

Cartography, landscape and territory¹

Vicenç M. Rosselló i Verger*

Universitat de València

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Abstract:

The word landscape is fashionable. It has become thoroughly modern and triggers heated debates on concepts like territory and map. But the most decisive impetus to “canonise” the predominant word and concept of landscape has come from laws, which refer back to the idea of territory and protection. This makes clear the need for cartography. Maps are not an image like any other: they strive to bring order to the world; they serve to classify and qualify. Yet maps cannot reproduce the totality of the landscape or its evolution: when it abstracts, a map falsifies, departs from reality, simplifies and caricatures it.

Key words: Landscape, cartography, geography, map, laws on the landscape

*“... cogor et e tabulis pictis ediscere mundos
qualis et haec docti sit positura dei”.*
PROPERTIUS, Elegiae, IV, 3, 37-38.

“Learning the painted worlds of the map and what position they have been accorded by a learned god”: the elegiac client of Maecenas felt driven to do this two millennia ago. Map and landscape: for many centuries the spatial representation has striven to capture in two dimensions – on a flat surface such as a stone plaque, a clay tablet, papyrus, parchment or a sheet of paper – two often divergent yet also harmonious objectives: one utilitarian and the other symbolic (Raisz, 1931). However, the map is – or aims to be – the rendering of a landscape, a figuration based on abstraction (an apparent contradiction) which must be read or interpreted.

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1. Concepts

1.1. Map, chart, plan

One simple yet not inaccurate idea refers cartography to space represented and measured. Indeed, our Euclidian representations of space are largely fixed by contemporary mapmaking practices (Bousquet-Bressolier, 1998). *Chart* and *map* are not the only terms adopted by the practice of cartographers. Perhaps the word *tabula* was used (in Latin; now we would say ‘painting’, which brings us closer to *landscape*), as well as *description*, which equally evokes a text and a drawing: those were the most frequent terms in the scholarly world of the first printing press. *Theatrum* (‘performance’, ‘spectacle’) became more solemn and complex, since it aimed to encompass territorial, urban, historical, architectural and other figurations. *Atlas*, a ‘counter-metaphor’, came later and was used for collections that could also be called *speculum*, *torch*, ...

Applied mapmaking, however, mainly clung to *charta* (‘paper’), a name that has prevailed in many Romance and Anglo-Saxon countries in sea travel, even among the Catalans: *carta de navegar*, Portolan charts, *carta nàutica*. Map comes from MAPPA (‘tablecloth’) and is a very early expression in the guise of *mappa mundi*. The English had no qualms about mixing *maps* and *charts*; nor do I when speaking about mapmakers and mapmaking, often better than cartography, which is ‘the science of maps’.

The map iconises space not only through perception – K. Lynch’s geography from the 1960s – but also through ideas – large, powerful, exalted country; or myths – biblical history, empires; or reflection – civility, development progress... Does the map reproduce, reflect, mirror reality, or does it create it, or does it create the image of it?

Regarding the materiality of design, today’s man tends to consider only documents that resemble or coincide with an azimuthal projection, a ‘bird’s eye view’, as maps. However, the history of cartography suggests a broader range. Between the vignette and the strict map or plan there is an entire range of vantage points, of views that range from a 0° to a 90° angle. Perhaps we should stress – and we shall further on – the role of ‘false perspectives’, ‘military perspectives’, cavalier perspectives and isometries in the attempts to include the third dimension.

Mapmakers wield their own language, both when the product has an instrumental purpose and when it is a symbolic or simply sumptuary caprice. This language has slowly taken root through reiteration, self-purging and consensus. The semiologic patterns are increasingly universal, more global, if you will. The Chinese or Swedes understand them as well as Senegalese or Catalan scholars. Instrumental, regardless of whether it means ‘for waging war, too’ – especially those! – or for scientific research and the struggle against hunger: this can be said not only of general but also thematic maps. Symbolic mapmaking fits more with an ideology: there has been talk of the theological cartography which the mediaeval Church imposed for centuries. The prominent sovereigns who show off the image of their realms or the owners who show off their domains or the municipal leaders of their city impose it equally. The shift from boasting ownership to struggling to defend or exemplify it is quite feasible. After all, were it not, would there be such a plethora of cartographic documentation of territorial disputes?

