

## 5 Cadastres and capitalisms

### The emergence of a new map consciousness

Like other technological systems, cartography is also strongly and inevitably ideological: it involves not merely the drawing of maps but the making of worlds. Maps are not just colorings in of preset outlines or simple depictions of portions of the physical universe. Maps present entire world views, with all that phrase implies in terms of philosophical or scientific outlook, theological import, political influence, aesthetic perspective, and artistic choice. The multifarious worlds cartographers draw are far more than merely passive reflectors of particular cultural circumstances or idiosyncratic renderings of some otherwise objective reality; rather, maps are among the most powerful statements of belief in the worlds that they help to create. They are tools, to be sure, but they are inscriptive tools that allow as well as necessitate perspective; they are tools without which we cannot read and without which we cannot see.

(Tomasch, 'Mappae mundi and "The Knight's Tale"')

#### MAPPING AND MAP READING

We have seen in previous chapters that the mapping impulse (as a technology for representing the real) emerged under specific conditions in different places and at different times. This historical geography of mapping has only recently begun to be unpacked, but it is clear that – as Alpers (1983) has shown – there were important differences between regional schools of imagining space and place. We have also seen how these distinct, and at times, competing scopic and mapping regimes were highly contested, especially in so far as they were part of broader political economies and intellectual traditions. From T-and-O maps to portolan charts to national cadastres, maps have been important elements of broader political economies and social formations. Not only have maps served as elements of a representational economy – what Latour called 'the modern settlement' – but, as Tom Conley has shown, they have served as the metaphysical and metaphorical basis for a broader social imagination; the world was literally and figuratively structured based on readings and interpretations of maps. What is becoming clear in all of these accounts is the way in

which mapping, even as it claimed to represent the world, produced it. And it is to this process of 'world production' that I now turn.

I have always been fascinated by the ways in which maps make palpable something without existence. This may seem to be a strange claim for a practice that has always prided itself on its ability to represent accurately and faithfully that which is real. But it seems to me that the productive and fictive character of maps is precisely what is at stake when we ask, how do cartographers render the world in map form, how do maps reproduce worlds, and how can we learn to understand the worlds maps contain? In all of these activities, projection, interpolation and symbolization are the keys to the making and reading of maps. Projecting from one surface to another, making continuous and contiguous what are often discrete and non-contiguous data sets, averaging point data, creating lines and surfaces from sample data, interpreting symbolic imagery in terms of worldly experience: goring, peeling, projecting, selecting, thematizing (Figure 5.1). To me this has always been an act of magic, Merlinesque when done well, like a Monty Python parody when done without skill, craft or commitment.

In the quotations with which I began Chapter 2, Robert Harbison (1977: 124) expressed this issue particularly well:

From cities of brick to cities in books to cities on maps is a path of increasing conceptualization. A map seems the type of the conceptual object, yet the interesting thing is the grotesquely token foot it keeps in

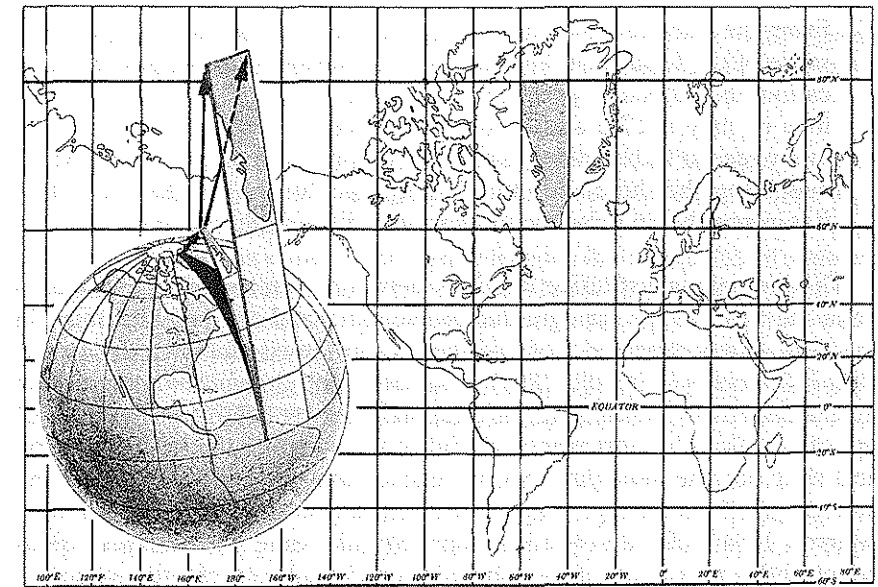


Figure 5.1 Goring, peeling, projecting...

the world of the physical, having the unreality without the far-fetched appropriateness of the edibles of Communion, being a picture to the degree that the sacrament is a meal. For a feeling of thorough transcendence such unobvious relations between the model and the representation seem essential, and the flimsy connection between acres of soil and their image on the map makes reading one an erudite act.

