commercial recovery revived the fortunes of cities: 'Just as the trade of the west disappeared with the shutting off of its foreign markets, just so it was renewed when these markets were re-opened.' Merchants led the urban revival, spearheaded by cities in the south (especially Venice) and on the North Atlantic coast (Bruges), where they settled in grey zones close to but outside former, pre-urban fortified enclaves: the *faubourg* or *portus*.

Later work has used archaeological, numismatic and textual sources to show that the Mediterranean remained a practicable trade route throughout this period, however, though activity was concentrated in the more secure central zones, and that trade was also vigorous along the Atlantic and Baltic coasts. Still more arrestingly, McCormick (2001) argued that communications between the Frankish empire and the eastern Mediterranean surged in the final decades of the eight and ninth centuries, so that Islam did not so much 'apply the coup de grâce to a moribund late Roman system' as offer 'the wealth and markets which would fire the first rise of Europe' and its commercial economy (see also Hodges and Whitehouse, 1981). It is now also clear that towns 'of unambiguously commercial character' grew in north-west Europe from the seventh and multiplied in the eight and ninth centuries, with important implications for both geographies of local and long-distance trade and the role of merchants in shaping urban MORPHOLOGY (see Verhulst, 1999).

Suggested reading

Hodges and Whitehouse (1983); Verhulst (1989).

pixel The term 'pixel' is a corrupted abbreviation of picture element – the individual elements arranged in columns and rows to form a rectangular, composite image. For example, a 1980s VGA (Video Graphics Array) monitor had a maximum resolution of 640 × 480 pixels (with 16 colours), whereas a modern Super VGA monitor can have 1,024 × 768 pixels (and 16,777,216 colours!). Raising the number of pixels per fixed area increases the resolution of an image, but also the amount of information to be processed and stored. Consequently, RASTER images are often compressed, as are digital photographs (as JPEGs) and DVD frames (using MPEG2).

place In a generic sense, a place is a geographical locale of any size or configuration,

comparable to equally generic meanings of AREA, REGION OF LOCATION. IN HUMAN GEOG-RAPHY and the HUMANITIES more generally, however, place is often attributed with greater significance (cf. LANDSCAPE). It is sometimes defined as a human-wrought transformation of a part of the Earth's surface or of preexisting, undifferentiated SPACE. It is usually distinguished by the cultural or subjective meanings through which it is constructed and differentiated, and is understood by most human geographers to be in an incessant state of 'becoming' (Pred, 1984). Place is a central concept in human geography in general and in CULTURAL GEOGRAPHY in particular, but there has also been renewed interest in the concept in ECONOMIC GEOGRAPHY, where it stands for the necessity of economic processes to be grounded in specific locales and for those locales to be proactive competitors within the global economy (Massey, 1984; Harvey, 1989b). For many geographers, place and the differences between places are the very stuff of GEOGRAPHY, the raw materials that give the discipline its warrant (cf. AREAL DIFFERENTI-ATION). But the potential interchangeability of place with other concepts is a sticking point. Place, region, area and so on all can denote a unit of space that has discrete boundaries, shared internal characteristics, and that changes over time and interacts with other similar units. What then makes place a distinctive concept? There are three arenas of discussion of special interest:

The idea that place, to be a place, necessarily has meaning. Although there are glimmers of this idea throughout the HISTORY OF GEOGRAPHY, it grew in popularity in the modern discipline with the rise of HUMANISTIC GEOGRAPHY. Tuan (1977), Relph (1976) and a host of others approached place as a subjectively sensed and experienced phenomenon. Often taking their inspiration from PHE-NOMENOLOGY, humanistic geographers regarded place as not only the phenomenological ground for geography but also an irreducible component of human experience, without which human experience itself could not be constituted and interpreted. Such experiences included perceptions of place, senses of place and human dwelling in and memories of place (see ENVIRONMENTAL PER-CEPTION; MEMORY). These understood to be formative of the unique experiences of individuals, while also