The kind of taxation which can only achieve a certain distributive justice through cadastral plans or maps is grounded upon land ownership. They could not be

more instrumental, yet more than once they have symbolised territorial power, *foncière* wealth, the progressive liberal ideology... When Anthonie van den Wijngaerde (1562) drew the palace of Valsain, he stressed royal power more than ownership or leisure. The 120 linear metres of maps of the Vatican in the Ottaviano Mascherino gallery celebrate the power and presence of the Catholic Church.

Today we cannot conceive of a map without scale. Biological phenomena can be represented with a ratio of 1:100 or in even more detail (Folch, 2003), while architecture requires scales falling between 1:100 and 1:1,000. Urban planning and ecosystems move easily in a range from 1:1,000 to 1:10,000, while ecology and the economy fit the scales from 1:10,000 to 1:25,000 and even 1:100,000, which are common in what we call topographic maps. A. Cailleux and J. Tricart (1958) established a taxonomic order of geomorphological magnitudes with six intervals, from the smallest (decimetres to kilometres), where lithology predominates, to the entire Earth, where large structures command in order to situate the morphoclimatic and palaeoclimatic context, in the third order. Other authors adopt the terms macro-, meso- and micro-scale, depending on whether we are closer or further away; this can be perfectly applied to cartography.

Since we try to measure the world from a human vantage point, the body often becomes the referent. Hereford and Ebstorf's 13th century table maps fit within the body of a majestic Christ, while the scales of the old charts used inches, palms, feet, steps, fathoms ('arms'), right hands and other units, all of them referring to the body. Miles merge in thousands of steps. It should be stressed that the measure is taken by man, for man. We measure our world in *destres*, or hand spans.

Intentionally or not, maps are works of art (Crone, 1956). It is obvious that symbolic or sumptuary maps are closer to being works of art, but we can find many utilitarian maps that have a high degree of artistic value, at least until the age of technification. Portolan charts are a good example, both the utilitarian ones and the sumptuary ones, which can reflect mountain chains or lakes, an urban, legendary or ethnologic landscape. From the revealed bestiary, we could extract a true zoological archive, and from time to time even a catalogue of plant depictions.

The Montjuïc signal tower, the Molo lanterns in Genoa, the windmills in Marseilles, the blue stripe of a river, the triangle or bulbous shape of a hill, the circle of a walled village become repeated symbols which end up becoming customary. Symbols, signs, information, legends of both handmade and printed maps include a set of information connected to a place. They are geographic facts which are situated, which are located visually and geometrically. However, the space, increasingly detailed and well-represented, becomes less artistic, perhaps because in advanced civilisation space is devoured by time, by speed. The global village has contracted the dimensions.

1.2. Landscape

Regarding the word and the concept, let us begin with Benjamin Disraeli's *boutade* (c. 1830): "... in the entire world, only seeing Paris and London is interesting; all the rest is landscape".

Today we are very accustomed to the word 'landscape', but we should trace the word back to its roots. The scientific concept stems from 19th and 20th century German geography, from Humboldt ("*Totalcharakter einer Erdgegend*") and Richter. The school ended up defining it as "*a dynamic system with a spatial structure*". *Landschaft* and 'landscape' come from the Celtic or Basque root *landa* with the Dutch suffix –

schap tagged onto the end. Sixteenth-century Flemish painters introduced the practice and name. In the Romance languages, the French *paysage* came to prevail, which comes from the root *pays*, which in turn comes from the Latin *PAGENSIS* ('farmer' to us, 'pagès' in Catalan) and *PAGUS*. "*Le doux pays*" comes from the novel *La Mort le roi Artur* dating from the mid-16th century, from the mouth of Lancelot, who was condemned to go into exile in the *pays* of Logres. Before that, Chrétien de Troyes had used it in around 1170. Starting in the end of the 15th century, the word came to mean 'native land'; hence its sentimental ring.

Adhesion to Mother Earth is implicit in the expression, which is often ethnocentric (Zumthor, 1994). Space is perceived from a specific place, from a certain distance. We move closer to or further from it; we speak about here and there with geographic concreteness. *Paisaje* reached Spain through the Frenchman É. Reclus, picked up by F. Giner. The institutionists² mentioned "*el contacto purificador con la Naturaleza*" (purifying contact with Nature) and "*El paisaje es la expresión del orden natural*" (Landscape is the expression of natural order). R. Otero (1928) revived *paisagem* of Galicia with the literature of the *bocaribeira* and the *seno ártabro*.