The map is a conjured object that creates categories, boundaries and territories: the spaces of temperature, biota, populations, regions, spaces and objects attain the reality that is particular to them through the combined and multiplied acts of mapping, delimiting, bounding, categorizing – Olsson's drawing and interpreting lines. Maps create objects whose existence is mythic, at least to the extent that these identities are highly formalized abstractions whose effects (once represented as a real object) become very real. Once conjured up, new spatialized identities begin to work as real places and the discourses and practices of cartography and mapping recognize themselves as representing the real. From this vantage point the real has been conjured out of the copper and ink by the cartographic magician: transubstantiation has been achieved and the magician's gold (the real thing) is available to us for use.

But how is this 'real' constituted in the first place and how does it function to allow for the production of discrete identities that have effects? That is, how do geography and cartography produce subjects and identities? In 'Speech and phenomena' Derrida (1991: 9) argues that:

From the start we would have to suppose that representation (in every sense of the term) is neither essential to nor constitutive of communication, the 'effective' practice of language, but is only an accident that may or may not be added to the practice of discourse. But there is every reason to believe that representation and reality are not merely added together here and there in language, for the simple reason that it is impossible in principle to rigorously distinguish them.

The mutually constitutive relations between representation and reality lie at the heart of the cartographic problematic, and are well illustrated in the now widely repeated story of the map in Lewis Carroll's *Sylvie and Bruno Concluded*. Carroll (1894) wrote of a map drawn at a scale of one mile to one mile which had, unfortunately, never been used because of opposition from farmers who said that 'it would cover the whole country, and shut out the sunlight!'. So, instead of the map, they 'now use the country itself, as its own map, and I assure you it does nearly as well' (Carroll 1894: 169, reported in King 1996: 4). Jorge Luis Borges (1964) adapted this as a story of an empire whose impulse to create a coherent territorial identity for itself led its sovereign to produce a map the same size as the empire. The map was later abandoned to rot in the desert

because it was too cumbersome when used (Edney 1997: 1). This Borgean image of a map at the scale of the territory now rotting somewhere in the desert stimulated Baudrillard (1983: 2–3) to problematize explicitly the relationship between map and territory, and to argue that the map precedes the territory, not territory the map:

It is the map that engenders the territory and if we were to revive the fable today, it would be the territory whose shreds are slowly rotting across the map. It is the real, and not the map, whose vestiges subsist here and there, in the deserts which are no longer those of the Empire, but our own. *The desert of the real itself* . . . It is no longer a question of either maps or territories. Something has disappeared: the sovereign difference between them that was the abstraction's charm. For it is the difference which forms the poetry of the map and the charm of the territory, the magic of the concept and the charm of the real. This representational imaginary, which both culminates in and is engulfed by the cartographer's mad project of an ideal coextensivity between the map and the territory, disappears with simulation . . .

For Baudrillard (1983: 146) the postmodern experience is one in which the very definition of the real becomes 'that of which it is possible to give an equivalent reproduction . . . not only what can be reproduced, but that which is always already reproduced. The hyperreal.'

As we have already seen, Henri Lefebvre (1991: 85) concretizes this notion of the hyperreal when he asks: 'How many maps, in the descriptive and geographical sense, might be needed to deal exhaustively with a given space, to code and decode all its meanings and contents?', and goes on to answer:

It is doubtful whether a finite number can be given in answer to this sort of question. What we are most likely confronted with here is a sort of instant infinity, a situation reminiscent of a Mondrian painting. It is not only the codes – the map's legend, the conventional signs of map-making and map-reading – that are liable to change, but also the objects represented, the lens through which they are viewed, and the scale used. The idea that a small number of maps or even a single (or singular) map might be sufficient can only apply in a specialized area of study whose own self-affirmation depends on isolation from its context.<sup>1</sup>

At one level, these comments seem rather obvious: mapping the complex spaces of a place or region require many different types of maps each at appropriate scales and each with its own select set of symbols and icons to capture the thematic focus of the coding. But Lefebvre's (1991: 84) point is more complex. It is that comparing different maps of a region

or country and recognizing the remarkable diversity among them illustrates the importance of understanding that '[t]hese spaces are *produced*'. It is these processes of the production of spaces and the multiple coding of social spaces that are crucial to understanding the social turn in contemporary mapping studies:

