way in which knowledge about such underlying structures can be achieved. Glucksmann (1974) thus contrasts the approach of Lévi-Strauss, which seeks to make theoretical abstractions from empirical reality, with that of Althusser, which begins with theory and thus works from the underlying structure to surface reality.

Lévi-Strauss (1953, 1963) was an anthropologist whose concern with social structure emerged from his development of a methodology designed to enable him to understand aspects of kinship, myths and symbols (Leach, 1974). This methodology was based on the initial assumption that everything in life is made up of pairs of opposites, or binary oppositions, such as light/darkness or naked/clothed. Lévi-Strauss's method was then to define a phenomenon under study as a relationship between two or more terms, to construct a table of the various possible permutations of those terms, and then to use this table as the basic object for analysis. The empirical phenomenon chosen at the beginning thus becomes but one possible combination of the complete system. His goal was eventually to identify the common

features underlying all systems of myth and kinship from these basic tables. In so doing he combined ideas from linguistics with mathematics to suggest that kinship systems can be interpreted as examples of algebraic structures (Piaget, 1971). In particular his schema closely parallels that of de Saussure's (1916) synchronic view of language, which was concerned with the relations that bind terms together to form a system in the collective minds of speakers. Just as de Saussure's systematic linguistics was concerned with determining the underlying rules governing communication, so Lévi-Strauss's anthropology was intended to reveal the structure underlying human society. However, such a conceptualization is based on the premise that any differences in social phenomena are but variants of the same underlying structure. Consequently, there is no dynamic of change and no possibility of progress. Lévi-Strauss's conceptualization of historical change has therefore been termed 'categorical' in contrast to Althusser's 'dialectical' conception (Gregory, 1978).

While Lévi-Strauss was essentially concerned with anthropology, and with understanding universal truths of the human mind, Althusser's focus was on philosophy, and in particular with a reinterpretation of Marx's historical materialism. This involved a discussion of the concept of structure at three related but distinct levels. First, in identifying an epistemological break in Marx's writings, Althusser (1969) focused on the structures underlying the written text to suggest that prior to 1845 his problematic was ideological whereas subsequently it was scientific. This is not to suggest that the former was in some way false, and the latter correct, but rather that scientific and ideological knowledge serve different purposes. For Althusser, science is

a form of knowledge which works with concepts as a means of production to produce its own object and order of proof, and thus produces new knowledge. In contrast to this, ideological knowledge can produce only variations of the original, since its problematic does not break away from the context of practical-social problems, and merely re-translates these practical-social problems into different forms (Macintyre and Tribe, 1975: 18).

Marx's achievement was thus to move from a system of thought which was ideological to provide the basis of a new science which would enable social formations to be analysed and thus changed.

However, secondly and in more general terms, according to Althusser's formulation, ideology is a structure enabling people to think and act. In contrast to some interpretations of Marx which conceived of ideology as a device used by the ruling class to deceive the mass of the population and thus maintain it in a state of subservience, Althusser envisaged ideology as combining both conscious and unconscious thoughts. Ideology, for Althusser, thus serves an important role 'representing our relations to us and enabling us to regulate our behaviour' (Macintyre and Tribe, 1975: 20).

This then, thirdly, required Althusser (1969) to provide an alternative to the crude economic reductionist interpretation of Marx's works,

which envisaged the economic base or infrastructure as always determining the form of political and ideological expression in the superstructure. Althusser did this by drawing a distinction between dominant and determinant instances (Althusser and Balibar, 1970). He thus suggested that social conflict could be formulated in any of three instances of social activity: economic, political or ideological practice. The instance in which this happened he termed the dominant instance, and he suggested that the economy then represented the field of possibilities in which the dominant instance could operate. It was in this sense that the economy was determinant. As Gregory (1978: 113) has summarized, 'In the capitalist mode of production, therefore, the economic level is both dominant and determinant, whereas in other modes of production other levels occupy the dominant position, but still as an effect of the conditions of existence of the economic level.'