The landscape is a spectacle that requires spectators who may have a pragmatic vantage point (such as the farmer or ploughman, the planner, the speculator), or a poetic or literary, urban, acoustic or patriotic perspective. The "static image of the frontal or oblique view of some open space" can be compared to a panorama or view (Folch, Rodà and Terradas, 2003). Some authors add to this "a socio-ecological algorithm" (Folch, 1999) to introduce an environmental landscape, "the sum of the specific traits of a territory". Let us return to Humboldt. The aesthetic perception remains in second or third place.

However, there are many landscapes. Within the **artistic landscape**, we can include both a 'still life' and a 'landscape with figures'. If we hark far back in time, we can head it with the story of the gardens of Rome, for example, the fountain of Clitumnus so vividly described by Pliny (*Ep.*, 8, 8)³. However, before the 14th century, no one in Europe spoke about the art of nature. In contrast, there are Chinese mediaeval landscape artists such as Wang Wei (701-761), a painter and poet, and Hsu Taoning (1000), when we at most were describing sacred landscapes or decorating the backgrounds of altarpieces. We cannot discuss Peter Brueghel (16th century), Nicolas Poussin (17th century), Cézanne (19th century) or Van Gogh (20th century) as landscape artists in the most understood and widespread meaning of the word.

Nicolau Rubió (Serrano, 2007), a 19th century bourgeois and *noucentista*⁴ garden designer, regarded the landscape on different scales: the garden, the park, the urban landscape ("marrying the city with the landscape"), up to regional planning. He spoke about agricultural, industrial and urban spaces "amicably distributed" in the midst of parks, hunting preserves and the like. With the landscape "of Latinity" we would return to the beginning. The aesthetic is perceived and/or sought by the traveller, by the wanderer, by the tourist. Even now, thanks to remote sensing, GPS, 3-D and other technological advances, we can even devise a *meta-landscape*, an invented landscape.

² The *Institución Libre de Enseñanza*, founded in 1876 by the Krausist F. Giner, promoted a clear revamping of educational practices all over Spain.

³ Teubner edition, pp. 248-249.

⁴ *Noucentisme* was a cultural movement which encroached into politics that got underway in Catalonia in the early 20th century.

There also exists a **literary landscape**. One of the themes in Frankfurt in October of last year was “The City as Literary Landscape”. What would remain of Jacint Verdaguer’s *Canigó* if we took away the landscape? Teodor Llorente’s “El barranc dels Algadins” and Joan Alcover’s “La Serra” are emotive evocations of landscapes⁵. Through professional bias, I should say that the key to toponyms – letters and words rooted in the land – lies in the physical and cultural landscape.

A book by my friend Salvador Tarragó was just released, entitled *Paisatges construïts*, and it refers to the Catalan legacy of public works. It is unquestionably part of what we could call the **humanised landscape**, or the cultural or anthropic landscape, ultimately an artefact. We have had centuries of history; without houses, without churches, without castles, without roadways, without bridges, the native soil would not be ‘ours’. Culture is not only a relic; it is also alive, living patrimony. The syntagma ‘**cultural landscape**’ reflects a concept evolved in its perception: sometimes nature loses and culture wins... In the French geographic tradition – to which my generation owes so much – the landscape was considered the ‘expression of societies’, not so far from genre of life or the life horizon.

The expression **urban landscape**, the kind inhabited by over half of the Earth’s population, does not sound so strange. It has been translated – even artistically – into paintings and engravings. Let us recall J. d’Barbari’s Venice or Pietro del Massaio’s Florence or Rosselli’s “map with the chain” in elevated perspective, not to mention Van der Wijngaerde’s striking views. They are also constructed landscapes brought to life by human activity or presence.

The **archaeology of the landscape**, which took off with geoarchaeology (Butzer, 1960), has become a discipline in its own right (Ashmore and Knapp, 1999), especially in Great Britain, and has been cultivated in Spain with brilliant studies (Bolòs, 2004). The territory is “*the best document we could have for studying the past..., if we know how to read it*” (Hoskins, 1955).