Space is never produced in the sense that a kilogram of sugar or a yard of cloth is produced. Nor is it an aggregate of the places or locations of such products as sugar, wheat or cloth. Does it then come into being after the fashion of a superstructure? Again, no. It would be more accurate to say that it is at once a precondition and a result of social superstructures. The state and each of its constituent institutions calls for spaces – but spaces which they can then organize according to their specific requirements; so there is no sense in which space can be treated solely as an *a priori* condition of these institutions and the state which presides over them. Is space a social relationship? Certainly – but one which is inherent to property relationships (especially the ownership of the earth, of land) and so closely bound up with the forces of production (which impose a form on that earth or land); here we see the polyvalence of social space, its 'reality' at once formal and material. Though a *product* to be used, to be consumed, it is also a *means of production*; networks of exchange and flows of raw materials and energy fashion space and are determined by it. Thus this means of production, produced as such, cannot be separated either from the productive forces, including technology and knowledge, or from the social division of labour which shapes it, or from the state and superstructures of society

Lefebvre (1991: 85)

There are, perhaps, few areas of geography which have historically come as close to Lefebvre's understanding of the social production of space and the role played by the state than the emergence of modern mapping. In what follows, I focus on a reading of mapping practices as they emerged between the fifteenth and seventeenth centuries, specifically on cadastral mapping, the state and the economy.

### THE EMERGENCE OF A NEW MAP CONSCIOUSNESS

David Buisseret's (1992) *Monarchs, Ministers and Maps: The Emergence of Cartography as a Tool of Government in Early Modern Europe* and Tom Conley's (1996) *The Self-Made Map: Cartographic Writing in Early Modern France* each begin with a simple, but important, question: 'how did it come about that whereas in 1400 few people in Europe used maps, except for the Mediterranean navigators with their portolan charts, by 1600 maps were

essential to a wide variety of professions?' (Buisseret 1992: 1); 'Why the sudden birth and growth of mapping?' (Conley 1996: 1).

As we have seen already, to this question Denis Wood (1993) answers that map-making and map use (distinguished from the general ability of mapping and way-finding) emerge with print capitalism and the territorial state. Although the specifics of map development and use are highly complex and regionally differentiated, we can say that in Europe between 1400 and 1600 major changes in the form, use and availability of maps occurred. Moreover these changes – which resulted in a radical transformation in map consciousness – were important in influencing (and were in turn influenced by) the emergence of a new national state consciousness whose defining characteristics were a concern for the establishment, defence and management of the national territory, and the administration of the national economy. Buisseret (1992: 4) goes so far as to argue that 'we can be sure that governmental activity was one of the main ways in which Europeans became habituated to the use of maps, and so to the use of new ways of both "seeing" the world and changing it.'

P.D.A. Harvey (1993) has suggested that in England the genre of world maps and regional maps that had become established between 1100 and 1300 had, by the fifteenth century, died out leaving only traces of a medieval mapping impulse in portolan sailing charts and the building plans of stonemasons. Jowett *et al.* (1992: 3) have gone even further arguing that 'with the fall of Rome the use of maps to describe and record landed property was effectively discontinued' to be replaced by 'written descriptions of the extent of land parcels and their topographical relationships'. In effect, the cartographic imagination of the Roman Empire had been lost, replaced by the chorographical imagination of medieval Europe. Even in Renaissance Italy, where it has often been assumed maps and mapping were commonplace,

[n]ot a long interest in exploration, nor a long tradition of state rationalization and bureaucratization, nor innovation in the arts and sciences, nor a propensity to depict the world 'naturalistically' with linear perspective, nor even the drawn-out military maneuvers during the French invasions of the first third of the sixteenth century left traces in everyday maps in the Italian states.

(Marino 1992: 5)

For Jowett *et al.* (1992: 3–4),

[s]o complete was the obliteration of map consciousness in feudal Europe that such private property maps as were produced in the medieval world cannot be seen in any sense as survivals of a tradition from antiquity. Property mapping in antiquity is not, therefore, part of a continuous history of the state-sponsored cadastral mapping that

came to characterize European countries in the Enlightenment ... In the emergent capitalist societies of Renaissance Europe, where land became a commodity and power relations were expressed through control of the means of production, which included land, there was now clearly a reason for mapping properties – namely, as an aid to developing the new systems of exclusive rights to land.

Throughout Europe between 1400 and 1600 a revolution occurred in the drawing, distribution and use of maps. Itinerary maps and picture maps (usually from a bird's-eye view) gradually began to disappear and maps of places or areas began to appear in increasing numbers (Figures 5.2, 5.3). P.D.A. Harvey (1993: 8) has suggested that in Tudor England the number of maps remaining from different parts of this period increased rapidly and is a clear indicator of this sea-change. From the second half of the fifteenth century, we have about 12 known maps of particular places or areas; from the first half of the sixteenth century, there are about 200; and from the second half of the sixteenth century there are about 800 such maps. Indeed, 'it is no exaggeration to say that the map as we understand it [of small areas – a house, a field, a town, a tract of countryside, an entire country] was effectively an invention of the sixteenth century' (Harvey 1993: 464).