being specific to different cultures. Places themselves were understood as unique, meaningful material constructions that reflected and articulated cultural perceptions and habits. With the rise of FEMINIST GEOGRAPHIES and a 'new' cultural geography in the 1980s, place was understood less through the notion of a self-adequate, intentional human SUBJECT and more through the lens of POWER-laden social relations through which human subjects were at once constituted and de-centred. That is, subjects were not understood as authors of their own intentions and meanings, but as bearers of social IDEN-TITIES that they did not themselves create. Place meanings came to be seen as specific to particular racial and gender-, sexual- and class-based identities (e.g. Keith and Pile, 1993; McDowell, 1997b). (This was part and parcel of the changing meanings of CULTURE in geography.) At the same time, meaning itself was cast in a new light, being viewed as much less self-evident than before. Particular attention was given to how places are represented in different cultural forms (e.g. ART, FILM, LITERATURE, MAPS), which themselves were given over to specific social uses within power-laden fields of activity (e.g. Duncan and Ley, 1993). But meaning was understood to be controlled neither by its producers nor by its consumers. Meaning had no ultimate locus: it was understood to be contestable and alterable at each point of dissemination. Another important stream of place as meaning-filled sees place as a concept that helps mark the distinction between social order/disorder, the proper/improper and so on. Place in this regard is inextricable from imposed/ internalized social and cultural rules that dictate what belongs where. It denotes the (alterable) state of belonging versus exclusion, as suggested by the expression that something or someone is 'in place' or 'out of place' (Creswell, 2004) (see also HETEROTOPIA).

(2) Place as becoming locale. Temporal change as a constituent feature of place has long been accepted, particularly in cultural-historical geographies. It is an unexceptional (yet at times politically charged) statement that places do not remain the same. Instead, place is continually emergent. This has meant various things. It

has meant that place involves a transformation of some kind; for example, the transformation of a non-human element (the physical environment) by human beings into a HYBRID of culture and nature (see CULTURAL LANDSCAPE). A different kind of transformation often spoken of is the transformation from space to place. The introduction of the notion of the PRODUCTION OF SPACE has made the space and place opposition difficult to sustain, however, as it seems to render place largely as a particular moment within produced space. More recently, the emergence of place has been understood as wrought through a process of immanence. In this sense, place is not derived from something else (as place from space); it is, rather, an always-already ongoing ASSEMBLAGE of geographically associated, ONTOLOGIC-ALLY co-constitutive elements and relationships. (Space, one might say, is fully saturated with place.) This idea of place builds upon STRUCTURATION THEORY (e.g. Pred, 1984) and, later, on NON-REPRESENTATIONAL THEORY and on the monistic thought of Gilles Deleuze and other theorists of immanence (Hetherington, 1997a; Thrift, 1999a).

The de-centred, global sense of place. Recently, geographers and others have taken up the question of whether GLOB-ALIZATION has eliminated place as a social-spatial reality (in much the same way that globalization is claimed to have brought about the 'death of distance' and, still more apocalyptically, 'the end of geography'), and whether places are degenerating into 'NON-PLACES' under the signs of late MODERNITY (see also PLACELESSNESS). There seems to be broad agreement that place does still matter, and that it would be wrong to see place and globalization as negating one another. For example, places/locales continue as salient features of a globalizing economy that is still marked by the production of differences through a constitutive process of UNEVEN DEVELOP-MENT. Also interesting is the way in which some geographers, notably Massey (1991), have promulgated an idea of place that takes the notion of global interconnection as a precondition for place or sense of place. For Massey, place is not constituted by what is internal to it, but by its distinct lines of

connection to other parts of the world. One place is different from another on the basis of its relations to the outside. This effectively renders the distinction between 'inside' and 'outside' moot. Massey's 'global sense of place' has the added virtue of a politics that looks towards the outside rather than towards a defensive localism on the basis of embattled, threatened traditions. Her sense of place nonetheless leaves open the question of whether to construe places as centres of some kind, even if only as meeting places of lines of global connectivity. Hetherington (1997), drawing upon ACTOR-NETWORK THEORY, advocates somewhat differently for place as an 'ordering process' of diffuse but connected placings, through which a NET-WORK of potentially far flung sites are enrolled into relationship with each other. (See also CONTRAPUNTAL GEOG-RAPHIES.) GHe

