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THE MEDIEVAL VILLAGE AS SEEN BY FRENCH ARCHAEOGEOGRAPHY¹

By MAGALI WATTEAUX²

Introduction

Historical and archaeological research has explored and frequently established many aspects of the history of medieval villages. These include the communities (of which much is known for the high and late Middle Ages) and their place in legal, political, and economic networks; the socio-economic functions of the village; the origins of villages; the role of elites in creating villages; the spatial organisation of villages; the typology of village forms; how relations between villages and surrounding farmland were organised; and so on. This raises the question of what an archaeogeographical approach may add to the picture. The purpose of this paper is, precisely, to show as simply and clearly as possible what French archaeogeography can bring to our knowledge of villages, and notably those that still exist, not those that have disappeared and been dug up by archaeologists in the vicinity of current habitats.

This discipline was first developed in France by Gérard Chouquer during the 1990s, initially under the name ‘archaeo-morphology’, then, from 2000 onwards, ‘archaeogeography’ (see, for example, Chouquer 2000; 2003; 2007).³ Archeogeography needs to be understood at two levels: as an archaeology of geohistorical knowledge that acknowledges the major ongoing challenges in determining and reconfiguring the objects of study of historical geography as apprehended by various disciplines; and second, as a discipline focusing on the dynamics of landscape forms and road networks (the ‘planimetric’ dimension of the ‘Ecumene’).⁴ This latter approach basically consists of studying all aspects of a society’s rural and urban spaces at several temporal and spatial scales, with the dual aim of helping to reconstitute the historical periodisation of the forms of these spaces, and improving understanding of the long-term dynamics determining how they have come down to us.⁵ Archaeogeography clearly shares much with geography. But their common points notwithstanding, archeogeography differs in its chronological depth and the attention paid to morphological analysis of landscapes, something in which geography has

lost interest. French historians have also neglected morphological analysis, despite Marc Bloch’s interest in the subject. The attention paid in the late nineteenth and early twentieth centuries to maps, cadastral maps, and aerial photographs yielded little in the way of convincing morphological analysis of the information provided in such documents, a failing which does much to explain the highly critical attitude or pronounced misgivings that most historians and archaeologists have towards morphology, that is when they did not dismiss it out of hand (Chouquer 2009). Concerning ancient centuriation lines and then landscapes as a whole, archaeogeography has completely transformed morphological analysis of land parcels and road networks by establishing more complex and scientific underpinnings.

This discipline clearly does not stand alone. In a book published in 2013 (Chouquer and Watteaux 2013), the authors list 152 discipline titles or simple approaches describing a research area at the intersection of geography, history, and archaeology (historical geography, landscape archaeology, spatial archaeology, geohistory, chronology, historic landscape characterisation, etc.).⁶ It falls outside the scope of this article to go into the differences between them, but schematically speaking, archaeogeography stands out for its voluntarily reflexive stance towards its research objects and for the attention paid to the complex processes by which landscape forms are transmitted and hybridised in the long term (unlike studies that view landscapes as ‘palimpsests’, *i.e.*, with a linear and stratigraphic conception of over time). We have moved from the study of land forms and the fossilised or buried remains waiting to be mapped or unearthed, to the study of what has come down to us as contained in today’s landscapes, in spite of – or in fact because of – the numerous changes altering them through the ages. The discipline of archaeogeography hence deals with the memory of places, and is akin to Laurent Olivier’s (2008) innovative definition of archaeology (Watteaux 2017a; Lavigne 2017). The true focus of archaeology, he argues, is not past events as they actually occurred, but rather the memory contained within things, what we find in them and understand from them here in the present. This perspective does not preclude the study of earlier land systems specific to a particular society and period; but it does considerably alter the ways we understand and speak about them. In this, French archaeogeography has a certain number of points in common with Historic Landscape Characterisation (HLC) as developed in

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³ This discipline is also known and used by certain researchers in Italy, Portugal, and Spain.

⁴ The Ecumene is a term used by geographers to mean ‘inhabited land’.

⁵ Readers wishing to know more about this discipline are referred to Watteaux 2017a, in English. A website devoted to this discipline (<http://archeogeographie.org>) is currently undergoing maintenance, and will be accessible once again in late 2020 on the open edition hypotheses.org platform.

⁶ This (non-exhaustive) survey focused on publications in France, Great Britain, Spain, Portugal, Italy, and even Germany thanks to summaries in French by certain historians. See Watteaux 2009 for a short presentation of the British historiography.

Great Britain. Hence archaeogeography does not pretend to be able to provide answers about all facets of research into old landscapes and spaces. It is just one component among others, yet with the ambition of asserting the need to deploy an ‘archaeology of knowledge’ approach alongside the production of knowledge by studies specialising in planimetry and societies’ spaces.

The purpose of this paper is not to change how villages are viewed or reconstructed by other disciplines, but to demonstrate the benefits of an alternative methodology, using different scales to that of archaeological or village sites, and looking at other aspects of the subject. I also hope to show the interest of initial results using this French methodology for studies conducted in the field of settlement history and archaeology in Great Britain, following the scholarship of John G. Hurst and Maurice Beresford (particularly since the MVRG became the MSRSG in 1986, as is well known to readers of this journal). The questions characterising an archaeogeographical approach are intrinsically spatial and morphological. That is why I use the term ‘village’ in a catch-all way: many of the results I have chosen to present concern ‘real’ villages (fairly small rural settlements) as well as market towns, bastides, new towns, and even small towns. While there are historical and geographical differences between these various scales on the settlement map, these levels tend not to induce methodological differences in how they are studied to apprehend their spatial and morphological organisation. Indeed, there is no essential difference in how to envisage space for, in historical terms, there is no link between how these towns were designated in medieval texts – *villa nova*, *burgus*, etc. – and their morphology (Gauthiez *et al.* 2003). All these cases are small-scale localities, whose morphologies do not necessarily differ, and which need to be understood as part of larger systems of settlement, circulation, and land usage.

To present these various dimensions of the village as clearly as possible, together with how archaeogeography treats them, I shall start by presenting the archaeogeographical method of studying village forms and what sets this apart from traditional approaches; I then discuss villages as components in settlement networks and road networks; lastly, I reposition the village within the surrounding farmland with which it is inextricably linked.

An alternative methodology

From village typologies to morphological analysis of the multiple legacies forming village plots of land

Analysis of village forms based on cadastral maps did not originate with archaeogeography, but dates back to the late nineteenth and early twentieth centuries when it was adopted by the German and then the English school of rural history and historical geography, introduced to France by Bloch. The main difference, however, is that this earlier research sought primarily to devise a typology of villages (in terms of their morphology), associated with a typology of agrarian landscapes (primarily hedged wooded pastureland – *bocage* – and open field), seeking to establish their historical and national origins, and

even – in the case of the originator of such typologies, August Meitzen – their ethnic origins (Zadora-Rio 2003; Chouquer and Watteaux 2013). Such typological work (Fig. 1) is still a useful tool, as we shall see, but it has become secondary to morphological analysis as conducted since the late 1990s – initially referred to as ‘morphodynamic analysis’, and now part of the broader field of archaeogeography. Nowadays the focus is on teasing out the multiple legacies fashioning village plots of land, drawing on established archaeological discoveries and historical knowledge (Chouquer 2007; Watteaux 2014). The village and its surroundings are thus no longer considered as the primary strata of land usage, as they once were.

From the historical topography of medieval villages to studying how village forms evolved

In the wake of these pioneers, French medieval archaeologists and historians developed what is referred to as ‘historical topographic analysis’. Drawing primarily on old land maps (often, in France, from the nineteenth century), such analysis seeks to rediscover the location, form, and extent of historical elements which have since disappeared from old centres, working on the assumption that they still mark the village topography and morphology (Chouquer 2012). Such an approach is familiar in urban contexts, particularly for establishing where old town walls once stood. For instance, archaeologists compared the Napoleonic land maps, written sources, and archaeological cross-sections to piece together the topography of the eleventh-century castle mound at the heart of the village of Betz-le-Château in Indre-et-Loire (Figs 2 and 3) (Riou and Marteaux 2012).