This invention was enabled by several technical innovations: a standardized scale was introduced into topographical mapping in England in the 1540s; the first printed map in England illustrated the Exodus in a bible produced at Southwark in 1535, and thereafter the production of printed maps grew quickly; triangulation was introduced into England in William Cunningham's *The Cosmographical Glasse* in 1559 adapted from a book published in Louvain in 1533; by the end of the sixteenth century,

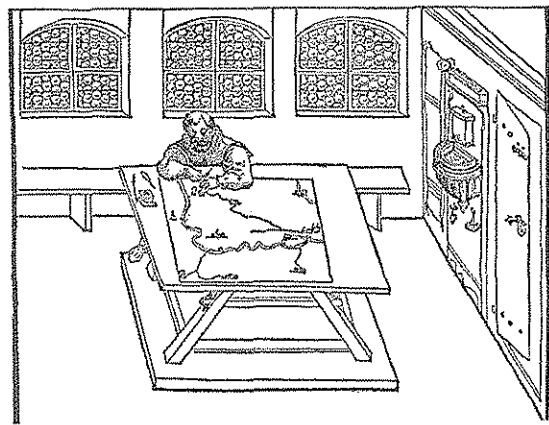


Figure 5.2 The earliest woodcut picture of a cartographer at work. From Paul Pfintzing's *Methodus Geometrica*, Nuremberg 1598

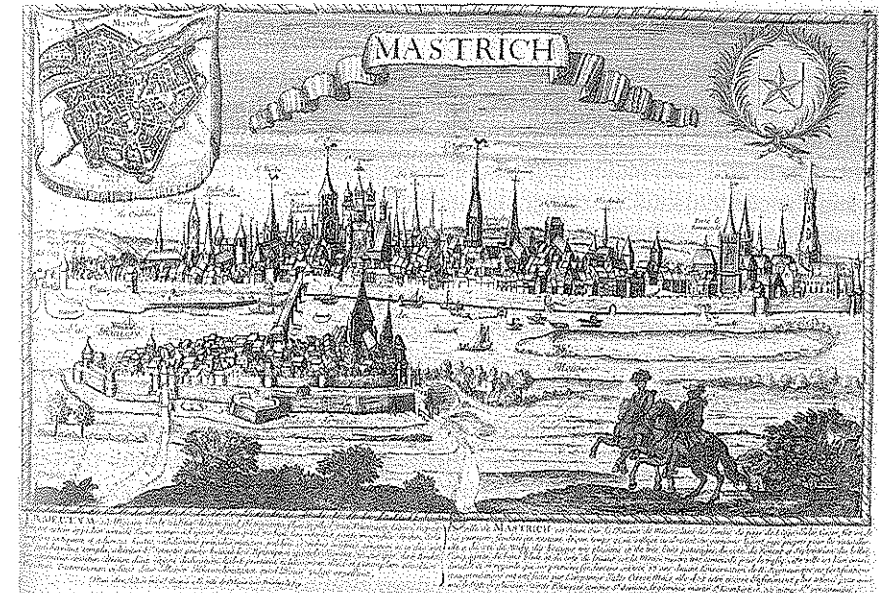


Figure 5.3 Seventeenth-century perspectival view of Maastricht by Gravure Sollain (Plans en Relief: Villes Fortes des Anciens Pays-Bas Français au XVIIIeS. (1989) Musée des Beaux-Arts Lille, with permission)

the plane-table and theodolite were beginning to be used for mapping; and in the 1590s legends were beginning to appear on maps to clarify the more unusual symbols used (Harvey 1993).

Besides these innovations in mapping practice, the birth and growth of map-making corresponded with (and contributed to) a series of transformations in European Renaissance ways of seeing (especially surrounding the development of linear perspective, renewed interest in Ptolemaic texts, a rebirth of interest in quantification and measurement, and new forms of saturated realist painting). But this birth and growth of mapping practices must also be seen in terms of a series of concrete concerns about property and identity emerging from political economic transformations of the period. First, there was a need for maps to envision and consolidate new communities, increasingly imagined as territorially bounded states and discrete unities of people (articulated in terms of a common history, ethnicity or language and culture). Second, there was a need for plots and plans for estate planning as private property claims on land and capitalist practices of land alienation and sale increasingly became the norm. It is these two related elements of the emergence of modern map-making: the role of maps and mapping in the emergence of new forms of property regime necessitated by the extension of capitalism, and the emergence of maps and mapping as a tool of government and state formation, that form the basis for this chapter.