Although variants of structuralism had important influences on biology, linguistics, mathematics and psychology as well as anthropology and philosophy, it was Althusser's structural Marxism that was to be of most significance to geography. This largely reflected the importance of Castells's (1977) work in introducing Althusser's interpretation of Marx to geographers, as well as Gregory's (1978) analysis of the potential contribution of structuralism to geographical enquiry. However, it also reflects the relatively limited links that had been established with other social sciences, particularly psychology and linguistics, prior to the late 1970s.

7.2.4 *Space, time and structuration*

Despite the power of the structuralist critique of empiricism and logical positivism, there was surprisingly little geographical research undertaken during the 1970s within an overtly structuralist framework. Although much radical geography can be interpreted as being broadly structuralist in approach through Althusser's interpretation of Marx's work, the main emphasis of most Marxist geography focused on its Marxist rather than its structuralist content. For those concerned with empirical research a central problem of Althusser's framework was its profoundly theoretical basis, which necessitated the interpretation of surface features through the prior construction of theory. In practice, neither Lévi-Strauss's or Althusser's extreme position is tenable; our knowledge of deep or underlying structures is in part determined by our experience of surface reality, but that experience itself is closely influenced by the economic, social, political and ideological structures which underlie it.

More formally, this problem reflects growing concern during the late 1970s and early 1980s with the inability of structuralism to deal with individual human actions. Thompson (1978) thus argued that Althusser's version of structuralism reduced men and women merely to passive carriers of structural determinants. This led to a widespread debate within Marxist social science (Benton, 1984), between those advocating a more humanist interpretation and those continuing to

support Althusser's version of structural Marxism. In geography Duncan and Ley (1982: 30) thus suggested that structural Marxists had created a holistic mode of explanation in which 'reified entities such as capital are treated as the formal cause while people are regarded as the efficient cause, the mere carriers of structural logic'. Critical of structuralism, they suggest that macroscale social structures 'do not have autonomy or an existence that is not ultimately reducible to cumulative human actions and interactions' (Duncan and Ley, 1982: 32), and they conclude that

the intersection of human geography with structural Marxism has led to a passive model of man that is conservative and results in an obfuscation of the processes by which human beings can and do change the world. Furthermore, philosophical holism is extremely difficult to apply in empirical research, the result being that in some cases the explanations are totally inadequate with causal power attributed to abstract mental constructions, while in other cases theoretical structures are almost completely divorced from the empirical analysis (Duncan and Ley, 1982: 54).

However one regards the philosophical critique of logical positivism provided by structuralism, this quotation once again emphasizes that it has proved very difficult satisfactorily to undertake empirical research based upon Althusser's structural interpretation of Marx.

One solution to the problem of how to combine human agency within a structural perspective was to seek to integrate elements of hermeneutics with structural Marxism. This had been attempted in sociology by Giddens (1979; see also 1981), whose structuration theory was also advocated from a geographical perspective by Gregory (1981) and Pred (1984). In essence, structuration theory sees structures as being both the outcome and the medium of human agency, and its aim is to analyse both the production and the reproduction of such structures. Giddens's (1981) structuration theory can be summarized in ten propositions. First, it distinguishes between structures and systems; structures have only a virtual existence in time-space, whereas social systems are constituted of situated practice. Second, 'Structures can be analysed as rules and resources' (Giddens, 1981: 26), and power is therefore as integral a part of social life as are meanings and norms. Third, there is the notion of duality of structure, by which Giddens means that structures are both the medium and the outcome of social practices. As he argues, 'The concept of the duality of structure connects the *production* of social interaction, as always and everywhere a contingent accomplishment of knowledgeable social actors, to the *reproduction* of social systems across time-space' (Giddens, 1981: 27). Fourth, 'the structural properties of social systems are embedded in *practical consciousness*' (Giddens, 1981: 27). Fifth, the study of structuration implies an analysis of the conditions of the continuity, change and dissolution of social systems in a non-functionalist style. Sixth, all reproduction is contingent and historical; 'the knowledgeable ability of actors is always *bounded*, by *unacknowledged conditions* and *unintended consequences* of

action' (Giddens, 1981: 28). Seventh, Giddens identifies three layers of temporality in the analysis of social systems: the immediate, the contingency of life in the face of death, and the long-term reproduction of institutions. Eighth, the theory of structuration is specifically concerned with power and domination. Ninth, 'the integration of social systems can be analysed in terms of the existence of "systemness" as *social integration* and as *system integration*' (Giddens, 1981: 29). Tenth, he differentiates between contradiction, the opposition between structural principles of a social system, and conflict, the struggle between actors.

