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# Human territoriality, maps, and the division of space

I cannot help thinking that in discussions of this kind, a great deal of misapprehension arises from the popular use of maps on a small scale. As with such maps you are able to put a thumb on India and a finger on Russia, some persons at once think that the political situation is alarming and that India must be looked to. If the noble Lord would use a larger map – say one on the scale of the Ordnance Survey map of England – he would find that the distance between Russia and British India is not to be measured by the finger and the thumb, but by a rule.

(Lord Salisbury, House of Commons, 11 June 1877)

### The challenge of space

In most modern societies space is there to be conquered, but the desire for mastery manifests itself in endless different ways, depending on the individual or group concerned and the particular nature of the perspective in question. Equally, as Lord Salisbury pointed out, there is always a great danger of misunderstanding and misinterpretation whenever questions relating to space are being discussed. One of the best illustrations of the potential for diversity is still the study by Wilkinson (1951) of the way in which the region of Macedonia, part of which is now an independent state of the same name in the central part of the Balkan peninsula, was defined by different ethnic and political groups from the middle of the nineteenth to the middle of the twentieth centuries. He analysed nearly one hundred different maps, all of which purported to depict Macedonia. None was the same and each illustrated a particular point of view, ranging from the different ethnic interests – Greek, Turkish, Slav, Serb, Albanian – to the territorial ambitions of Britain, Germany, and Russia (the Soviet Union). Wilkinson points out that the reasons for the diversity in part represent a willingness to

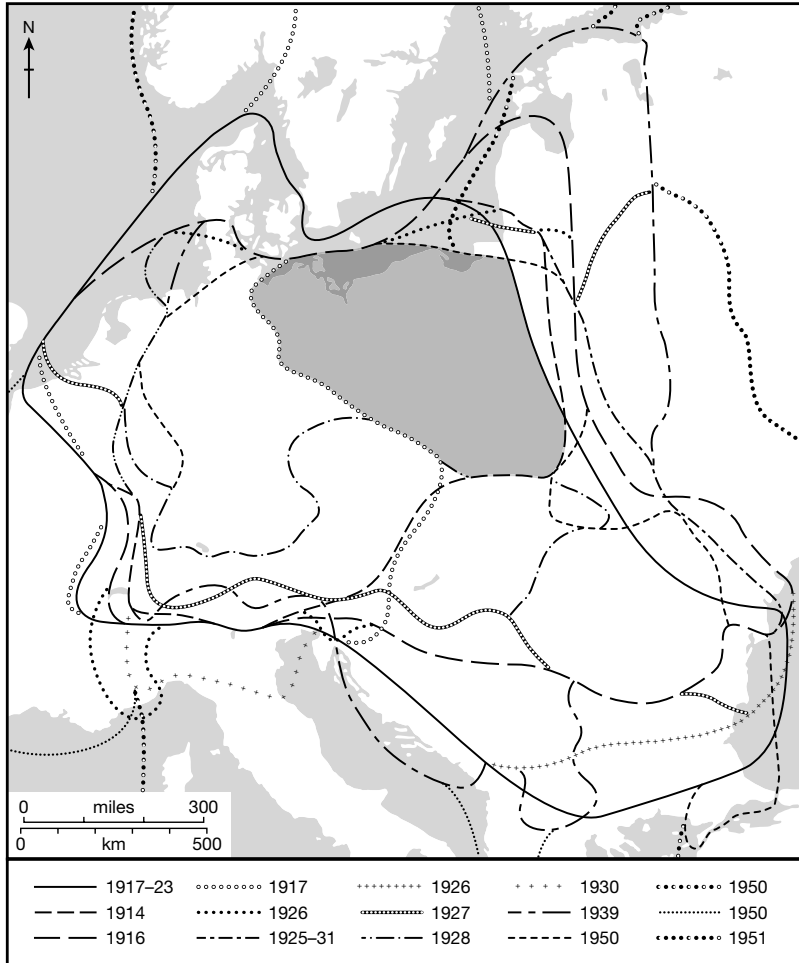
misrepresent the facts in pursuit of selfish political ends, but also in part are evidence of simple ignorance, the changes in the political situation over time, not to mention a lack of consensus as to which criteria should be used to distinguish between people and areas.

In similar vein, Sinnhuber (1954) attempted to pin down what it was people were referring to when they wrote about Central Europe. As can be seen from Figure 2.1, he illustrated how much can be lost by assuming that translations are exact equivalents in their respective languages. Central Europe is loosely translated as *Mittleuropa* in German and *l'europe centrale* in French, but each means something slightly different in spatial terms. When this is allied to variations in definition by writers within each language the scope for confusion is self-evident.

Nevertheless people do define themselves to a significant degree in terms of space, deriving their sense of identity from specified tracts of land, be it the nation state, house and home, or their religion (Tyner, 2004). Indeed, there are few activities in society that do not have a spatial referent. The fundamental drive towards what is known as territoriality is widely accepted as a key social process and must be clearly understood if the dynamics of society as a whole are to be properly interpreted (Sack, 1980 and 1986).