## CADASTRES, PROPERTY REGIMES, CAPITALISM AND THE STATE

One primary form of this governmental intervention was the emergence of systems of cadastral mapping; the inventorying and mapping of private land by public authorities for the purposes of governing territory.<sup>2</sup> As an instrument of governance, especially of tax reform, 'the cadastral map was a highly contentious instrument for the extension and consolidation of power, not just of the propertied individual, but of the nation-state and the capitalist system which underlies it' (Jowett *et al.* 1992: 8).

In *Maps in Tudor England* P.D.A. Harvey provides a delightful account of the emergence of new maps in public and private institutions and practice: the military, government administration, urban 'planning', private estates, buildings and the law. But *Maps in Tudor England* is also instructive in another way. It can, I think, be read as an account of the emergence of the discourses, practices and institutions of two competing power-knowledges. The first is that of sovereign power, whose interests in consolidating territorial unity and extending state powers were directly fostered by both the national and the cadastral forms of mapping. At the same time, a second and relatively new form of modern power was being fostered and extended by the new mapping practices and technologies: the power of private property. In so far as cadastral mapping enabled the compilation and dissemination of spatial information on specific places and areas, new economic and political forces emerged able to assert their own interests. Through the expression of those interests they were able to extend the broader processes of economic and political transformations emerging at the time. Lodged between these two, and dependent on each to varying degrees, were the new professions of surveying, mapping, publishing and public administration, for whom the new cartographic practices represented a political and an economic opportunity (in much the same way is currently true of digital information technologies and GIS). As Harvey (1993: 17) argues: 'Cartographic techniques were substantially in advance of the market in Tudor England, ready to be put to use when demand arose. What mattered was the spread of demand, and how map-makers created and fostered this demand for their products.' It was 'this society which, in the course of the sixteenth century, discovered the *value* of maps' (p. 25). This value resided in the ways in which it (like other technologies of the day, especially the printing press) served the needs of several different and often contradictory interests, among them the interests of the crown, the state, the military, the merchants, the private property owners, local communities, publishers and the emerging group of professionals involved in the surveying, mapping and use of cadastral maps.

How precisely was this constellation of interests articulated around cadastral mappings? *The Cadastral Map in the Service of the State* (Jowett *et al.* 1992) provides a series of important answers to this question. Rapidly

increasing population generated increases in rival claimants on private and common-resources lands, and new commercial uses created increasing friction among and between existing and new users of common lands. Jowett *et al.* (1992) locate these emerging conflicts firmly in terms of the political economic transformations from feudalism to capitalism, in which cadastral mapping and groups such as professional land surveyors, private estate managers and public administrators were especially important. The new maps and their spokesmen legitimized issues such as precision of location, efficiency of land management and permanence of record as the basis for government interest in mapping.

Beginning in the sixteenth and seventeenth centuries, cadastral mapping became increasingly professionalized and concerned itself more with legal and symbolic issues involved in inventorying private estates, cadastral mapping for tax reform and the provision of general tools of accurate recording for public authorities at the local and state levels of government. In turn, such state-supported cadastres were widely resisted, becoming highly charged and contested political issues.

In the Netherlands, the expansion in the production and use of printed cadastral maps in the sixteenth and seventeenth centuries was directly related to 'its mercantile and imperial expansion during this the Dutch golden age' (p. 44). In the polder areas in particular 'surveying and mapping developed early and rapidly became an indispensable part of public administration' (p. 45). *Waterschap* (polder authority) maps illustrated clearly the ways in which these newly emerging mercantile interests intersected with the interests of the local state to foster new mapping practices. The polder authority maps were needed for the administration, management and accounting of dyke and polder construction and maintenance. From the fifteenth century, the costs involved in these practices had been a public charge and by the sixteenth century the charges had been levied against each village and shared by quota among the villages. Detailed and accurate maps became particularly important for the administration of these levies and, by the sixteenth century, for redressing the unequal burdens that dike taxation by quota imposed. The result was a series of local and regional cadastral maps, some of which were so detailed and accurate as to serve as the basis for tax collection and property records for many years (Figure 5.4). Schillincx's 1617 map of Putten, for example, served as the standard map for tax collection in the town for over 250 years (Jowett *et al.* 1992: 14). Besides serving the administrative and fiscal needs of polder management, the cadastral maps also had an important public relations and advertising function. Especially in the seventeenth century, when a surplus of capital and land drew investments from urban merchants and manufacturers who wanted to diversify their investments, cadastral maps served as publicity tools for reclamation schemes. These 'merchants' drainage projects were thoroughly capitalist undertakings' (1992: 20) in which maps were deployed from conception, in the planning