For my professional taste – I am a physical geographer, a geomorphologist – I might stop at the **physical landscape**, even though I have always proclaimed, in addition to the unity of geography, that human beings are a prime factor in it. Our tired old lands have withstood millennia of anthropic pressure: broken soil, fires, breakages, ploughing, levelling, edging, drainage, river corrections, up-building, civil works, buildings, road networks, etc. All of this also fabricates the physical landscape. Perhaps for this reason it is so difficult to classify landscapes. Not so long ago, some colleagues in Madrid – through the Ministry of the Environment – published an *Atlas de los paisajes españoles* (Mata and Sanz, 2003), and in an appendix they felt obliged to construct the periphrasis: “associations of kinds of landscapes”, a photograph album...

1.3. In the end, geography

After so many discursive formations where I have eluded the ‘cognitive landscape’, allow me to place myself in a slightly improper or unorthodox position. I believe that the term ‘landscape’ has been used and abused to express a reality closer to *land* or *territory*. The landscape is a constructed yet diverse object or artefact; it can be personal, sentimental, touristic (with water and blue depicted, if needed), pictorial (the

⁵ J. Verdaguer, T. Llorente and J. Alcover, respectively, are some of the leading poets from the Catalan-speaking lands and were the spearheads behind the *Renaixença* or Catalan cultural Renaissance.

word 'picturesque' comes from 'painting'), industrial or archaeological. It is another metaphor which has triggered the semantic evolution of the word: everyone understands whatever he or she wants when the word is modulated. Does someone who mentions the *archaeology* of the landscape mean the same as someone who speaks about the *archaeology* of knowledge?

If landscape structures depend on the biophysical matrix (lithology, relief, soil, hydrology, biota) which human intervention has affected, it would probably be better to speak about geography. Regardless of how much we add the novelty of GIS or the ecological footprint, it still remains pure geography, a landscape imposed on us by Europe. What is one to do?

2. Which came first, maps or landscapes?

In 1336, Francesco Petrarca climbed Lo Ventor (1,909 metres above sea level) at the same time that Angelino Dulceti was drawing up the first Mallorcan navigational charts. Apparently Petrarca was the first to make an ascent in order to view the landscape. The Middle Ages still respected Saint Augustine's dictum: "*Remove your gaze from the world*". Six centuries later, the Félibriges F. Mistral and T. Aubanèu would scale the Provençal peak. Four hundred years after Petrarca, Michel-Gabriel Paccard and Jacques Balmat would be the first to conquer the peak of Montblanc, egged on by H.-B. Saussure, in a gesture regarded as the beginning of mountaineering. In these different episodes, aesthetics, leisure and profit all come into play. The map or chart would be considered more utilitarian than the landscapes viewed or depicted, but next to the Portolan charts we have symbolic or theological maps.

2.1. *The ancient world*

Above we said that the Latin authors had shown some interest in the literary but not the artistic landscape. The architectural landscape was something else entirely, if we translate it into technical treatises and patrimony. On the other hand, an embryo of instrumental mapmaking can be glimpsed in diverse pieces of information or relics that still survive. One of the most spectacular, Arausio's stone cadaster (AD 77), is basically a fiscal instrument (and a register of the land divided among colonists), but it also contains the layout of the roadways (Via Agrippa) and the course of the River Berre, a tributary of the Rhone. The portico of Agrippa in Rome had a kind of marble mural map of the imperial domains; it does not survive today. There is also information on a city map which must have been more useful than decorative.

Finally, the *Tabula Peutingeriana* is a late copy of a large itinerary map covering the entire Roman Empire and rendered on a series of parchments measuring six metres long and 0.3 metres wide, which required schematic, deformed drawing. It depicts seas, rivers and mountain ranges, in addition to pictorial symbols for the mansions, baths, cities and ports. Yet there are few concessions to sumptuary appearance in the ancient remains we have cited. Now utility does not exclude a certain representative or propagandistic turn.