Formally, territoriality is defined as 'the strategy used by individuals, groups and organisations to exercise power over a portion of space and its contents' (Agnew, 2000, p. 823) and, as a strategy it contains a number of components, three of which stand out. First of all, territoriality is a form of classification by area, which both includes and excludes. In the case of a state, the majority of those living within its borders are citizens and the majority of those outside are not, although within both groups there will be a certain fuzziness at the edges. Some people living within the borders, such as *Gastarbeiter* (guest workers) in Germany, will not have full rights of citizenship, whilst others outside, like diplomats working in embassies overseas, will have.

Second, territoriality must be communicated, either physically on the ground, or through some form of easily decipherable graphical representation on a map or plan. One has only to look at the average house to see how important communicating territoriality is. The urge to proclaim your exclusive right of access and to distinguish your own property from that of everybody else is almost overwhelming and in the UK results in the bewildering profusion of idiosyncratic gardens for which the nation is famous.



**Figure 2.1** *Mid-twentieth-century definitions of Central Europe, Mitteleuropa, and l'europe centrale*

Note: The shaded land area shows where the various definitions between 1914 and 1951 overlap.  
Source: After K. Sinnhuber (1954) 'Central Europe – Mitteleuropa – l'europe centrale: an analysis of a geographical term', *Transactions and Papers, Institute of British Geographers* 20(1): 19. Reproduced with permission of the Royal Geographical Society with the Institute of British Geographers.

Finally, the maintenance of territoriality demands enforcement, either through the physical presence of the police and the military, or through threats of recourse to the law and direct action should claims be ignored. 'Trespassers will be prosecuted' is a common message in the countryside and it is not infrequently backed up by that secondary warning 'Beware of the dog', just to ram home the consequences of not complying.

Beyond these three basic characteristics, the drive for territoriality also has a number of other less obvious characteristics. It has always been extremely important as a means of reifying power in society, for successfully proclaiming exclusive control goes a long way to legitimising it. Examples of the truth of the old adage ‘possession is nine-tenths of the law’ are never hard to find, be it in squatters’ rights or land occupied by armies as an act of war, and attempts to reclaim what has been lost are always fraught with uncertainty, no matter how strong the legal case may be. Territoriality also displaces the fundamental balance of power between the controller and the controlled, replacing it with a relationship enshrined in law. This has the further consequence of depersonalising what has been created, so that rather than the balance of power being represented by a confrontation between two or more individuals, it is represented by something such as a statute, a by-law, or a contract.

Territoriality self-evidently leads to space being divided into containers within which people live and activities occur, indeed the spaces created actually mould what goes on within them. There are many situations where spaces are deemed to be empty, not because they are actually empty, but because they lack the particular functions thought to be appropriate to them. A classic example of such culturally crafted emptiness are the brownfield sites in towns and cities, which are seen as underutilised land, ripe for redevelopment and an alternative to the further outward spread of urban sprawl. In fact, of course, they are as ‘full’ as the ‘developed’ sites that surround them, but not with the artefacts (or in some cases the people) demanded by society as a whole (Sibley, 1995). Conversely, the space allocated is very often insufficient for all the people and activities that need to be contained and under these circumstances territoriality becomes inherently expansionist, seeking by whatever means to annex more space to fulfil its perceived destiny.

Territoriality is, therefore, an artificial political construct that seeks to subdivide space. It is inherently political, dynamic and, by its very nature, controversial. Without the remorseless drive to partition and make exclusive allocations of space the world as we know it would not exist, but there is nothing remotely natural or absolute about what has been created. It is inherently contested and ephemeral, but for all that represents the reality of most people’s daily experience.

## Formalising control

Natural and cultural landscapes rarely subdivide neatly along the same lines and attempts to use natural features as political boundaries have hindered as much as they have helped. Even apparently clear physical boundaries, as between land and sea, usually turn out to be unhelpful in practice, because of the way they deny the importance of human interaction between different biomes in favour of interactions within them (Box 2.1). Rivers probably represent the most obvious example of the dilemma. They are classic zones of contact and interaction and, as a result, are often the first linear features to be formally represented on maps and other media. They therefore appear as natural dividing lines, whereas in reality they form natural meeting places and zones of interaction. Indeed, there has been a strong counter lobby for using river catchments and basins as political and management entities, one of the most notable example being the Tennessee Valley Authority in the USA. However, although much quoted and celebrated since its inception in the 1930s, it never lived up to expectations in political terms and attempts to copy it, both in America and elsewhere in the world, have met with even more limited success (McKinley, 1950). The message is clear: the natural and the political do not necessarily coincide and attempts to make them do so are likely to end in failure, not least because of the fundamental differences in the dynamics of the physical and cultural environments.