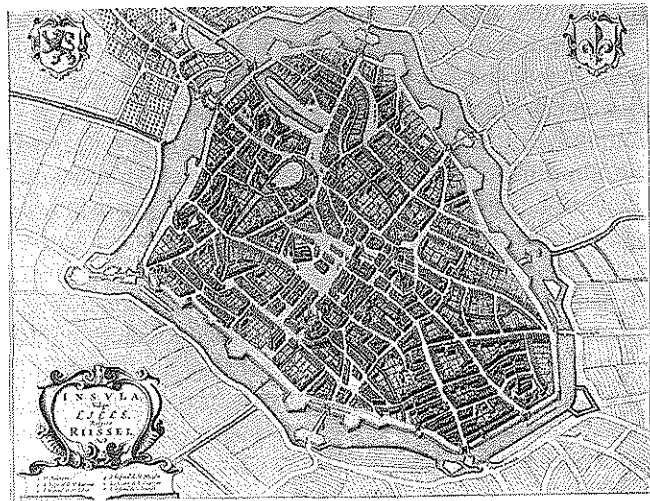


Figure 5.4 Platted spaces of the perfect state. *Lille avant les travaux de vauban*. Gravure de Blaeu, 1649 (Plans en Relief: Villes Fortes des Anciens Pays-Bas Français au XVIIIeS. (1989) Musée des Beaux-Arts Lille, with permission)

and construction phases, to the allotment of plots to the decorative representations for investors of the plots they had purchased.

In Sweden, Finland and Norway the situation was different: subsistence production in peasant households was much more important than commercial agriculture (p. 47). Here the imperative of the central state under the power of the monarchy was to consolidate the power of the central state in part by developing a national taxation system. To this end, the development of national mapping programmes was encouraged from the sixteenth and seventeenth centuries onwards. In Denmark, the establishment of an absolute monarchy in 1660 and its attempts to consolidate its economic and political power and diminish the economic and political power of the nobility – in part through taxation policy – also gave an important stimulus to a comprehensive surveying and mapping programme (p. 116). In all the Nordic countries, open-field enclosures and the transfer of common property rights to individual owners gave added value to the project of detailed cadastral mapping, creating its own base of support even in the face of the centralization of state power (p. 117). Jowett *et al.* (1992: 118) are very clear about this: ‘Where private property rights are not established, the development of cadastral mapping is problematic if not impossible.’

In part, this difficulty or impossibility stems (for Jowett *et al.*) from the resistance of those who own the land collectively in terms of common rights. But in part it stems from very different notions of value under such property regimes. For example:

To have mapped ownership of *skyld* [a measure of the value of land rather than the land itself, and to which – not to land – individuals could lay claim] would have been impossible, just as today mapping ownership of shares in a company is impossible.

(p. 118)

Only with the transfer of individual land plots to individuals and the assignment of ownership rights did cadastral mapping become possible. But this was not a one-way relationship, as the use of maps also resulted in significant changes in the concept of ownership and the meaning of land. With maps came the dissemination of standardized measures and a simplification in the types of measure: thus measures of land quality (like *skyld*) were substituted for by land area, and land price then became a surrogate for concepts of land value and quality. In Livonia, for example, the *uncus* was a cadastral not a real measurement of land, and took into account quality, proximity to market, associated labour requirements and customary dues. But, with the imposition of the Swedish land surveys, a simple and uniform measure of land area was substituted (Jowett *et al.* 1992: 118–19).

In Germany the situation was much more complex, in part because of the legacy of war and in part because of the fragmented nature of the *Länder*. Here, war, the need for symbols of territorial identity, and the demands for ‘administrative reforms and mercantilist state direction of the economy’ were all important factors in the development of cadastral mapping, and ‘[w]ith the development of the territorial state, rulers wanted to get as full a picture as possible of the extent and condition of their territories and found the map a useful instrument of this task’ (Jowett *et al.* 1992: 168).

Austria and Italy provide fascinating counterpoints to this story of national mapping projects on the part of a hegemonic state. Cadastral mapping was instituted in Austro-Hungary as a whole only in the nineteenth century. Until that time, any effort to consolidate the power of the Habsburg state at the expense of the nobility and church was fiercely resisted. In Italy, cadastral mapping was resisted unsuccessfully in Milan and successfully in Tuscany, and opposition ensured it was not attempted in the remaining territories (Jowett *et al.* 1992: 203–4). Cadastral mapping in France, by contrast, was particularly important for reforming tax policies – a necessity for Louis XVI and a central objective of the French Revolution.<sup>3</sup> Indeed, in 1929 Marc Bloch suggested: ‘Tax reform was one of the *raison d’être* of the revolution: to base taxation on land in a manner as equitable as possible, topographic surveys were absolutely essential.’