2.2. *The Middle Ages*

Ptolemaic maps – if any remain from the ancient world – must not have contained any reference to the landscape, nor do the ones that have survived, which are fully from the Middle Ages or Renaissance, reconstructed or recopied. An astronomic basis, a simple geographic design and toponyms are the sum total of their contents. Biblical maps – erroneously called theological – Isidorian maps or the maps of the oft-copied “holy men” (Beatus of Liébana) adopt an ideological bent that we could allow into mental cartography. Not for nothing, the simple scheme of the T-O map is made to dovetail with the start of the *terrarum orbis*. Three continents, Asia as an eastern semicircle, Europe in the NW quarter, and Africa in the SW, are separated by seas or rivers without a great deal of precision, which are decorative or doctrinaire if they do appear. There is nothing about landscape, except the terrestrial paradise or the celestial city of Jerusalem: pure decoration.

Likewise we could speak about the large encyclopaedic maps that develop the previous scheme – perpetuating classical sediments – in altarpieces or large panels which are actually a sermon on the Creation or an exposition on biblical history implanted in the ecumene. The Hereford altarpiece (from the late 13th century) is called *estorie* and has more than 1,100 inscriptions. It boasts not only a framework of seas, rivers, islands and mountain ranges but also a multitude of architectural vignettes, a lengthy bestiary and many human figures. The Ebstorf Map (probably prior to its Hereford counterpart and destroyed during World War II) had similar characteristics. Yet there is no landscape intention: the world was drawn as a divine creation subjected to the judgement of God (Harvey, 2007).

In around 1154, Al-Idrissi, a transnational geographer born in Septa who ended up living in Sicily under Roger II, drew up a large map divided into 70 sections (and seven climates) which has many Ptolemaic transmutations. The texts accompanying it note its instrumental purpose – didactic and/or for travellers – but its embryonic decorations (wavy sea and blue rivers, mountains like caterpillars, floral buttons for the cities) begin to suggest a vague idea of landscape, in contrast to other Islamic maps, which were strictly schematic and symbolic.

I would daresay that the rudimentary city maps that started to be drawn up in the 9th or 10th centuries are more symbolic of the emblematic *situs* of the most important cities, Jerusalem and Rome. Yet the defence walls, representative buildings, temples and streets evoke something of the landscape.

Portolan charts, which were initially instrumental, require a chapter of their own. Sailing and cargo loads were facilitated with the compass and *sestes* (dividers). In these charts, the coastal landscape is simplified into a heavily broken littoral line; inland, there is nothing more than perpendicular toponyms. They are true scale maps. Now the masters of navigational charts found a more profitable placement for their product, sumptuary, decorative or didactic. The majority of works that are still conserved are in this luxurious style and are peppered with a host of figurations that begin with vignettes of cities and flags, followed by mountains and chains, images of sovereigns, terrestrial animals, fish, ships and more. I would not claim that the panorama introduced is more landscape than cartography.

In reality, we are reencountering the encyclopaedism – ethnographic, even – of the large 13th century altarpieces. What is clearly established (Pujades, 2007) is the duplicity between the utilitarian and the sumptuary bias. The latter encompasses the

isolaria which, during the transition to the Renaissance, allowed for imaginary journeys with the accompaniment of texts and images. But not much landscape.

2.3. *The Modern Age*

In the late 15th century, Martin Behaim tried to transfer the cartographic information from his age onto a metal globe. A. Örtel and many others would later follow suit. Generalisation and synthesis had to be imposed by force, no matter how meticulous the engraver was. Parchment and paper, nonetheless, were the materials of a cartography that began to spread thanks to the printing press. A sheet is two-dimensional, even though the decoding of many figures enables one to penetrate the depth or height: some are even perceived nose-dived (Zumthor, 1994).

Soon printed maps, the earliest ones woodcuts and later brass or copper engravings, strove to remake the landscape, but for centuries they barely went beyond the relief, portrayed with shaded, angled silhouettes or tortuous caterpillars, the river system with undulant courses, and a hint of vegetation from time to time. The range of symbols of settlement would gradually become richer. In simplifying, mapmakers become aware of abstraction, and when they want to offer *landscape*, they add vignettes or panoramas of both cities and monuments and coats of arms. Likewise, progress in the engraving technique yielded increasingly artistic products.