Political legitimacy and control crucially depend on three things: symbols, systems, and agency and all must operate effectively if political areas at all levels are to be legitimated and enjoy any semblance of stability and permanence.

## Symbols

Concrete symbols of control are essential; they remind people as to who is in charge and continually reinforce the message when evidence on the ground is often hard to find. Examples of such symbols are everywhere in a plethora of signage: at national frontiers you are threatened or welcomed, depending on the state of relations between the two adjoining countries, and within national jurisdictions local boundaries of all kinds are replete with warm words, ushering you in and waving you out (Figure 2.2). Nor is this a recent phenomenon, even though the scale has grown immeasurably in line with the increase in travel. The tradition of

## Box 2.1

### Tennessee Valley Authority (TVA)

The TVA was one of the innovative solutions put forward by President Franklin D.

Roosevelt as part of his New Deal initiative to try to lift the USA out of the economic depression of the late 1920s and early 1930s. He asked the Congress to create 'a corporation clothed with the power of government but possessed of the flexibility and initiative of a private enterprise'. On 18 May 1933 the TVA Act was passed, setting up an authority encompassing the whole of the Tennessee river basin and with powers to control all the economic activities within this huge area.

From the outset the TVA adopted an integrated resource management approach to its task. Each issue, whether it was power production, navigation, flood control, malaria prevention, reforestation, or erosion control, was studied in its broadest context and each issue was weighed in relation to the others. Even by the standards of the Depression, the Tennessee Valley was in a desperate state in 1933. Much of the land had been farmed too hard for too long, eroding and depleting the soil. Crop yields had fallen along with farm incomes. The best timber had been felled. The TVA developed fertilisers, taught farmers how to improve crop yields, and helped replant forests, control forest fires, and improve habitat for wildlife and fish. The most dramatic change came as a result of the huge amount of electricity generated by the

TVA dams on the river system. Electric lights and modern appliances made life easier and farms more productive. Electricity also attracted industries in to the region, providing much needed new employment.

During the Second World War, the USA needed aluminium to build bombs and aeroplanes, and aluminium plants required electricity. To provide power for such critical wartime industries, the TVA began one of the largest hydroelectric construction programmes ever undertaken in the USA. Early in 1942, when the effort reached its peak, 12 hydroelectric projects and a steam plant were under construction at the same time, and employment in design and construction reached a total of 28,000.

By the end of the war, the TVA had completed a 1,050-km navigation channel along the length of the Tennessee River and had become the nation's largest electricity supplier. Even so, the demand for electricity was outstripping its capacity to produce power from its dams. Political opposition prevented the TVA from obtaining additional federal funds to build coal-fired power stations, so it sought the authority to issue shares. The Congress passed the necessary legislation in 1959 to make the TVA power system self-financing, and henceforth it had to pay its own way.

The 1960s were years of unprecedented economic growth in the Tennessee Valley.

The farms and forests were in better condition than for generations. The cost of electricity was amongst the lowest in the country and it stayed low as the TVA bought larger and more efficient generating units into operation. In the expectation that the demand for electricity would continue to grow, the TVA began to build nuclear plants as a new source of cheap power. However, the economic downturn sparked by the international oil crisis in 1973, and the rapid increase in fuel costs later in the decade, brought significant changes to the economy of the Tennessee Valley. The average cost of electricity increased fivefold from the early 1970s to the early 1980s and, with the demand for energy falling and construction costs rising, the TVA was forced to cancel several nuclear plants.

The TVA was forced to become more competitive and by the late 1980s it had stabilised power prices and begun to restructure the operation of its generating capacity. It cut its operating costs by \$800 million a year, reduced its workforce by more than half, increased the generating capacity of its plants, stopped building nuclear plants altogether, and produced a long-term plan to meet the energy need of the Tennessee Valley as far ahead as 2020. It also implemented an extensive programme to reduce all forms of pollution from its plants. It is now third lowest of all the 25 major power generating companies in the USA, but the TVA still struggles to remain competitive and meet the obligations to integrated resources management that led to it being created in the first place.

regularly beating the parish bounds in England goes back to medieval times, and involves the whole community periodically walking around the perimeter of the parish checking that the boundary stones and other markers are still in place and, crucially, that they have not been surreptitiously moved by neighbouring parishioners eager to garner a little more land for their own parish (Figure 2.3).