The *plan terrier* compiled for Corsica in the 1770s and 1780s distinguished Crown, common, and individual land parcels, and had important implications for economic development beyond fiscal reform. This fact was recognized by the post-revolutionary government under Napoleon, who lent strong support to the development of the *cadastre parcellaire* (Jowett

*et al.* 1992: 205). In fact Napoleon had long been a supporter of detailed mapping programmes and had used large-scale miniature plans and models in military campaigns for many years to great effect (Musée des Beaux-Arts Lille 1989) (Figure 5.5).

There is some disagreement about the dates when a broad-scale mapping consciousness emerged in Britain. Harvey (1993: 7) argues that 'in the England of 1500 maps were little understood or used. By 1600 they were familiar objects of everyday life.' But Jowett *et al.* (1992: 263) suggest that a national cadastral mapping programme did not emerge until much later. Crown and parliamentary land surveys from the seventeenth century contain few or no mapping provisions, and throughout the sixteenth and seventeenth centuries land enclosures had occurred in many parishes without recourse to maps. Only with the Enclosure Acts of the late eighteenth century were maps required (Jowett *et al.* 1992: 263). For our purposes, however, the point is clear: between the sixteenth century and the eighteenth century, maps became a fundamental part of everyday life and the practices of the state.

Perhaps the most thorough investigation to date of the role of mapping in the practice of statecraft is Tom Conley's (1996) *The Self-Made Map: Cartographic Writing in Early Modern France*. Conley (1996: 2) begins his book with the wonderful wordplay on 'self-making' in the title – both the production of the map *and* the making of identity (the national, French, citizen self): 'a theatricalization of the self, which acquired a consciousness of its autonomy through modes of positioning that are developed into both textual and gridded representations of reality'. Conley points to the ways in which the sudden birth and growth of mapping – 'a new cartographic impulse' – emerges along with early modern print culture and an emerging sense of national identity.

He begins with the same question posed by David Buisseret: why, between the early fifteenth and seventeenth centuries, was there such a 'sudden birth and growth of mapping?'. He gives several reasons by way of an answer. The Renaissance rediscovery of Ptolemy triggered a surge in innovations in printing, especially in wood-cutting, copper engraving and movable type, and these not only facilitated the emergence of a modern print culture (and as Anderson reminds us, a print capitalism), but also mapping culture and mapped capitalism. Developments in science and technology placed added emphasis and value on quantification and measurement. Innovations in the visual arts, especially the emergence of 'saturated realism' in Northern Europe and one and two point perspective in Southern Europe, prioritized the 'naked eye' over other senses as the basis for empirical 'observation'. These were further enhanced by the use of mapping in estate planning as private property regimes were extended and public resources were redefined and enclosed. The projects of political unification, nation building and the consolidation of a notion of national space gave added importance to mapping projects, particularly in regard

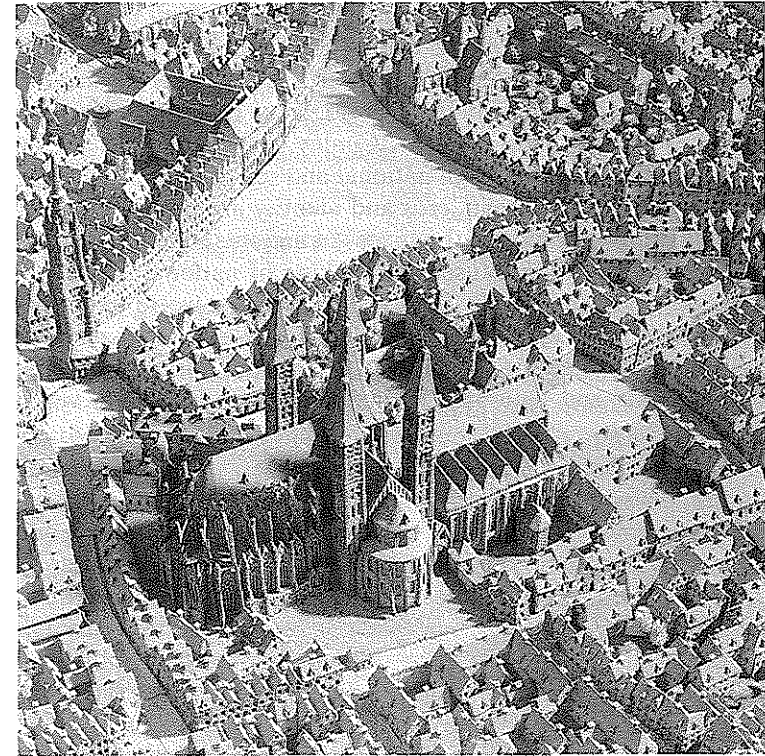
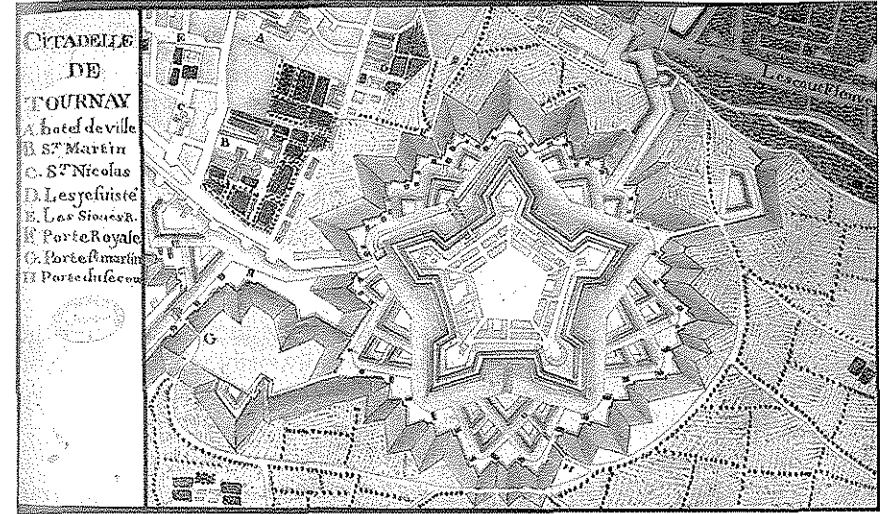