Although the above summary reflects the dense style of Giddens's writing, there are two central points to be grasped from his overall approach. The first is that it seeks to understand the interactions between human agency and structure, and second, this is undertaken through an introduction to social theory of relative views of time and space. For Giddens (1981: 30) 'Time-space relations are portrayed as constitutive features of social systems, implicated as deeply in the most stable forms of social life as in those subject to the most extreme or radical modes of change.' Following Leibniz, Giddens (1981: 30-1) suggests that 'We can only grasp time and space in terms of the relations of things and events: they *are* the modes in which relations between objects and events are expressed.' For geographers, one of the most interesting features of Giddens's structuration theory, particularly through his reference to Hägerstrand's time geography, is thus that it represents an attempt to bring geographers' traditional concern with space into social theory. In so doing, Giddens (1985) seeks to develop the theoretical foundations of time geography through a consideration of the ideas of locales, the settings of interactions, and of regionalization. Although attempts have been made to incorporate these ideas into geographical research, such as Pred's (1984) examination of place, and Duncan's (1985) brief analysis of political legitimation in Sri Lanka, it has as yet mainly been discussed within a theoretical context.

A somewhat different means of incorporating space into structuralist and Marxist theory, but still focusing on a relativistic interpretation thereof, has been advocated at a theoretical level by Harvey (1985a, b, 1989a). In the continuing development of his understanding of capitalist urban society and consciousness, he suggests 'that the very existence of money as a mediator of commodity exchange radically transforms and fixes the meaning of space and time in social life and defines limits and imposes necessities upon the shape and form of urbanization' (Harvey, 1989a: 165). Harvey's overall argument is that 'Command over space . . . is of the utmost strategic significance in any power struggle' (Harvey, 1989a: 186). Following Lefebvre (1974, 1991), he suggests that the created space of society is the space of social reproduction, and thus that 'control over the creation of that space also confers a certain power over the processes of social reproduction' (Harvey, 1989a: 186). Harvey (1989a: 196) thus interprets the urban process under capitalism as being fraught with political confusions, which can be understood through an examination 'of how urbanization is framed by the intersecting concrete abstractions of

money, space, and time and shaped directly by the circulation of money capital in time and space'. Moreover, in order to examine changing urban spatial practices, and again building his arguments from those of Lefebvre (1974, 1991), Harvey (1989a) establishes a grid, based on three dimensions, namely those of (a) material spatial practices (experience), (b) representations of space (perception) and (c) spaces of representation (imagination), which he sees as intersecting with three aspects of spatial practice, namely (a) accessibility and distanciation, (b) appropriation and use of space, and (c) domination and control of space. Harvey's use of the term 'space', though, is somewhat ambivalent. As is evident from the above, in general he adopts a relativistic view of space, arguing that it is something that can be commanded (Harvey, 1989a: 165) and conquered. However, elsewhere, for example, he suggests that money 'permits the separation of buying and selling in both space and time' (Harvey, 1989a: 175), and that social power can be concentrated in space (Harvey, 1989a: 176), both of which would appear to represent absolute views of space.