Other kinds of symbol further bolster a sense of cohesion. Postage stamps remind people of the role of the state in promoting and controlling the means of communication between citizens and with the world beyond national borders (Stamp, 1966). It is fascinating that one of the most striking features of the current IT revolution is the dominance of private multinational companies, which operate largely outside national influence and control (see 'Transnational corporations' in Chapter 11). The change represents, in symbolic terms at least, a significant ceding of power by the state. In the economic sphere, coinage and bank notes send similar messages as to who is in control, though here too the emergence of a few dominant world currencies reflects an important aspect of changing political realities (Unwin and Hewitt, 2001). In the early part of the twentieth century, the pound sterling and



**Figure 2.2** *Road sign in English and Cornish at the border between Cornwall and Devon*



**Figure 2.3** *Beating the parish bounds in Belstone. Every seven years the ritual of walking the boundary of the parish is observed and young children are upended and have their heads (lightly) bumped on the main boundary marker stones to ensure that they are firmly imprinted with the territorial ethos of the parish*

Source: Chris Walpole, with permission.



the French franc were international trading currencies, with spheres of influence stretching way beyond their national borders and encompassing the whole of their respective colonial empires. In the second half of the twentieth century, the US dollar achieved an even more extensive sway and one that it continues to enjoy in much of the world. At the turn of the twenty-first century, however, the position of the dollar in Europe is being challenged by the euro, a common currency for 12 of the 25 members of the European Union. Leaving aside the economic arguments for and against adopting the euro as a national currency, it is an interesting case, because whether or not the currency is adopted sends a strong message about the willingness in the countries concerned to modify their political priorities in line with changing economic imperatives.

Some of the most potent symbols of national control stem from transportation and transportation networks. In most countries roads and road-building are public responsibilities and at least from the time of the Roman Empire some two thousand years ago roads have been viewed as a way of binding land together into a unified territory. In recent times, the motorway system in Germany was begun in the 1930s under the Third Reich with the explicit aim of making Berlin more accessible to Bavaria and the south and west respectively. Subsequently, most other European countries have followed suit and now also have extensive national motorway networks. It is also interesting that one of the first major initiatives to encourage European integration was a project to link these national motorway networks and the so-called E routes now connect most of the major cities in Europe in much the same way that the interstate road system does in North America. As with the example of the euro discussed above, such integration also has the political effect of shifting the focus away from the national to, in this case, the European level.

Similar national involvement and support is to be found with railways, airlines, and the other major carriers of goods and people. Even where the operators are private companies or the network privatised, there is usually still a strong sense of identity with the prevailing national or regional political image. Ships on the high seas fly the flag of the country where they are registered; and airlines are invariably closely identified with their country of origin, even where they are not formally national carriers. It all serves to bind territory and allegiance closely together in the popular imagination and thus reinforce the sense of commitment to an arbitrary and ultimately ephemeral political reality.

## Systems

Symbols on their own are, of course, too superficial to be able to provide the necessary coherence for political survival. They must be backed up by formal systems which codify and explain the nature of the state, or other political area, and how it is supposed to function. For most states the critical document is the constitution, which provides a blueprint embodying everything for which it stands (Duchacek, 1973). The constitution is then elaborated and supported by a range of other entities, such as legal codes and political institutions, all of which derive their authority from the constitution itself. Amongst other things, these will determine how contracts are enforced and disputes settled, between both individuals and the state and between two or more individuals. This then is the key to the orderly management of territory, enabling private and public property rights to be guaranteed and providing for orderly transfers when the occasion demands (Waldron, 1990).

Historically, formal written constitutions are a relatively recent innovation, the first modern example being the American Constitution, which was adopted by thirteen states along the American eastern seaboard and came into force in 1788. There are still many states that do not have a written constitution, depending instead for their legitimacy on the collected customs, government, and law of the land, rather than on a single written document. Nevertheless, the UK, which is probably the prime example of a constitutional state without a written constitution, certainly operates a system of government that allows its territory to be managed effectively within an established and agreed framework of behaviour, as do other such states.

## Agency

Finally, there needs to be appropriate agency to ensure that what is written down and supposed to happen is actually enforced. To this end, there must be military and police to try to guarantee compliance by upholding the law, though it is important to stress that this on its own is not sufficient. One of the purposes of formal education, the bulk of which is provided by governments, either completely free or with substantial public subsidy, is to instil a sense of identity and shared purpose. While it would be a crude exaggeration to imply that the main aim of educational provision is national indoctrination, to a degree it is part of the

educational agenda and explains why political control over education is so hotly contested.

## Political maps and cartography

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Cartography is the classic artifice for representing and recording the division of space and maps, one of the tangible results of cartographic skills, have always been at the heart of geography. Their capacity to store and reproduce information about the world at innumerable different scales and to relate the results accurately one to the other has also made maps inherently and intensely political. As Harley has so ably and effectively demonstrated, maps provide knowledge, confer power, and historically have made map-makers sought after people by political elites; not for nothing was cartography known in medieval times as ‘the science of princes’ (Harley, 1988).