Let us spell out how archaeogeography differs. As Élisabeth Zadora-Rio (2003) observes, the goal of medieval archaeologists and historians is not to understand the origins and evolution of village forms as a whole, but to focus solely on the medieval phases in the history of an agglomeration, and particularly the polarising role played by the castle and/or church at its core. Additionally, specifically for archaeologists, their approach ‘is only distantly related to morphological analysis. It is always selective, isolating on the map what can be interpreted with reference to archaeological structures; it is interested primarily in the traces left, not the form’ (Zadora-Rio 2003, §19). An archaeogeographical approach, on the contrary, implies using planimetric documents as a primary source for morphological analysis.

A specific methodology and document set

The archaeogeographical method, while differing from that of archaeology, history, and geography, draws on the documents and data drawn up and used by these disciplines. It is thus a ‘sister’ methodology, and complements its siblings (Robert 2011; Brigand 2015; Watteaux 2018). An archaeogeographer works with an extremely heterogeneous and heterochronic set of documents, ranging from the extremely typical (written sources, old maps) to the most contemporary (LiDAR), using mainly what are known as planimetric documents (maps, aerial photographs, satellite images, and

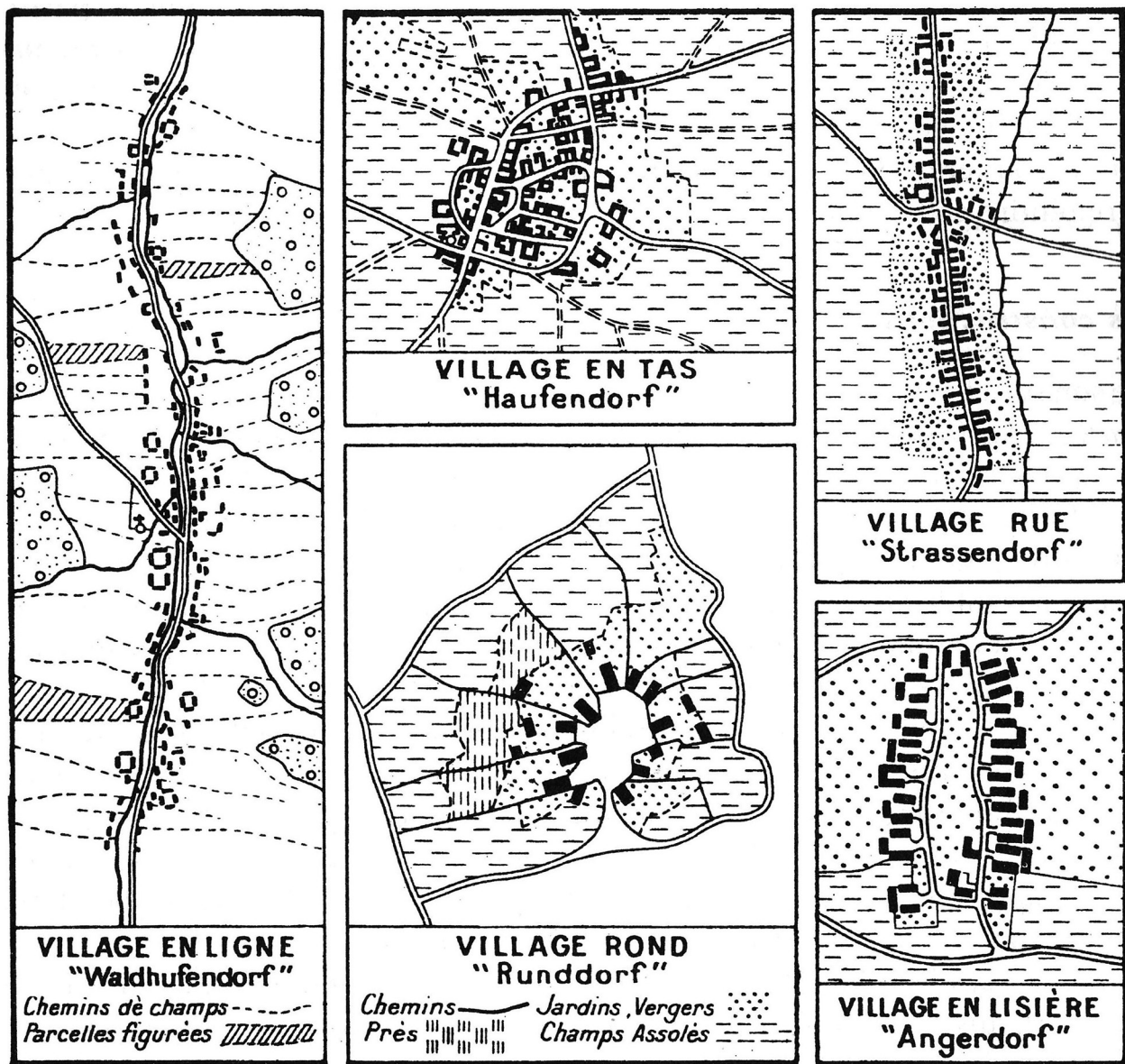


Figure 1 Typology of villages, taken from René Lebeau (1969).

geographical databases). This type of broad documentary corpus is necessary to study the ‘planimetry’, that is to say the features produced by all the actions of societies on the land surface: roads, land parcels, habitat networks, artificial limits composed of vegetation (forest hedges, for example), coastlines, hydraulic works, human actions on the hydrographic network, and so on. It also supposes identifying many of these planimetric forms to see how they are organised, how they combine, how they conflict, and so on and so forth.

Furthermore, the current state of the landscape is not separated from earlier states. Archaeogeography views legacies on the basis of the current state. Additionally, archaeological traces are deemed to have a complex (non-linear) relationship with current forms. This is shown by an aerial photograph of La Cartoucherie, near Genlis in Côte-d’Or (Eastern France) (Fig. 4). An archaeological ditch (probably dating from the Iron Age and the early Roman period on the basis of excavations of similar lineaments a few hundred metres to the north) runs

north-westwards beneath a contemporary geographical feature, a path, as if there were no temporal gap between the two (Chouquer 2009). The association of the two levels creates a coherent whole in which memory and oblivion are interwoven. This example also shows that analysis needs to address different levels of landscape conjointly. Old relief patterns such as hedgerows, stone walls, lynchets, and so on – the province of the archaeologist – must not be dissociated from the planar layouts and features visible on contemporary maps – the province of the geographer. Relief pattern and planar layout both need to be taken into account in archaeological analysis.

This depends on compiling the historical, archaeological, and geographical information deemed relevant for a given georeferenced space. This ‘compiled map’ is then used to conduct analysis and formulate hypotheses about the observed morphology (Fig. 5). Chouquer uses a metaphor to capture the purpose of such a document for historical research: ‘the compiled map of

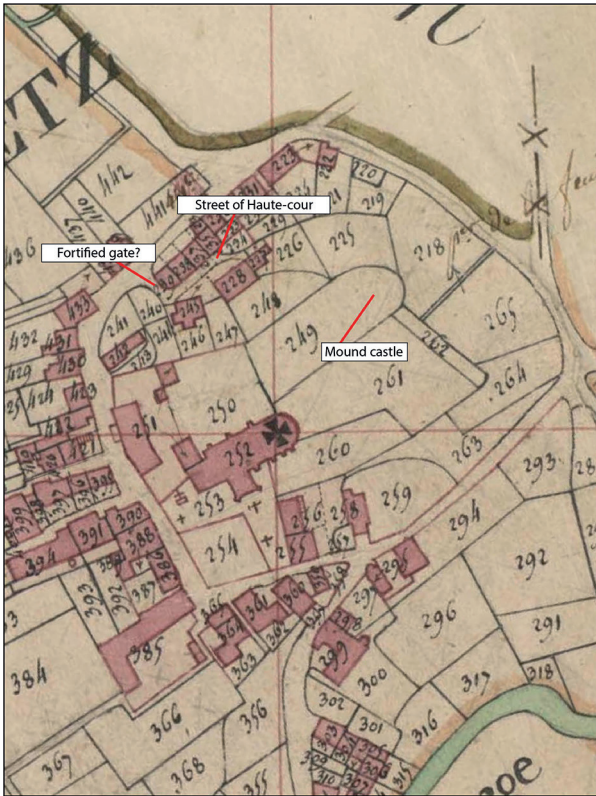


Figure 2 The centre of the village of Betz-le-Château on the Napoleonic land map (Rioux and Marteaux 2012).