In an attempt to operationalize the theoretical work on human agency and spatial structure in an empirical context, Massey (1984) has focused on an analysis of the way in which economic and social change vary in different places. This has led her and others (Massey and Meegan, 1982; Cooke, 1989) to examine spatial variation in the economic restructuring of Britain. In so doing, Massey has developed a line of argument somewhat similar to that of Giddens, but devoid of much of the latter's obfuscation. Moreover, in criticizing Giddens's concept of locale as being too vague, passive and lacking social meaning (Johnston, 1991a), this research has led to the coining of the term 'locality' to refer to the space where people's working and consuming lives are lived (Cooke, 1989). Localities are thus seen as the totality of social structure and human agency in space, as centres of collective consciousness, and as the expressions of social and political interest. However, as Duncan (1989) stresses, the term 'locality' has been used in many different, and sometimes contradictory ways. In particular, he argues that 'The idea of locale should not be equated with locality. The terms are asymmetrically related (localities may be locales, few locales will be localities), locale is not a dimension of social organization in the way that locality should be – rather it is a mediation of social relations, and where locale is typical locality is unique' (Duncan, 1989: 247). Furthermore, such an attempt to integrate structural Marxism with empirical research has suffered from criticisms on the grounds both that it is a return to empiricist studies of place and also that it is an attempt to give structural Marxism a human face (Cochrane, 1987; Smith, 1987). Nevertheless, as Duncan (1989) points out, the term 'locality' became one of the most popular geographical organizing concepts of the 1980s, and formed the focus for substantial research grant funding. As such, it represents one of the few examples of substantial empirical research resulting from the interface of structural Marxism and a concern with human agency.

7.3 *Realism and postmodernism*

By the mid-1980s the humanist and structuralist critiques of logical positivism had provided powerful arguments for the rejection of a conceptualization of geography as spatial science. However, they had concentrated largely on epistemological issues, concerned with the claims to knowledge advanced on behalf of different theoretical positions. Moreover, the numerous different theoretical alternatives advocated provided a highly fragmented framework for the discipline. For those seeking to understand this fragmentation, there was a need to find an overall way of interpreting this diversity of approaches to understanding in the social sciences. This has been achieved through two main approaches, namely those of realism and postmodernism. Whereas realism seeks to provide an overarching meta-theory within which the philosophical diversity of the last twenty years can be understood, postmodernism rejects such a possibility, and instead encourages an attitude of mind through which to interpret these changes.

7.3.1 *Reality and realism*

The contrasts between idealism, which conceives of the world as only being known and constituted by the human mind, and realism, which admits of a real world independent of human perception, were briefly alluded to in the earlier discussion of humanist approaches to geographical enquiry. During the 1980s, though, a new form of transcendental realism emerged in the social sciences largely through the influence of Bhaskar (1978, 1986; see also Keat and Urry, 1981), and this has begun to have a significant influence on geographical enquiry (Gregory, 1982a; Sayer, 1984, 1985a). Its particular attraction, as Cloke, Philo and Sadler (1991: 135) note, is that 'proponents of realism claim that all of the post-positivist tendencies in human geography can be interpreted as roads towards realism, be they labelled Marxist, humanist or even other "mainstream" geographies'. While realism can therefore be seen as a way of uniting such diverse critiques of positivism, this very inclusivity means that it is not easy to characterize it as a single philosophy; there is a real danger that realism can mean all things to all people. Indeed, Gregory (1986) has suggested that Habermas's critique of empirical-analytic sciences can be applied not only to logical positivism, but also to realism.

Outhwaite (1987) has argued that one of the key features of realism is that rather than focusing on epistemological issues it has addressed questions of ontology, seeking to examine the features of the world that make it possible for knowledge to exist. Bhaskar (1978) has thus suggested that there have been three main ontological traditions within science: classical empiricism in which the source of knowledge ultimately derives from what he terms 'atomistic events'; transcendental idealism in which knowledge derives from mental constructions

imposed on the world; and transcendental realism, which sees the basic objects of knowledge as the structures and mechanisms that generate phenomena. For Bhaskar (1978), in transcendental realism, these basic objects of knowledge are neither phenomena, as characterized by empiricism, nor human constructs imposed upon them, as would be the case with idealism, but rather real structures which endure outside our knowledge and experience.