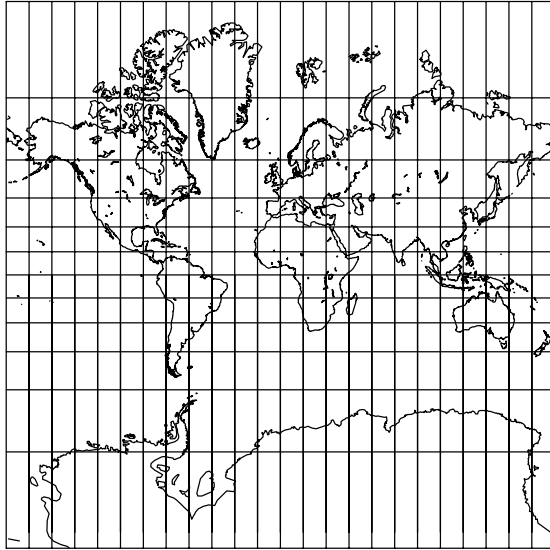
The power of maps and their innate ability to create a new reality for those who use them has long been recognised and valued. The University of Pennsylvania in the USA has an example of a map from Mesopotamia that is three thousand years old, with cuneiform characters incised on a clay tablet. All major societies since have made use of maps to depict boundaries and curtilages at every conceivable scale, thereby legitimating politically the division of the territory they control (Wood, 1993). The power they embody also means that access to maps has traditionally been jealously guarded: they were the preserve of religious elites in ancient Egypt and Christian medieval Europe, of intellectual elites in classical Greece and Rome, and of the mercantile elites in the Mediterranean city states for much of the Middle Ages. Only in the past two hundred years have they become widely available and universally understood and used (Thrower, 1999).

From a political perspective, the attraction of maps is that while purporting to be neutral and comprehensive, they are actually inherently distorting and selective (Muehrcke, 1978). It is impossible to transfer a curved image onto a flat surface, or to include all the information available at any given point on the surface of the globe. Equally, all maps and plans have to exaggerate to some degree, otherwise significant features, such as rivers, roads, or buildings, would be so small as to be invisible and the main purpose of the map itself would be lost. As a result, cartographers have enormous licence to mould the images they create to reflect their own, or their paymasters’, particular world view.

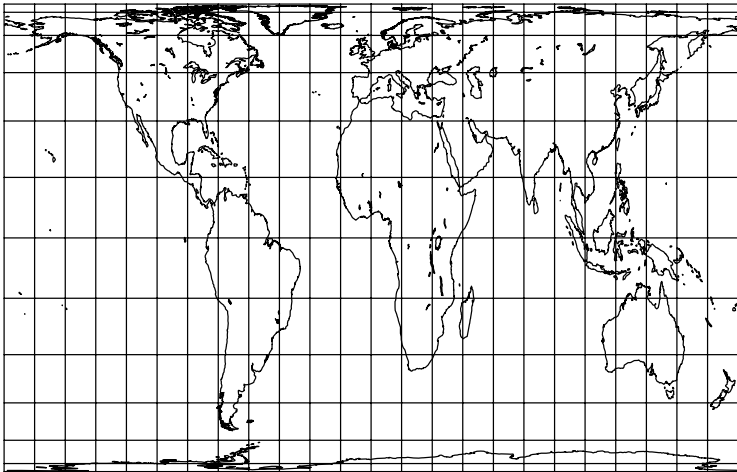
With small-scale maps, showing the whole world or individual continents, the choice of projection can fundamentally alter the image being mapped, an attribute that gave rise to Lord Salisbury's outburst cited at the beginning of this chapter. As can be seen from Figure 2.4, the Universal Transverse Mercator Grid hugely exaggerates the extent of the higher latitudes, while compressing the lower latitudes, thus sacrificing the true representation of area to the interests of relative location, because all compass bearings can be shown as straight lines. Equal area projections, on the other hand, accurately depict area, but distort where land masses sit in relation to one another, potentially giving rise to quite unjustified territorial associations. Even when cartographers are scrupulously careful to be specific about how a map is constructed, it is very difficult for the full consequences of any caveats to be taken on board by all the possible users, leading inevitably to misunderstanding and misconception.

An excellent illustration of the controversy that maps can generate is the argument over the value and accuracy of the world map devised by the German cartographer Arno Peters in 1974. He claimed that his projection illustrated equal area on a world map for the first time without undue fragmentation of the grid upon which it was drawn. What it certainly did was to visually emphasise equatorial and tropical latitudes at the expense of the higher latitudes. Whether the map was truly original or a modification of earlier projections was heatedly and rather inconclusively debated, but as far as political geography is concerned it focused on the intrinsic ideological content and power of maps (Crampton, 1994). Peters projection caught the public imagination and was used extensively to highlight the true extent of developing areas and their concentration in the tropics, thus underlining the scale of Third World poverty. Many non-governmental organisations concerned with overseas aid adopted the map to promote their cause, which was at the centre of a wider global political debate in the last quarter of the twentieth century about how to redress the economic disparities between the industrial and the non-industrialised worlds. The former are predominantly in the temperate latitudes, the latter predominantly in the tropics (Vujakovic, 1989). Whatever its cartographic merits and originality, Peters demonstrated conclusively to a wide audience that a map could be a powerful ideological weapon, capable of determining the terms of political debate in the most forceful manner.