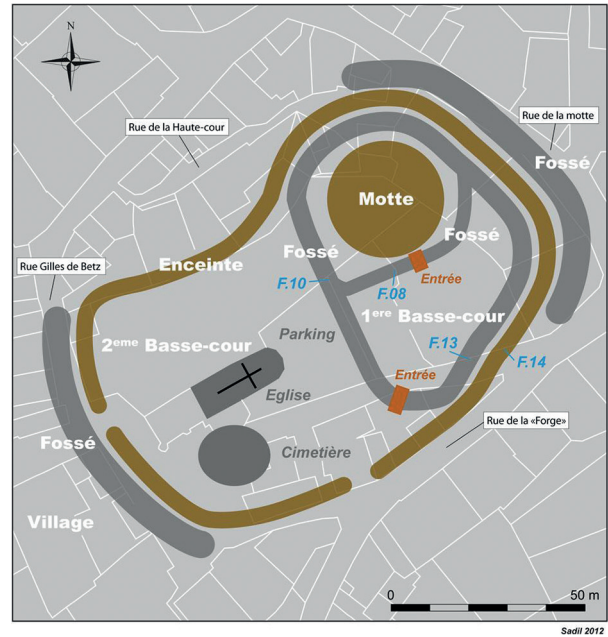


Figure 3 Hypothetical reconstruction of the medieval topography of the village of Betz-le-Château (Indre-et-Loire) (Rioux and Marteaux 2012).



Figure 4 Aerial photograph of La Cartoucherie, near Genlis (Côte-d'Or), illustrating the complex (non-linear) relationship between archaeological traces and current forms. © Chouquer 2009.

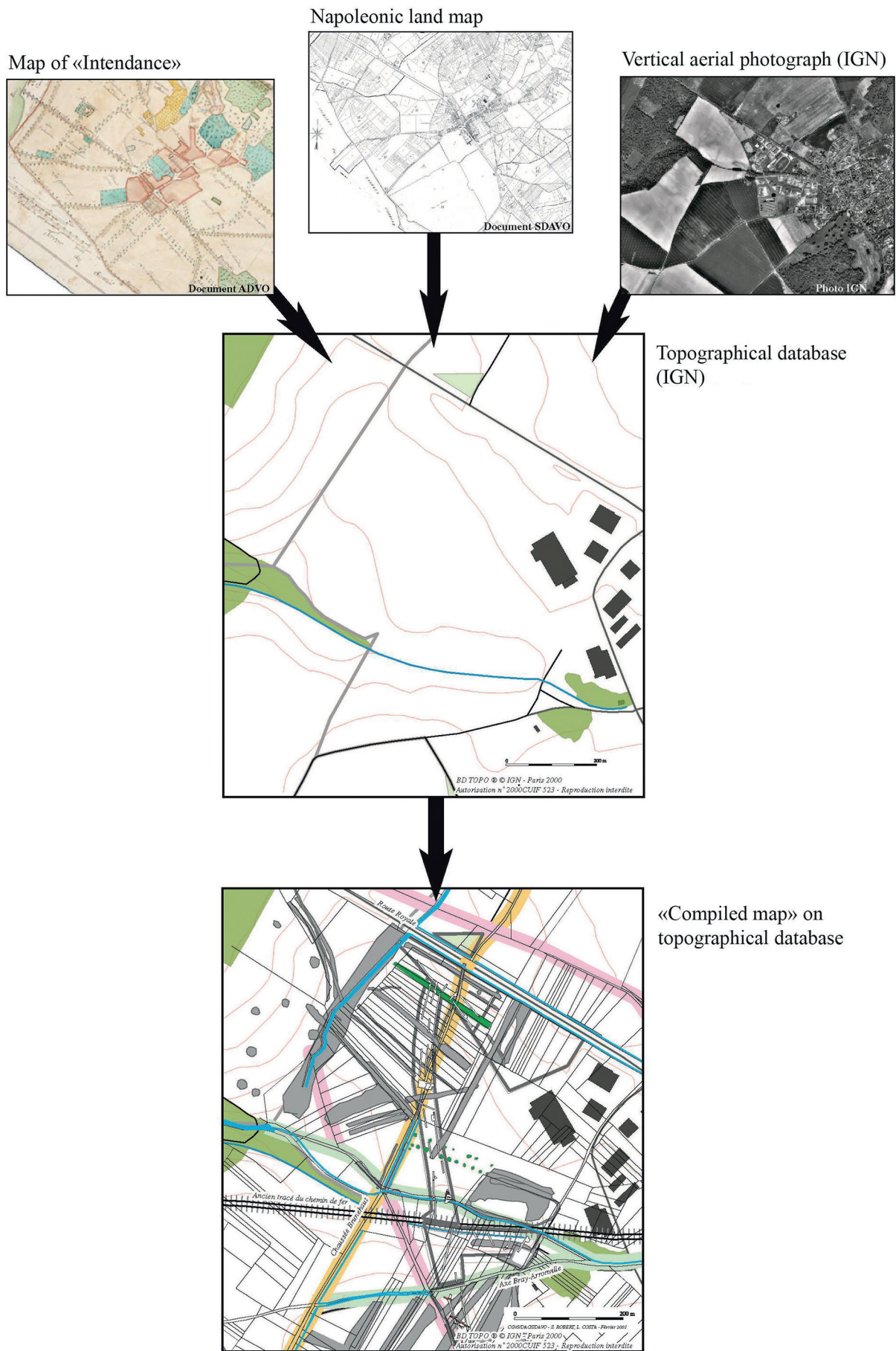


Figure 5 Principles of the 'compiled map' (Robert 2003).

archaeogeographers is no more of an objective “source” than a [medieval] cartulary is. It is a pure construct. But this construct gives access to information about the past, and above all enables associations depending on what has been included in the document’ (Chouquer 2007, 223).

To sum up, the specificity of an archeogeographical approach thus resides in combining the various levels – layouts, relief patterns, and archaeological traces – on a single map, along with as much historical, geographical, and environmental data as possible, and then analysing this map at several different scales. Landscapes are a topic primarily for geographers, rather than for archaeologists; yet with regard specifically to everything that shapes the layouts and forms transmitted over time, they are the subject terrain of archaeogeographers.

From a strictly morpho-functional and morpho-historical interpretation to studying planimetric dynamics over time

Since the late 1990s, it has become established practice to focus on planimetric documentation and to (once again) consider it as a reliable and appropriate source for studying agglomerations. From 1995 to 2003, a group based in Tours, headed by architect and urbanist Bernard Gauthiez, assisted by Zadora-Rio and Henri Galinié, worked on the ‘morphogenesis of medieval agglomerations’, leading to the publication of a book (Gauthiez *et al.* 2003). This collection of essays is not simply about villages founded in the Middle Ages, but ‘French agglomerations, of ancient or medieval origin, of all sizes’, from villages to towns, in Normandy, Languedoc, and Anjou-Touraine. Gauthiez is strongly attached to the morpho-historical tradition, and a very good analyst of regularities in size and orientation, and his influence may be seen in the attempt to identify planned morphologies in the development of medieval agglomerations (Fig. 6). This consists in identifying a founding moment and a powerful figure or institution shaping the form taken by these agglomerations. The evolution of these initial forms is subsequently limited to a process of degradation for they became fossilised in the layout of the agglomeration.

The medieval historian H el ene Noizet (2014) has indicated that such a morphological interpretation has limitations. Looking for any direct link between an ancient social initiative and recent layout is problematic, for it is often difficult to identify, quite simply because it tends to no longer exist (except in the case of ‘foundation’ villages, see below). Thus in 2003, Zadora-Rio referred to the ‘disorder’ in the organisation of towns and villages in Anjou and Touraine: any link between these forms and a putative planned layout remains impossible to establish, curtailing scientific discussion of the form of these agglomerations.