Maps, now more detailed with scales of around 1:500,000, could offer substantial guidance in commercial treks, both peaceful and hostile. Wars and invasions could lead to a *bellicose landscape*. All we have to do is recall the obsession with the *cols* or passes of the Pyrenees shown the 16th century cartography through the map consulted by Pere Gil in 1596 (“els colls de la mappa”, 1600). ‘Regional’ maps were particularly widespread in Central Europe in the 16th and 17th centuries; from then on, the sovereigns and monarchs were the main driving forces behind the cartography associated with power: the more land, the more power. The executors were called ‘geographers’; we should not lose sight of that.

Some map collections are labelled as *theatre*, which evokes the perspective technique assimilated by painters, especially landscape painters. Geometrised gardens and the Albertian regularisation of Renaissance buildings appear on the plates of Abraham Örtel’s *Theatrum Orbis Terrarum*. Does this mean that strict mapmakers are making landscape? *Stricto sensu*, no. They inform, they communicate using a graphic language with vacillating codes. When they want to make cities, monuments, histories pictorial, as in F. Braun and J. Hogenberg’s *Ciuitates Orbis Terrarum*, they resort to another frame: perspective.

2.4. *Today*

The word *landscape* is fashionable. It has become thoroughly modern; it is a unique presence in the world of the humanities and triggers heated debates among geographers, ethnologists, landscapists, environmentalists, philosophers and epistemologists on concepts like *territory* and *map* (Baridon, 1999). In 1997, Jean-Pierre Le Dantec mentioned fourteen journals (in English, French or German) which had ‘landscape’ in their title or as a core theme. Anne Coquelin’s *L’Invention du Paysage* and Louis Dagognet’s *Mort du Paysage: Philosophie et Esthétiques du Paysage* were released in

1989. The hoard of rising literature is unattainable, and the term's presence in the media is insistent.

The landscapes of the 20th century used everything visible, everything that can be detected or photographed on foot, from a balloon, from an airplane, from a satellite. The purpose of remote sensing must be the landscape... If remote sensing is used in cartography, the purpose of cartography must also be the landscape. Have we concluded the syllogism correctly?

Since the introduction of airborne sensors and plotters – a wartime advance, like so many others – mapmaking technique has made spectacular progress: the task that took the old topographers years can now be accomplished in just a few days. The GPS has ended up being a tool within everyone's reach, and maps have almost inexhaustible bases. It is clear that we must examine alternative sources to introduce invisible elements into them which are perhaps not related to the landscape. Professor Veny's *Atlas del domini lingüístic* cannot be drawn up from an airplane, but from many pilgrimages on foot across the land. Are dialectal colours, isoglosses, the cultural landscape?

A geomorphic atlas – stereoscopic analysis, the filtering of greys or colours, helps a lot – and a phytogeographic map are unquestionably about the landscape, but we could wonder whether they encompass the entire landscape, all the landscape we have surveyed. More than one century ago, E. Raisz advocated and executed morphological and physiographic maps derived from diagrams which had been introduced by William M. Davis in the transition from the 19th to the 20th century. They were combined perspectives with geographic sections that combined pictorial symbols – around 40 different kinds – with oblique, stylised aerial views. Understandable by anyone with basic education, I believe that they are actually the most complete synthesis of map and landscape. However, they were only useful for 'small' scales.

For centuries, cartography has been burdened with the problem of the third dimension. J. G. Lehman's solution (1799) of more or less dense hachure according to the gradients systematised the shadings made popular during the 18th century, but isohypses were not introduced until 1830 ("six-inch" map of Ireland). Legibility was enhanced with colour (hypsometric tinting), and the topographic landscape acquired plasticity with the more or less conventional shading in which Helvetic cartography would excel. The world of tourism, on the other hand, adopted hybrid forms of depicting the relief, which became veritable landscapes, always at the expense of topographic accuracy.

In the last 25 years, seizing upon the overabundance of data and models, the third dimension has once again come to the fore. Maps of slopes can be accompanied by models of the surface curvature, of visibilities, of elevations or of potential solar radiation. The three-dimensional views found in Google Earth – virtually a videogame – are available to everyone.

3. The ontological landscape and laws

Some philosophers, such as George Lakoff (1989), claim that our life and all our thoughts are made up of cartographic operations, or mapping. Grammar, they say, is nothing other than a map of the language. Metaphors are determinants of everyday life, and since metaphors are mapping operations, all our thinking takes place thanks to this mapping of concepts and structures. Thinking means drawing a map, outlining

boundaries, organising a terrain, transforming it into a known landscape (Shusterman, 1999). This works wonderfully for us geographers. The map, just like the pictorial landscape, would be a *double* of the real territory, a mirror of the truth. This is why we find so many maps and plans in the archives as legal evidence.