Large-scale maps of smaller areas are less beset with problems of physical distortion, but the information included, or more often not included, may lead to equally significant misconceptions. The map can



Mercator projection



Gall-Peters orthographic projection

**Figure 2.4** *Different worlds: the globe projected using the Mercator and the Gall-Peters orthographic projections*

look completely different and assume quite different meanings, depending on what information is included or excluded, and in what form. Even the written language used on a map is politically significant. The spelling, for instance, may reflect the working language of the map-maker, rather than that of the local population; in the past this has led to centuries of confusion about the origin and meaning of place names, for example. Equally, it is often the case that two or more languages are current in a given area and selecting any one for use in a map elevates it above the rest, conferring a quasi-official status to an essentially arbitrary choice (Ormeling, 1983).

A good example of such arbitrary distortion on large-scale maps is the results of English-speaking surveys in Ireland in the nineteenth century. The surveyors used anglicised transliterations of Gaelic words to identify places and features, resulting in a plethora of names that had nothing to do with the true meaning of the unwritten original and its associations with place. The full extent of the distortion only became apparent when the maps were reinterpreted back into Gaelic, but by this time the language itself had all but died, so that the original meanings were in any case of little more than academic interest, as a new geography had effectively been created based on linguistic gobbledegook (Robinson, 1986).

It is both a strength and a weakness of maps that they exude an air of veracity. The information they contain tends to be taken at face value and widely believed, even though by their very nature maps must distort. One of the reasons for this is the unequivocal way in which cartographic messages are conveyed. Information is either present or absent and equivocation and uncertainty are hard to accommodate. Transition zones of all kinds are difficult to incorporate clearly into a cartographic format and imprecision, including political imprecision, tends to be masked. Disputed and undemarcated political boundaries provide excellent examples of the problems that can arise. Sinnhuber has shown how different national atlases in the former East and West Germany and in Poland depicted the boundaries between what were then the three countries in significantly different ways, each reflecting their particular geopolitical aspirations (Sinnhuber, 1964). Equally, there are still many national boundaries that have not been properly surveyed and continue to be disputed, notably in north Africa between the states spanning the Sahara desert, and in South America between the states along the spine of the Andean cordillera. However, few maps give any clue to the uncertainty and provisional nature of what is shown.

## Maps, the state, and empire

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Although governments and those with political power had always used maps as a means of demonstrating and confirming the control they sought to exercise over space, it was not until the beginning of the nineteenth century that map-making became fully absorbed into the apparatus of the state. A succession of wars seeking to establish unequivocally the extent of state hegemony in Europe, culminating in the extensive campaigns of the Napoleonic Wars between 1793 and 1815, which at one point seemed to promise a French state extending from the Atlantic into Russia as far east as Moscow, made it increasingly obvious that accurate and comprehensive information about land and territory would be a huge military asset. At the same time, governments were seeking to identify people with the state in a way that had never been attempted before and the emergence of the concept of the nation state encouraged military map-making and state-inspired political image-making to come together in a powerful alliance (see Chapter 3).

Nearly all states now have some form of national mapping agency, charged with producing accurate and up-to-date maps. The scale and sophistication of these documents varies enormously, but many still retain explicit reference to their military origins. The earliest and still one of the most comprehensive is the Ordnance Survey of the United Kingdom, which was founded officially in 1841 by the Ordnance Survey Act, but whose origins actually go back to 1791 (Skelton, 1962). Initially the goal was to survey the whole of the country at a scale of 1 inch to 1 mile (1:63,360), but the huge variety of uses to which the new maps could be put, ranging from civil engineering to town planning, as well as providing basic information for military purposes, quickly convinced the British government that something more detailed and at a variety of scales was required. In 1858 it was decided that across the whole country maps should be produced at a scale of 1:2,500 for cultivated areas, 1:10,560 for uncultivated areas, and at 1:500 for towns with a population of over 4,000. All other maps, including the 1 inch to 1 mile series, were to be derived from these basic surveys (Harley, 1975).

In the ensuing century and a half this huge project has suffered considerable vicissitudes as a result of changing political priorities and the need to incorporate technical advances in cartography. However, the whole of the United Kingdom has been surveyed and regularly updated at scales of 1:1,250 for major urban areas, 1:2,500 for minor towns and cultivated areas, and 1:10,000 for mountain and moorland. The maps

provide a datum against which the nature of the national environment is routinely measured, but in a real sense they are no more accurate than their technically cruder predecessors. Users, as Harley has so forcibly pointed out, when considering the accuracy of maps must always first ask 'Accuracy for what?' (Harley, 1975, p. 159). Geometrical distortion and selectivity as to what information is included or excluded remain as fundamental to the cartographer's art as ever. As far as the Ordnance Survey maps are concerned one can look in vain for many military installations, excluded from the maps on the grounds of national security. A case in point are the absent military airfields in Oxfordshire and East Anglia, where the maps show agricultural land with no settlement at all. A simple piece of detective work, comparing the vacant areas on the map with the official population census statistics, easily uncovered the evasion, but it is a salutary warning that even the most apparently authoritative maps must be approached with a healthy dose of scepticism (Beckinsale, 1972).