Rather than concluding that written sources are incommensurable with planimetric sources, archaeogeographers acknowledge that forms – as brought to the fore by planimetric documents – relate to multiple timescales, and they therefore link up the various epochs with which these forms are associated from prehistory through to the present day. Without rejecting synchronic dating, they supplement it by examining how epochs

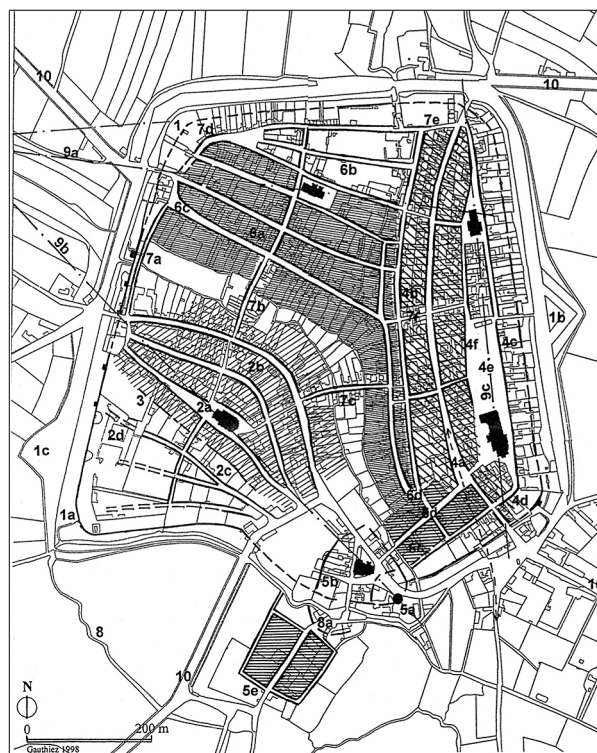


Figure 6 Verneuil-sur-Avre (Eure): morphological hypotheses based on the Napoleonic land map of 1837 (Gauthiez *et al.* 2003).

are related, in a process involving transmissions and transformations. That is what Chouquer’s concept of ‘transmission’ (2007) seeks to capture, emphasising that spatial forms only exist because they are appropriated by subsequent societies. The meaning and materiality of these forms clearly change, but always to a limited extent, and without effacing their general outline. These transformations are in fact the precondition for transmission: ‘what gives the appearance of continuity in fact results from permanent discontinuity: it is only because there are many modifications to details that the overall structure is transmitted’ (Noizet 2014, 186). Thus as Noizet (2014, 185) succinctly puts it: ‘it is the overall process of the transmission of a form which is taken into account, from a period of varying remoteness through to contemporary documents, and not an individual moment’. Ultimately, the ‘project’ (in the sense used by architects and urbanists) remains pertinent for historical analysis, but equally, all subsequent stages (in the case where there was indeed a development project) are held to be just as interesting, and hence form an integral part of the scientific study and account. Conversely, not all foundational moments necessarily start over from scratch, for planned developments tend to take their place within a space that is already organised, in the light of oro-hydrographic factors and/or prior social functioning.

The example of the paleomeander of the Seine in Paris, for which Noizet, Mirlou and Robert (2013) have compared textual, planimetric, and archaeological data, clearly illustrates this entire chronic and dynamic perspective. Admittedly it is an urban example, but

it provides a magisterial illustration of the general functioning of planimetric forms. On the right bank of the river, multiple historical stages (land belonging to the collegial chapter of Sainte-Opportune from the ninth to the eighteenth centuries; sewer networks from the Middle Ages and Early Modern period; the road network and nexus of land parcels from the nineteenth and twentieth centuries) echo each other over time due to a shared legacy, that of the great paleomeander of the Seine formed during the Holocene (Fig. 7). The durability of this form (as a corridor) may be observed over time in the light of multiple transformations and reworkings (including the great flood of 1910, which particularly affected this space). Of course, this should not be seen as an example of determinism. As the authors observe: ‘the potential of the paleomeander has been progressively given material form in the urban fabric, not because of any geological determinism but because it became a form within the experience of medieval, modern, and contemporary societies. [...] No single stage plays a more determining role than any other; rather, it is the interlocking sequence of these various moments which explains the durability of the overall form’ (Noizet *et al.* 2013, 219).

An intrinsically multi-scalar interpretation

This archaeogeographical interpretation of forms implies leaving behind any periodised framework (forcing the researcher to no longer focus on their preferred period). And rather than remaining fixated on the land at the very centre of the village, it entails assessing the wider landscape at a more macro level to conduct multiscale analyses. This is the dimension at which the archaeogeographical method strives to operate, for it is by shuttling between several scales of analysis and

between several types of source that new hypotheses may emerge concerning not only village space, but also its surrounding territory and thus its history over time.

The case of Saint-Aubin in Jura (Eastern France) is revealing here (Chouquer 2013). Recent and old planimetric documents show an old centre with regular forms (Fig. 8). Written sources outline that it was founded during the second half of the thirteenth century by Philip of Vienna and his wife Agnes, daughter of the count palatine of Burgundy (Hugues). It was an important stop on the salt road from Salins-les-Bains to Dijon. The new centre (*villeneuve* in French, *i.e.*, a new centre founded by a seigneur and endowed with a specific legal status and privileges) was granted its charter of franchise in 1293. In spite of this Saint-Aubin never became a small town and remained the size of a village. The layout of the land plots suggests that this foundation was divided up into lots following an overall plan, within an enclosure formed by the diversion of the little Cleux river. Chouquer has proposed a framework layout which might have guided the division into plots. The foundation subsequently expanded to the north, with a large mound castle built in *c.* 1345. There is still little archaeological information available about a nearby medieval occupation prior to the new town whose forms shroud any earlier legacy. There have been some interesting finds at Sainte-Anne to the north-west of the medieval village (a deposit of ceramics near a crossroads), and there is an outstanding ancient and early medieval deposit at Le Mazeret to the south-east. Incorporating the wider landscape into the assessment, morphological analysis allows us to hypothesise that the old occupation in fact lay slightly to the north-west. Indeed, there is a gap between the village of Saint-Aubin and the main intersection of roads and paths at

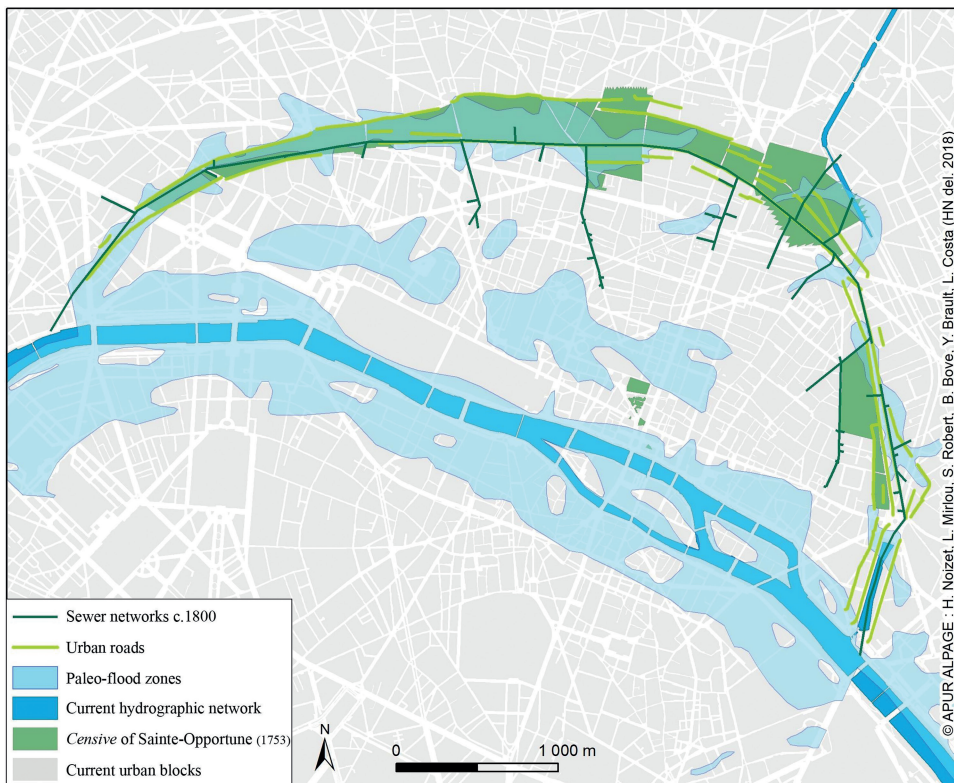


Figure 7 Hybrid corridor (north paleomeander of the Seine, Paris) (Noizet *et al.* 2013).