Suggested reading

Cresswell (2004); Hetherington (1997a).

place-names Attaching a name to a PLACE is a way of differentiating one place from another, but place-names are more than markers in a system of differences: they are also ways of staking some sort of claim (often of rule, domination or possession) and, as such, are frequently sites of contestation. The two spatial registers, linguistic and social, are intimately connected (cf. Pred, 1990).

In HISTORICAL GEOGRAPHY, especially in EUROPE, the study of place-names or toponyms is a philological discipline based principally on written evidence revealing early spellings of names. Such studies have often been used to make inferences about settlement history and LANDSCAPE evolution, and have also attracted considerable controversy. Thus for Britain it was once claimed that pagan names and settlements with the element -ingas (e.g. Hastings) denoted the very earliest Anglo-Saxon settlement, while -ingaham (e.g. Birmingham) represented the next stage of settlement, and the numerous instances of x's tun names (e.g. Edgbaston: Ecgbald's tun) marked a later establishment (Gelling, 1997). Adherents to these views also believed in the so-called 'clean sweep' theory, which asserts that the Anglo-Saxons were the originators of English landscapes, since a wholesale disappearance of Celtic place-names in the eastern counties denoted a land area devoid of settlers and

settlements (cf. SETTLEMENT CONTINUITY). Almost all of these claims have been rejected in the past 40 years. The main objection is that -ingas and -ingaham place-names coincide with early Anglo Saxon archaeological remains about as little as possible, given that both occur in substantial numbers in south and east England (Dodgson, 1966). Furthermore, there are great difficulties consistently distinguishing ham meaning 'village' from hamm meaning 'land in a river bend', probably dry ground in a marsh, which opens up the possibility of mistaking topographical and habitative meanings (Dodgson, 1973). However, it is recognized that if there is one nominative form more frequently associated with the early Anglo-Saxon settlers than any other it is the topographical name. It is now supposed that -tun is associated with manorialization, when society was organized in a more sophisticated manner with the establishment of the powerful institutions of kingship. A stronger continuity of Celtic populations is suggested by work charting the incidence of the word walh, which is supposed to establish the presence of substantial Welsh-speaking populations (Cameron, 1980). Studies Scandinavian names have, however, produced greater consensus and led to some successful integrations of philological, archaeological and landscape history. These studies consistently suggest that the Danish-named villages were located in the least desirable locations from an ecological and agricultural perspective, and imply that the victorious Danes were a militarily smaller group than once claimed and did not take over or absorb pre-existing English settlements (Fellows-Jensen, 1975).

The modern world has by no means been insensitive to the histories carried in solution in place-names. Beyond Europe, and sometimes within, COLONIALISM and IMPERIALISM exercised the power to impose new names on the landscape: naming a place coincided with the taking of place. Although the practice continues - as in Israel's colonization and settlement of Gaza and the West Bank under its military occupation (see OCCUPATION, MILI-TARY: Cohen and Kliot, 1992) - subject populations do not passively adopt the new nomenclatures. Indeed, the POST-COLONIAL period has usually been marked by the recovery or invention of place-names that register a pre-colonial history and an indigenous culture (Herman, 1999; Nash, 1999). Thus, for example, Salisbury, the capital of the British colony of Rhodesia, was named after a British Prime Minister, but in 1981 it became Harare,