Beyond the mapping of the national territory, cartography has long been used by states to legitimise imperial conquest. Surveyors accompanied the military as they ranged ever more widely across the globe seeking to acquire new lands. The maps produced were hugely influential in defining the extent of political hegemony, even though they included little or nothing about the detail of the lands they were depicting. They were geometric abstractions and Harley claims that 'The rediscovery of the Ptolomaic system of co-ordinate geometry in the fifteenth century was a critical cartographic event privileging a "Euclidean syntax" which structured European territorial control' (Harley, 1988, p. 282). From the rectangular land surveys in the United States, to the hurried cartographic annexations that accompanied the colonial carve-up of Africa, the imposition of an abstract geometry enabled land to be commodified without reference to past or existing use, or anything other than a two-dimensional geography. This depiction of a flat and featureless environment had the effect of absolving the new colonial governments of any sense of responsibility for the historical legacy of the lands they were annexing and, as a direct result, perpetrated some of the worst political injustices and atrocities in the history of civilisation. Native peoples, particularly in North America, Africa, and Australasia, were literally sacrificed to the colonial cause; their plight could be conveniently ignored, because the largely blank maps that colonial governments used as their main sources of reference meant that the native peoples were little more than an irritating impediment on the road to a manifest European destiny (Livingstone, 1994).

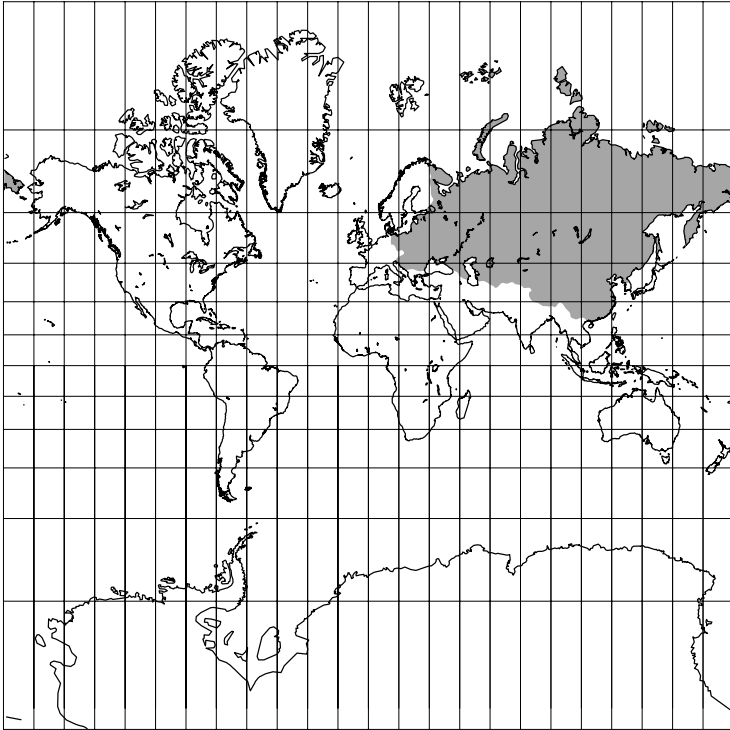


## Maps and propaganda

Implicit in much of what has been said so far in this chapter is that maps have a great power to mislead, empowering those who make them by very effectively creating a preconceived desired image in the minds of map users. It follows that maps may also be used malignly as weapons of propaganda, using cartographic sleight of hand deliberately to mislead. There are numerous ways of doing this and the whole subject has been comprehensively and entertainingly reviewed by Mark Monmonier in his book *How to Lie with Maps* (1991). For present purposes, therefore, discussion will be confined to political propaganda, where the aim has been to create a deliberately misleading impression, with the express intention of influencing the terms of debate and justifying a particular course of political action.

One of the most blatant examples of such propaganda was the systematic and persistent overestimation of the scale of the Communist threat to Western Europe and North America. The deception was perpetrated in two ways. First, the fact that the Soviet Union and the People's Republic of China, the two major Communist countries in terms of both area and population, shared a common border stretching some 2,000 km and that most of the Communist satellite states in Eastern Europe also adjoined the Soviet Europe, enabled the Communist threat to be represented as a single monolithic block, threatening to overwhelm its smaller and fragmented western counterpart (Figure 2.5). Rarely, if ever, was any reference made to the vast areas of empty territory, punctuated by small constellations of settlement and development, that are the reality in this apparently undifferentiated region. Second, the fact that the greater part of the Soviet Union is located in the higher northern latitudes meant that, by using the Mercator projection to depict it, the impression could easily be given that its areal extent was much greater than was in fact the case. While it is perhaps tempting to claim that the prevalence of this looming image was purely accidental, it is interesting that since the break-up of the Soviet Union in 1989 a much more fragmented and diversified cartographic image of the territory of its former territory has begun to be displayed, emphasising, for example, the emerging regional power block in and around the Black and Caspian seas and the Caucasus Mountains that separate them.