Figure 5.5 Citadelle de Tournay [top] and photograph of *Le Plan en Relief de 1701, Tournay* [bottom] (Plans en Relief: Villes Fortes des Anciens Pays-Bas Français au XVIIIeS. (1989) Musée des Beaux-Arts Lille, with permission)

to the defence of territorial borders. The national origins of early modern print culture are thus paralleled by (and related to) the emergence of mapping culture. A new cartographic impulse thus emerged historically along with a newly emerging sense of national identity, and – as Denis Wood insisted – from that point onwards, map-making is effectively a form of statecraft.

The spatial strategies of nationhood and selfhood emerged in books on navigation, island atlases, sheet maps, cosmographies and atlases, and Conley (1996: 6) claims:

‘Selfhood’ and ‘self-fashioning’, and their consequent import on the creation of national subjects become especially visible in the evolution of cartographic writing from the years of humanism to the age of Henry IV and the subsequent growth of French cartography.

The cartographic impulse is, then, a means of coping with the growing recognition of finitude in an expanding universe. This emerging autonomous selfhood is: ‘A drive to locate and implant oneself in a named space; a drive to imagine necessary connections between the “I”, the locale of its utterance, and the origins of its birth . . . a perceived need to burrow into and circulate about a body, a world, and a nation’ – giving credence to an illusion of origins (p. 303). Conley points not only to the intense interweaving of mapping with national and self-identity, but to the fact that the issue of gender, origin, *eros* and identity are produced cartographically through the mapping of the spaces of nation and nationhood.

But, if cartographic writing infused the making of national identity in Europe, it was deployed universally in the non-European world to decode existing social and territorial structures and to forge a modern national body, what Thongchai called the *geo-body* of the nation. It is to this notion of the nation building and national identity in the non-European world that I now turn.

## 6 Mapping the geo-body State, territory and nation

In terms of most communication theories and common sense, a map is a scientific abstraction of reality. A map merely represents something which already exists objectively ‘there’. In the history I have described, this relationship was reversed. A map anticipated spatial reality, not vice versa. In other words, a map was a model for, rather than a model of, what it purported to represent . . . It had become a real instrument to concretize projections on the earth’s surface. A map was now necessary for the new administrative mechanisms and for the troops to back up their claims . . . The discourse of mapping was the paradigm which both administrative and military operations worked within and served.

(Thongchai, *Siam Mapped: A History of the Geo-Body of a Nation*)

### POWER TALK AND THE PRODUCTION OF NATURE

The drive for overseas exploration, knowledge, and wealth (always through some form of national competition) accelerated the technologies of modern mapping and the territorialization of non-European lands. In the preceding chapter, we have seen how European states became involved in and committed to the development of national mapping programmes, particularly to consolidate the power of the central state against sectional and regional interests. As in the case of cadastral mapping, the response on the part of the people of the regions was mixed; new private owners and investors supported these means of defining accurately and legally the boundaries of their private property; large segments of the population supported tax reform which addressed regional and social inequalities; and established feudal interests resisted, in some cases strongly and successfully, the extension of the power of the central state and by implication the diminution of their own powers (as in the provinces of Austro-Hungary). However, the geo-coding of the body politic went hand in hand with the extension of state interests and private property regimes, with the result that local knowledges and valuations, regional systems of tophophilia, and alternative mapping opportunities were eradicated or sublimated under the universal logic of law, administration and measurement.