However, maps cannot reproduce the totality of the landscape or its evolution, not even on a 1:1 scale. For this reason, the editor or institution often enlists aid (hypocritically) to correct and update them. Maps are not an image like any other: they strive to bring order to the world; they serve to classify and qualify. We cannot forget that measuring the land always becomes an appropriation of space.

The management of “spatial capital”⁶ suggests or demands cartography: consider the situation of a borderland or the closeness or distance of a road; or in the issue of strategy, either geopolitical or urbanistic (the qualification of lands!).

Yet let us return to the landscape. Do the treatise writers, scientists and philosophers lead or trail behind the terminology? I would not dare to answer this question, regardless of whether it is to see or to represent. Pictorial figuration aims to be a portrait of reality (and aerial photography is even more so), while mapmaking is always an abstraction of the land or the landscape. When it abstracts, a map falsifies, departs from reality, simplifies and caricatures it. For this reason, maps bear legends, a word which comes from the Latin *legere*, literally ‘to read’, meaning that at least part of the cartographic code is not obvious. Here we should add the relationship between text or narration and map in many (historical) cases. Once again we are evoking the implication between written Portolan and mediaeval navigational charts. The *Liber de existencia riueriarum Mediterranei* was written to explain or accompany a 12th century *cartula mappaemundi*. The great map by al-Idrissi came coupled with the *Kitab al-Rugar*.

Since we scientists cannot agree, we have pragmatically passed off the task of defining the landscape to technicians, politicians or legislators.

3.1. Laws on the landscape

The most decisive impetus to ‘canonise’ the predominant word and concept of ‘landscape’ has come from laws. Since the 1960s, some European states have legally formalised the declaration of ‘protected spaces’ and issued provision to ensure their promotion and survival. By the late 20th century, almost all governments – some with greater or lesser efficacy and conviction than others – had enacted a set of protectionist laws. Gradually, a specific jurisprudence began to take shape, even though the figures on safeguarding, cataloguing and promoting the landscape were extremely diverse (Llorens and Rodríguez Aizpeolea, 1991).

The European Landscape Convention was gestated between 1998 and 2000 (Florence, 20.10.2000). The expression ‘space worthy of protection’ has become *landscape*: “The natural and humanised environment expressed in landscapes has become part... of territorial planning and development policies” for the member states of the Council of Europe. A new concept was introduced: the *sustainable* development of the cultural, ecological, environmental and social realms and a natural and cultural legacy was mentioned.

⁶ “The pool of resources accumulated by an actor which allows him to get profit according to his strategy, to the use of the spatial dimension of the society” (Lévy and Lussault, 2003).

The ‘European’ definition of landscape must be noted: “any part of the territory, as perceived by the people, whose character is the outcome of the action and interaction of natural and/or human factors”. Other definitions refer to “landscape policies”, “landscape quality”, “landscape protection”, “landscape management” and “landscape planning”. I believe that it is essential to note that the most solid part of the proposals – which are not always precise enough – refers back to the idea of territory and protection. Underlying it is the qualification and cataloguing for which cartography is indispensable, even though it is not mentioned. Identifying and qualifying in order to plan: geography’s mission *par excellence*.

Valencia’s law on *Ordenació del Territori i Protecció del Paisatge* (Territorial Planning and Landscape Protection, 30.06.2004) was the first⁷. Section I is devoted to planning criteria, which include quality of life and sustainable development. Article 11 refers explicitly to landscape protection, as does the whole of Section II, which is tellingly divided into the rural environment and the urban landscape. Section III mentions the land planning instruments. In all of its 236 pages, the regulation from December 2006 never mentions cartography! At any rate, it has hardly been applied.

The Catalan law on *Protecció, Gestió i Ordenació del Paisatge* (Landscape Protection, Management and Planning) dates from 2.06.2005. Articles 10, 13 and 14 cover landscape catalogues, a landscape observatory and maps of the landscape, respectively, without either specification or definition. Another thing altogether is the regulation issued on 21.09.2006 which includes the claims of the College of Environmentalists. Article 9 mentions cartography in detail – maps of landscape units, maps of visual basins, evaluation maps and landscape quality maps – and stipulates a minimum scale of 1:50,000. Even though the administrative language is not always satisfactory, the interdependence between landscape – this slightly slippery landscape that is legislated – and cartography is quite clear.