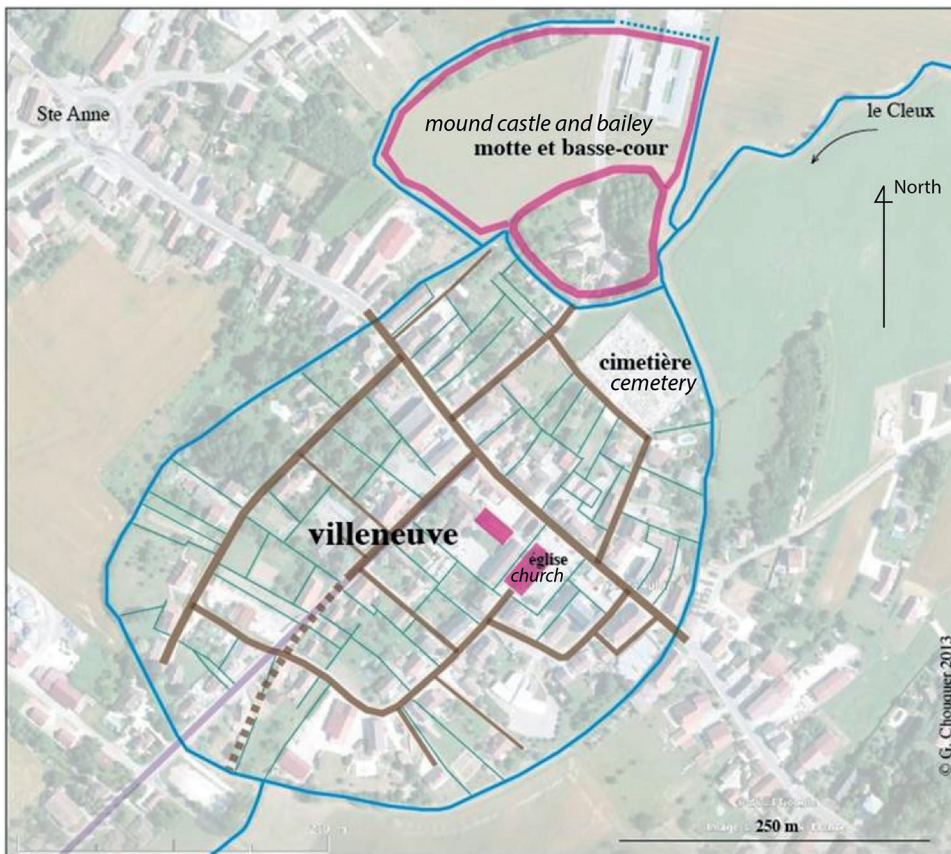


Figure 8
Morphological analysis
of the 'villeneuve' of
Saint-Aubin (Jura)
(Chouquer 2013).

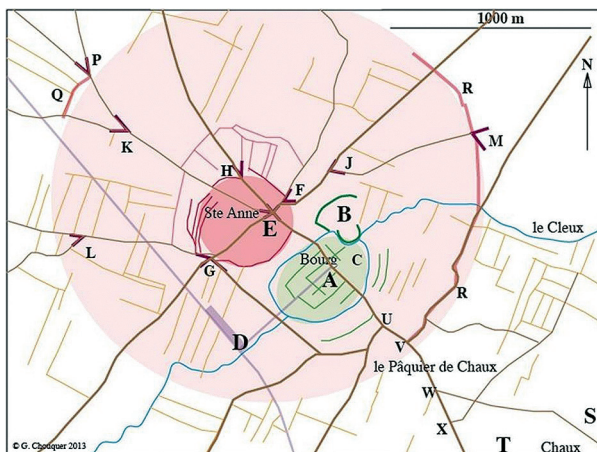


Figure 9 Morphological analysis of the village of
Saint-Aubin (Jura) and its surroundings (Chouquer
2013).

Sainte-Anne, and this gap is still (slightly) visible on the current 1:25,000 map (Fig. 9). Lastly, the outline of a series of plots centred on and enveloping the Saint-Anne site, visible on the planimetry, corresponds to a radial concentric form. It is thus plausible to identify this as one of the two early medieval habitats, which was probably still occupied when the new village was founded in the thirteenth century, though the latter was unable to exert sufficient pull to reroute the paths to its advantage. This provides a clear illustration of the interest of archaeogeography, for in addition to hypotheses about how the layout of the new town was planned when it was founded, it also allows us to put forward hypotheses

concerning the evolution of the settlement map and show how these old occupations built on legacies which still mark recent planimetry.

Clearly, this example does not amount to a Copernican revolution, since certain archaeologists follow this methodology and use the resources of planimetric documentation to understand how sites have shifted over time. But it should be observed that they do not systematically do so, and that in most cases their observations are not grounded in any in-depth morphological analysis.

Furthermore, and thanks to its specific method, archaeographic analysis presents the additional interest of envisaging villages as networks of sites within a spatial approach.

Alternative scales: from points to networks

From the ideal-type of a medieval village to the dynamic processes of habitat networks

Pioneering work conducted by the 'Archaeomedes' research group in France did much to champion the shift from a site-centred reading of archaeological data to analysing this data in networks, introducing a new scale of analysis (Durand-Dastès *et al.* 1998). Being composed of geographers and archaeologists, this group naturally tended towards archaeogeography, with a propensity to analyse habitat networks over time.

This methodological venture, particularly research by Claude Raynaud (2003) on settlement systems, helped move debate forward in France, where some researchers persisted in referring to the 'birth of village' some time around the year 1000, when the 'medieval village',

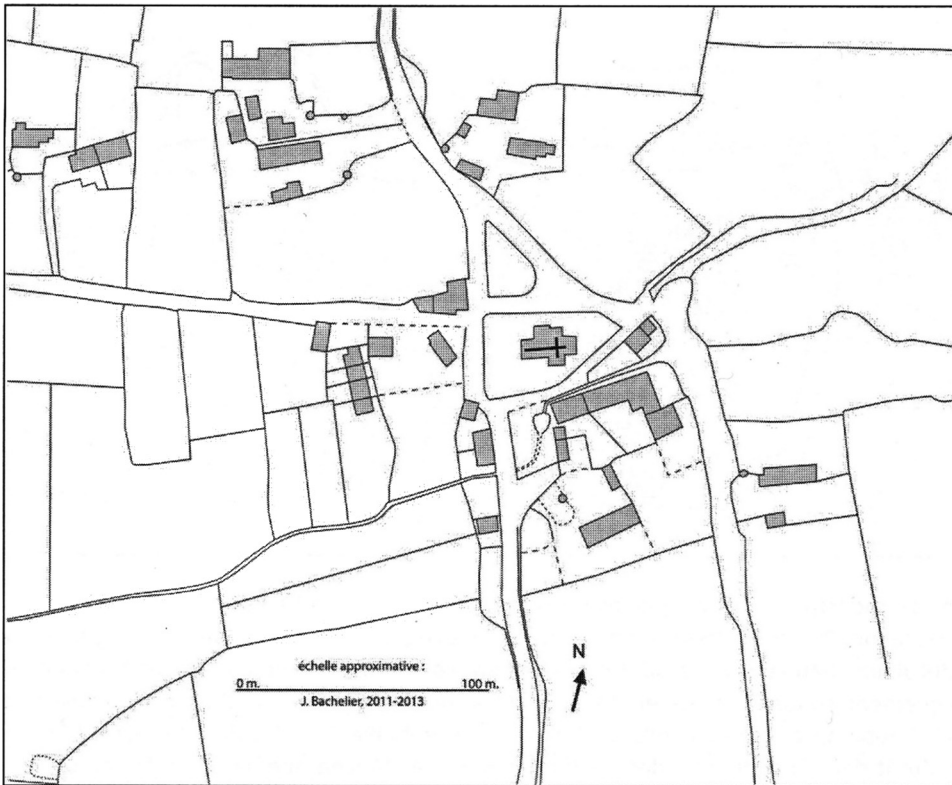


Figure 10 The village of Saint-Aubin-du-Pavail (Ille-et-Vilaine) on the Napoleonic land map (Bachelier 2014).

thought of as an ideal-type, was said to have emerged. Under the influence of the Archaeomedes group, focus shifted to studying the long-term dynamics of habitat networks as a process (Peytreman 2003; Watteaux 2003a). Hence the threshold of the tenth to the twelfth century, viewed by some (such as Robert Fossier) as the foundational moment in the history of villages – and by extension of the ‘true’ Middle Ages (Feller forthcoming) – instead came to be seen as a period when there was a bifurcation in the evolution of the habitat network, part of a far longer process reaching back to the second half of the seventh and early eighth century, which over time acquired the aspect of a network of ‘classic’ villages forming the current distribution of villages across the landscape. Additionally, this gave new scope to the study of prehistoric, ancient, and early medieval villages – now free to use the label of ‘village’ – as distinct stages in the evolution of settlement systems.