the capital of the newly independent state of Zimbabwe. Many states have attempted to fix place-names through the institution of national committees, such as the South African Geographical Names Council or the United States Board on Geographic Names (a federal institution supported by a network of committees in individual states). MODERNITY is as much an economic as it is a political project, and it is scarcely surprising that place-names have come to function not only as markers of national or cultural IDENTITY, but also as sites of commodification. A place-name, through its association with a particular regional expertise, may thus become a bearer of value for a COMMODITY (cf. INTELLECTUAL PROPERTY RIGHTS). For this reason, the European Union has attempted to regulate the attribution of regional place-names to FOOD (e.g. Roquefort cheese) and wine (e.g. Beaujolais) through a LAW on 'protected geographical indications': despite bilateral agreements, however, it has proved difficult to enforce these restrictions and protections outside the EU. In this sphere, as in so many others, place-names continue to mark sites of struggle in the present as they did in the DG/RMS past.

Suggested reading

Gelling (1997); Nash (1999); Pred (1990, pp. 92–142).

placelessness If by one definition PLACE represents a 'fusion' of human and natural worlds that become 'significant centers of our immediate experiences' and make it possible to live authentic, original and meaning-filled lives, then placelessness represents its antithesis (Relph, 1976, p. 141). It 'describes both an environment without significant places and the underlying attitude which does not acknowledge significance of places' (Relph, 1976, p. 143). Relph devised the concept as an object of critique in a treatise that became a key text in HUMANISTIC GEOGRAPHY, particularly in those versions that were inspired by PHENOMENOLOGY. Placelessness is said to result from the tyranny of 'technique', efficiency, interchangeability and replicability, in the design and construction of the human LANDSCAPE. It is evident everywhere from suburban houses and shopping centres to tourist attractions, restaurant chains and airports. In this sense, placelessness is a distinctly modern phenomenon that is all of a piece with the rise of mass culture, mass communication, multinational corporations and overweening central governments (see also ALIENATION; MODERN-ITY; POSTMODERNITY).

The concept of placelessness is not without controversy. The kinds of 'places' it names (suburbs, shopping strips, tourist sites and so on) have been viewed more tolerantly, even affectionately, by students of popular and vernacular CULTURE, especially in the USA, as evinced by the writings of J.B. Jackson and his students (e.g. Jackson, 1970; Wilson and Groth, 2003). They claim an important distinction between the crass imposition of bureaucratic planning, on the one hand, and culturally original solutions to the spatial problems of everyday life, on the other. Moreover, they see in these inventive responses (not all of them 'good', but none so destructive as to undo place as such) a great deal of popular meaning and symbolism. More recently, geographers who study the CONSUMPTION of mass goods, including clothing, food and shelter, have argued that production does not determine consumption: thus places produced with one set of uses in mind can be claimed and hence consumed by people for quite other, often resistant, purposes (e.g. Gregson and Crewe, 2003). Placelessness has also been argued to be a necessary and important resource for the exercise of marginalized and oppressed sexual IDENTITIES, a realm of relative freedom, liberation and anonymity versus the constraints imposed by otherwise ordered places (see Knopp, 2004) (cf. HETEROTOPIA).

plantation The meaning of the term 'plantation' has changed over time. Originally a plot of ground with trees, it came to mean a group of settlers or their political units during British overseas expansion (e.g. the Ulster Plantation; see COLONIALISM). Later, 'plantation' came to mean a large farm or landed estate, especially one associated with tropical or subtropical production of 'classical' plantation crops such as sugar, coffee, tobacco, tea, cocoa, bananas, spices, cotton, sisal, rubber and palm oil (Thompson, 1975b: see FARM-ING). Most plantations combined an agricultural with an industrial process but technologies, labour processes, property rights and INFRASTRUCTURE have varied enormously across space and time, making a generic definition of plantation impossible (see AGRIBUSI-NESS). Plantations have witnessed historical transformations in labour relations between slave, feudal, migratory, indentured and free wage labour, and many plantations in LATIN AMERICA operated on a mixture of these labour forms (see LABOUR PROCESS; SLAVERY).