The Balearic Islands are in a category of their own. Since 2006, there have been attempts to embark upon a legislative project bearing in mind that “the landscape is an economic asset” and the backbone of tourism. I know that work is underway on a draft in the corresponding regional ministry, but the delay is significant. The people working on it are knowledgeable about maps.

* * *

A vaporous, blurred, diffuse landscape that is legally rarefied requires a map as a means to define it. As Shusterman (1999) said, there is a rhizomatic web between map, landscape and territory. A map is open and can be connected on all sides; it can be improved, folded, cut or filled as a political act or as a reflection. When a description is overly arduous, we geographers add a sketch or a map, like the gentleman Tristram Shandy in Laurence Sterne’s disturbing novel (c. 1760).

The pragmatic offices that work for others and draw up “positive environmental impact” maps (!) speak about the “cartography of the landscape”. We could talk about the *cartographic landscape*, but that would be the topic of another chapter. Geotechnical maps (I am resisting the expression ‘geoscientific’) tend to accompany

⁷ The circumstance of the congress where this lecture was delivered made it necessary to cite examples from all three Catalan-speaking lands: Catalonia proper, the region of Valencia and the Balearic Islands.

maps of risks, forest planning, pollution, waste elimination, etc. (Obartí, 2008). The adjectival label 'landscape' conceals an indisputable, clear applicability, a dichotomy that is not easy to resolve.

In the 'European' concept of preservation, protection tends to imply an adversary: protection against ourselves, even against *urbanity*. Urbanism does indeed devour territory, yet it also creates landscape... So many dichotomies, so many contradictions, so many mirages! Perhaps everything is simpler and clearer, regardless of whether we call it territory or landscape. With maps, of course.

Bibliography

- ARENTZEN, J.G. (1984). *Imago mundi cartographica*. Munich: Fink.
- BARIDON, M. (1999). "Les repères culturels du paysage", in SHUSTERMAN, R. (ed.). *Cartes, paysages, territoires*. Bordeaux: Presses Universitaires de Bordeaux.
- BOUSQUET-BRESSOLIER, C. (1995). *L'oeil du cartographe et la représentation géographique du Moyen Age à nos jours*. Paris: CTHS.
- BROC, N. (1999). *Les Montagnes du siècle des lumières: perception et représentation*. Paris: CTHS.
- CRONE, G.R. (1956). *Historia de los mapas*. Mexico: Fondo de Cultura Económica.
- KISH, G. (1980). *La carte, image des civilisations*. Paris: Seuil.
- LAKOFF, G.; TURNER, M. (1989). *More than cool reason. A field guide to poetic metaphor*. Chicago: University of Chicago.
- LEVY, J.; LUSSAULT, M. (2003). *Dictionnaire de géographie et de l'espace des sociétés*. Paris: Belin.
- LLORENS, V.; RODRÍGUEZ AIZPEOLEA, J. (1991). *Els espais naturals protegits a Espanya*. Valencia: Alfons el Magnànim.
- MATA, R.; SANZ, C. (2003). *Atlas de los paisajes españoles*. Madrid: Ministerio de Medio Ambiente.
- OBARTÍ, J. (2008). "El paisaje desde la ciencia a la planificación territorial", in MATEU, J.F.; NIETO, M. (eds.). *Retorno al paisaje. El saber filosófico, cultural y científico del paisaje en España*. Valencia: EVREN.
- SERRANO, D. (2007). "Nicolau Maria Rubió i Tudurí y la idea del paisaje", in PAÛL, V.; TORT, J. (eds.). *Territorios, paisajes y lugares. Trabajos recientes de pensamiento geográfico*. Cabrera de Mar: Galerada / Asociación de Geógrafos Españoles.
- SHUSTERMAN, R. (ed.) (1999). *Cartes, paysages, territoires*. Bordeaux: Presses Universitaires de Bordeaux.
- ZUMTHOR, P. (1994). *La medida del mundo. Representación del espacio en la Edad Media*. Madrid: Cátedra.