Situating habitats in road networks on multiple scales

In addition to bringing out the place villages held in habitat networks, changing scale also reveals their place in road networks too.

There is nothing new about the idea that there is a strong relationship between roads and villages, as may be illustrated by a quotation from Gaston Roupnel, an historian of ruralism, in 1932: ‘originally, the village only exists as a function of the routes running through its countryside. Their coming together endows the village with its *raison d’être*. The conditions in which these paths cross give rise to the form and plan of the human agglomeration’ (Roupnel 1932, 196). In the 1960s, M.R.G. Conzen, an Anglo-German geographer, developed this idea (though without having read Roupnel) as part of a more dynamic perspective,

showing that urban streets tend to form morphological frameworks conditioning the emergence and growth of later forms, and are in turn modified by the latter. His ideas only really received consideration in France in the 1980s, though they remained little-known among historians.

Once again, however, analysis needs to be conducted on several scales if we are to understand all we may observe. Here is the example of Saint-Aubin-du-Pavail in Ille-et-Vilaine (Brittany, France). The scale of the map used in the morphological atlas produced by historian Julien Bachelier (2014) does not provide any grounds for explaining why the buildings are scattered (Fig. 10). However, the compiled map brings out two potential explanatory factors (Fig. 11). First, the group of buildings lying furthest north appears to have been attracted by the main road, which in the twelfth century ran from Rennes to Angers via Châteaugiron; secondly, the church forming the core of the village lies alongside a great eco-morphological corridor, and hence on dry land.⁷

Furthermore, studying the relationship between these two levels – the village and roads – is not simply a matter of analysing the paths fashioning the extent and morphology of the village. It also raises more general questions about the principles governing how roads serve and connect sites. To answer these, the

⁷ The idea of a ‘corridor’ is borrowed from landscape ecology and designates any linear and relatively narrow organisation in the landscape. The adjective ‘eco-morphological’ provides a way of expressing how it is positioned in the layout of land parcels forming this linear shape, and in the ecological composition of landscapes which tend to be dominated by juxtaposed pastures and meadows. Such corridors are nearly always associated with the river system (either still existent or paleochannels), even though they are frequently larger than the major bed of watercourses.

archaeogeographical method – drawing extensively on the methodological suggestions of the archaeologist and historical geographer Éric Vion (1989) – blends the category of the ‘village’ with that of ‘local centre’.

Vion’s technique of ‘digital sorting’ provides a way of establishing a large-scale hierarchy of local, regional, and supra-regional centres depending on the number of branches of road intersections. The links between

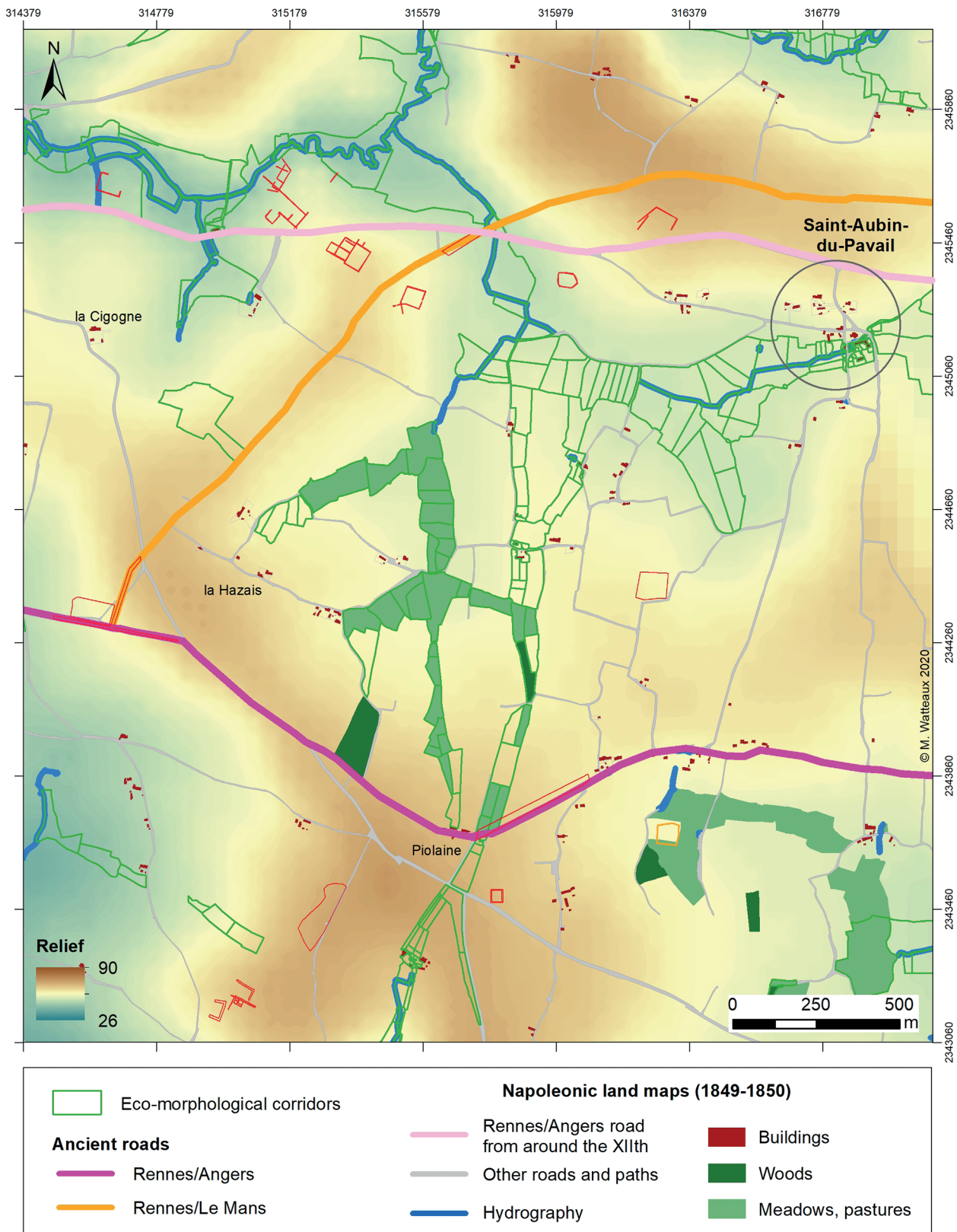


Figure 11 Compiled map of the surroundings of Saint-Aubin-du-Pavail in Ille-et-Vilaine (Watteaux 2013).

these centres are thus also hierarchised. For example, though Châteaugiron is a (small) local centre, two supra-regional routes pass through it (Fig. 12) (Watteaux 2017b). Analysis may thus be rapidly directed along

these lines, rather than focusing solely on the small-scale (of the market town). This latter scale clearly provides interesting information, for its morphology is a record of the long-lasting relationship between the