Outhwaite (1987: 45) has summarized three basic realist ontological principles. First, there is a distinction between transitive and intransitive objects of science, the former being such things as models and concepts used by scientists, and the latter being the real objects making up the social world. This has the epistemological consequence that both empiricism and conventionalism, the latter of which implies that knowledge is merely the conventions adopted by scientists, are rejected, and this leads to the adoption of the concept of real definitions which are 'statements about the basic nature of some entity or structure' (Outhwaite, 1987: 45). Second, transcendental realism divides reality into three realms: the real, the actual and the empirical. 'The last of these is in a contingent relation to the other two' (Outhwaite, 1987: 45). Third, there is the idea that causal relations are tendencies determined by the interactions of generative mechanisms. Such interactions need not necessarily produce events, and if they do, these events need not be observed. In turn this has the epistemological implication that 'the realist conception of explanation involves the postulation of explanatory mechanisms and the attempt to demonstrate their existence' (Outhwaite, 1987: 46). In practice this leads to two methodological procedures for realists: the need to identify how something happens, and the need to establish how extensive a phenomenon is. More formally, this involves the identification of both causal mechanisms and empirical regularities. From what has been said so far, it is evident that this schema has close relationships with structuralism, hermeneutics and critical theory, and there has been much debate as to the relationships between these various philosophical positions (for a summary see Outhwaite, 1987). Bhaskar (1980), for example, makes clear that in his version of realism all science should be critical and emancipatory, both of which are key features of Habermas's critical theory. Moreover, realism has closely engaged the debate over human agency and structure (Sayer, 1984), although it has avoided making this the foundation of its approach, rather seeing structuration theory as one of a number of possible interpretations of the relationship between individuals and structures.

One of the key advantages offered by realism in Bhaskar's formulation is its potential to link together both the natural and the social sciences. Bhaskar (1978, 1986) thus suggests that similar ontological and epistemological foundations underlie both the natural sciences and the social sciences. However, not all agree, with Harré (1986) and Benton (1981) in particular seeking to reformulate Bhaskar's project, stressing that by their very definition social structures, unlike struc-

tures in the natural world, are not independent of individual human agents.

Within geography, the work of Sayer (1984) has been of seminal importance in developing the practical implications of realism. He thus identifies four main types of research which geographers can undertake: abstract theoretical research concerned with structures and mechanisms; concrete practical research focusing on events and objects produced by structures and mechanisms; empirical generalizations concerned with the establishment of the regularity of events; and synthesis research, which combines all of these types of research in order to explain entire sub-systems (Sayer, 1984). Furthermore, Sayer (1984) suggests that there are two fundamental varieties of concrete research, which he terms intensive and extensive. The former focuses on producing causal explanations pertaining to a small number of individual cases, whereas the latter seeks descriptive generalizations based on surveys of large populations. These, he emphasizes, address different types of question, use different methods, and define their objects in different ways.

Such ideas have provided the basis for a small but increasing amount of research specifically seeking to put into practice realist perspectives. Among the earliest such attempts were Allen's (1983) approach to property relations and landlordism, and Lovering's (1985) analysis of defence industries and the structuration of space in South Wales and the Bristol area of England. As this last example indicates, though, there is a close overlap of interest between realist approaches and those building on the structuration theory of Giddens. This similarity of interest has been emphasized by Soja (1985: 121) who suggests that 'The realist philosophy of social science seems almost ready-made to sustain and rationalize the theoretical directions taken by the contemporary materialist interpretation of spatiality.' Such attention to the significance of space has also been addressed by Sayer (1985b), who argues that the failure of much concrete research to develop satisfactory explanations results in large part from its failure to consider spatial form. Realist perspectives on the relationships between spatial and social structures have also led Gregory (1985b) to combine an interest with places, a new regional geography and spatial structure in order to develop an understanding of the role of space in society that also owes much to structuration theory.

7.3.2 Concrete buildings and postmodern alternatives

At the close of the 1980s, the increased links between geography and the other social sciences led some geographers, notably Soja (1989; but see also Dear, 1988; Gregory, 1989; Harvey, 1989b), to turn to the postmodern critique of previous social theory. It is extremely difficult succinctly to summarize the broad spectrum of ideas encapsulated within postmodernism. At one level it is a body of social theory that has been derived from the critique of the modernist style of architecture developed following the First World War by architects such as Le