A more frequently quoted example of maps and cartography being employed in a battle for hearts and minds is the extensive use of maps by the National Socialist government of Germany's Third Reich between



**Figure 2.5** *The Communist threat to the West depicted using the Mercator projection*

1933 and 1945. The driving obsession of this regime was to reassert Germany as a key European and global power after the humiliation the country had suffered after the comprehensive defeat of the Second Reich in the First World War. To this end, it used maps in the most tendentious fashion to illustrate how a reduced and beleaguered Germany was encircled by hostile states, and how territorial expansion was a necessity if it were to escape from the stranglehold. The images were published widely, not only in Germany, but also in the United States in a concerted campaign to enlist support for Germany's cause. Not surprisingly, much of the steam ran out once America joined the Second World War on the opposite Allied side in 1942 after Germany's ally Japan attacked the American fleet in the Pacific Ocean at Pearl Harbor.

Finally, it would be quite wrong to give the impression that maps and cartography have only been used for political ends in national and international conflicts. Some of the most successful cartographic forays

have been in support of local issues, where the hearts and minds of the electorate need to be won. In the 1970s, there was widespread concern in England and Wales that the national parks were about to be overrun as part of a mass invasion of the countryside from the towns and cities. As part of its campaign to avert this the Dartmoor National Park published a map, showing the numbers of people who would be within two and a half hours' driving time of its boundary once the M5 motorway was complete. The clear message was that millions would be using Dartmoor as their main recreation destination. Crucially, the map made no mention of all the alternative destinations, including other national parks, for tourists from Birmingham, Bristol, and south Wales, many of them much less than two and a half hours' driving time away. Despite this fundamental omission, the map became a powerful weapon in the argument for more restrictive tourist policies for Dartmoor, attracting widespread local political support.

### **The future of maps – mapable information on demand**

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Traditionally, maps and access to map information have been tightly controlled and it is this that has been the source of their enduring political influence. Even with the advent of national cartographic surveys, such as the Ordnance Survey in the United Kingdom, producing maps at a variety of scales on open sale to the public, a degree of control has always been exercised over what is and is not shown. In the past two decades, however, technological advances mean that the sources of that control have all but disappeared and virtually all visible information about the surface of the globe is potentially available on demand. The agent of this fundamental change is a combination of developments in geographic information systems (GIS) and satellite imagery, which means that any part of the world can now be photographed with a sufficient degree of resolution for detailed maps to be constructed and with little or no restriction on who has access to the data.

It is impossible as yet to say what the long-term consequences of this revolution will be, but it is certain that cartography will no longer be the exclusive preserve of powerful elites, nor will there be the same restriction on what is mapped, since an immeasurably wider range of information will be available to put into map form (Cho, 1998). Nevertheless, it is unlikely that the democratisation of map-making and

cartography that information technology and the satellite age have ushered in will result in maps losing their political clout and effectiveness. Indeed, it seems likely that their power will increase as more people are able to deploy them in support of their own political agendas.

## Key themes and further reading

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The main theme of this chapter has been the representation of space. Readers should now have a clear idea of the meaning and political implications of territoriality – identifying, laying claim to, and defending specific areas of land. They should also understand the process of map-making and the importance of, and distinction between: symbols for demarcation, systems for codifying claims, and agency for enforcement. The role of maps and cartography are central to the whole process, but the limitations and partial nature of maps as sources of information should now be clearly apparent. Historically, maps have been a weapon which powerful minorities have used to consolidate their control over space. The way in which maps can be used for propaganda purposes to distort the real world should now be understood. The impact of GIS and other computer technologies on the availability and use of spatial data is currently making maps of all kinds much more widely available, but it should be appreciated that this does not necessarily remove their capacity to distort.

The whole concept of territoriality has been explored in detail by Robert Sack (1986) in his book, *Human Territoriality: its theory and history*. It is jargon-free and readable, without becoming mired in the more difficult aspects of a complex concept. To find out more about maps as symbols of power and patronage, the many books and journal articles by J. B. Harley are essential reading. One of the best, and an excellent introduction to the political geography of maps, is 'Maps, knowledge, and power' (1988) which is published in *The Iconography of Landscape* edited by D. Cosgrove and S. Daniels. The role of maps and spatial images of all kinds is changing rapidly as a result of satellite imagery and recent developments in IT. These issues are comprehensively discussed by G. Cho (1998) in his wide-ranging book, *Geographic Information Systems and the Law*.