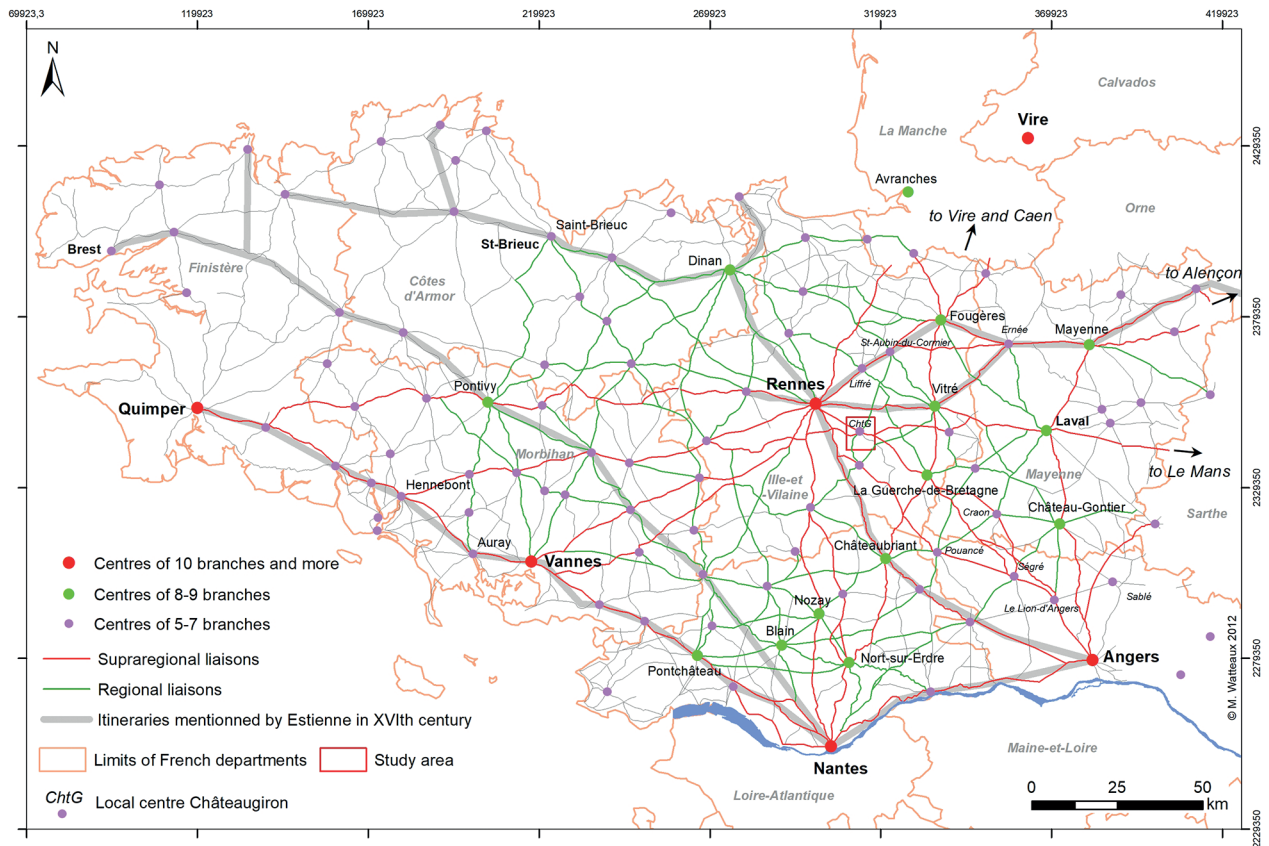


Figure 12 Châteaugiron to the south-east of Rennes (Ille-et-Vilaine), a local centre crossed by two supra-regional itineraries (Watteaux 2013).

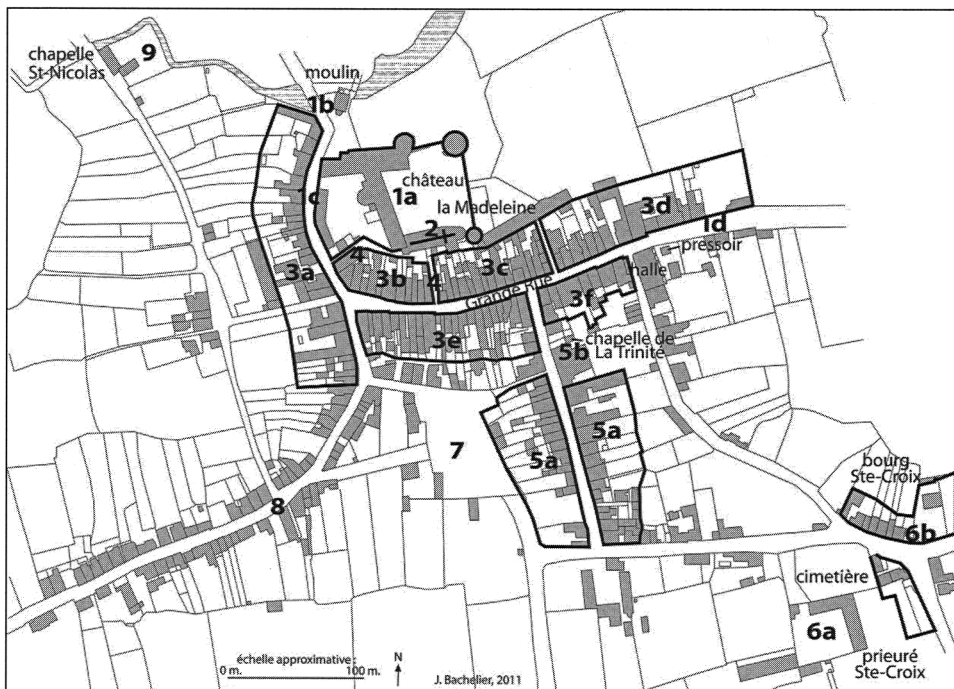


Figure 13 Morphological analysis of the market town of Châteaugiron (Ille-et-Vilaine) by Julien Bachelier (2014).

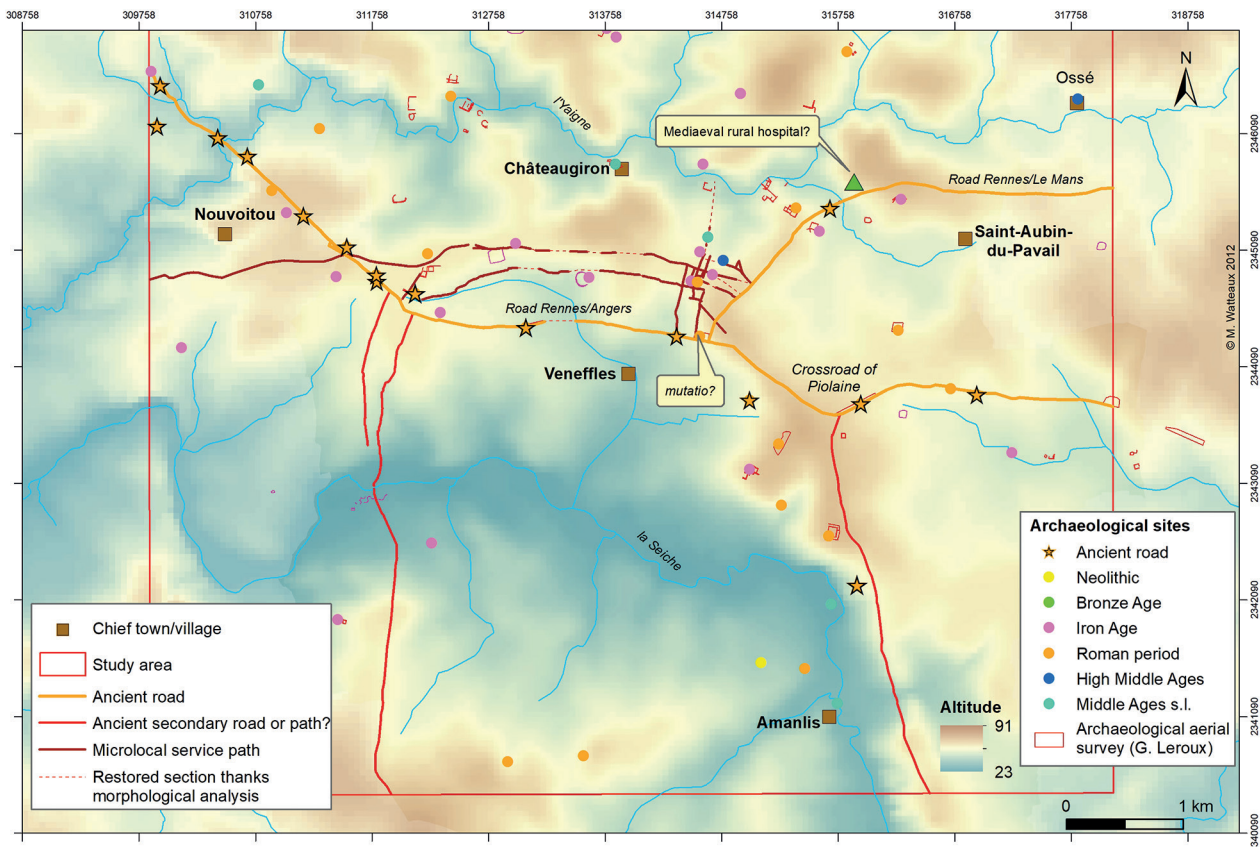


Figure 14 Archaeogeographical interpretation of the ancient road network around Châteaugiron (Ille-et-Vilaine) (Watteaux 2017b).

built environment and the road from Rennes to Angers, as well as possible land parcel divisions (Fig. 13). Still, to understand the dynamics of this town and its territory over time, the two major routeways crossing this space since at least Roman days need to be factored into our analysis.⁸ Indeed, during the eleventh and twelfth centuries Châteaugiron captured the Rennes/Angers and Rennes/Le Mans roads passing slightly to the south (perhaps offering an additional reason to settle here?) (Fig. 14), and since then a star-shaped road network has formed centred on Châteaugiron. It was only in the nineteenth and twentieth centuries that the pull it exerted on the road network dropped drastically, to the benefit of roads via Vitré to the north, and via Châteaubriant and Janzé to the south (Fig. 15).

Other objects: from inhabited space to farmed space

Shifting our focus a bit further from the village centre, we may turn to the question of the forms of the land as farmed or otherwise exploited by village residents.

The 'radial grid' pattern characterising unplanned farmland

Unplanned areas of land are often laid out in a radial pattern of squares, in which a radial road network focused on a habitat is accompanied by plots of land laid out in a predominantly non-orthonormal grid pattern (Watteaux 2003b). This type of layout is very frequent, as demonstrated by an example in Vendée (western France) (Fig. 16). A road network runs out in a star shape from the village of Pouillé, intermingled with a series of routes forming a supple and long-ranging grid pattern (in what is known in French as a 'réseau de formation': a 'formation network'). Many lines on this network are formed by road layouts in the Fontenay-le-Comte/Sainte-Hermine route, which on a larger scale is part of that linking Niort to Nantes. The association of these two figures means that the pattern of this planimetric object may be described as one of radiating squares, in which features from two different and complementary scales may be observed:

- a supple grid framework, observable on a large scale, not specific to any period but resulting from a dynamic construct lasting over time
- a small-scale road network focused on the habitat (here, Pouillé).

⁸ In archaeogeography, a distinction is made between the levels of the itinéraire (itinerary: linking up two points along which traffic flows), of the trac (trace) and of the modèle (the actual form: the material nature of the trace as dirt track, metalled road, etc.).

The intermeshing of the two generates a completely unplanned form in the overall layout, not relating to any

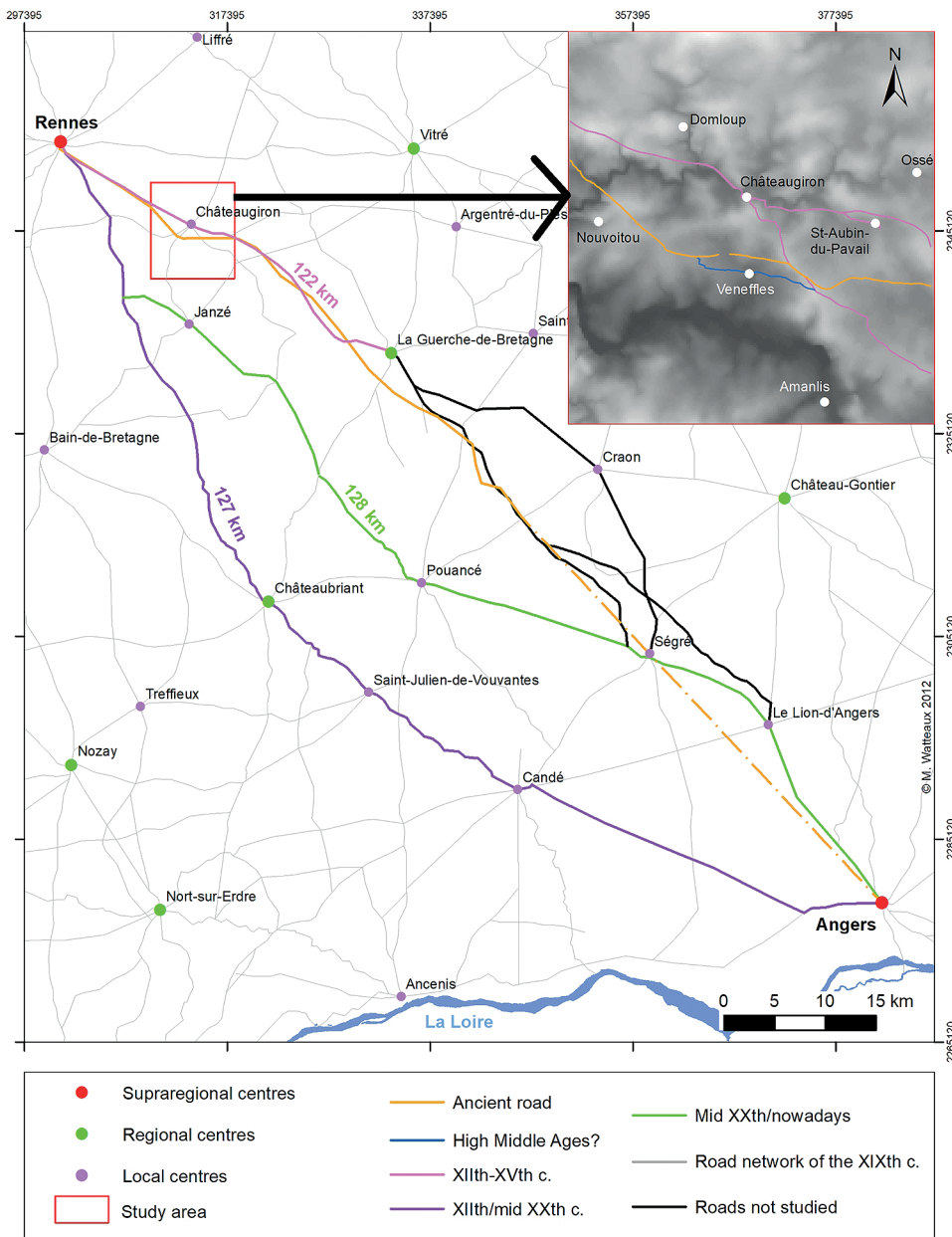


Figure 15 Changes in the main 'long distance paths' around Châteaugiron between Rennes and Angers (Watteaux 2013).

precise period. As a strong spatial object, the radial grid pattern escapes any chronotypological classification, meaning spatiotemporal dynamics need to be fully taken into account to analyse it.

This is frequently observed in open-field countryside: the morphology and basic grid of plots has been built up over time since the Iron Age at least, and this process was accelerated in the Middle Ages by dividing up plots (laid out in quarters and strips) coexisting alongside new forms (see below) and those issuing from ancient and Gaulish remains (Leturcq 2007; Watteaux 2012). The (partly) new layout of road networks focused on the medieval settlement is overlaid on this grid. Once again, it is by comparing different scales that this morphological object may be detected. It is also clear that it does not depend on any project borne by any given community of inhabitants, for it pertains to a far larger scale. It is in fact a spatial configuration built over a very long timeframe, without any intent guiding the overall form and extent. Thus studies of how medieval people living in villages

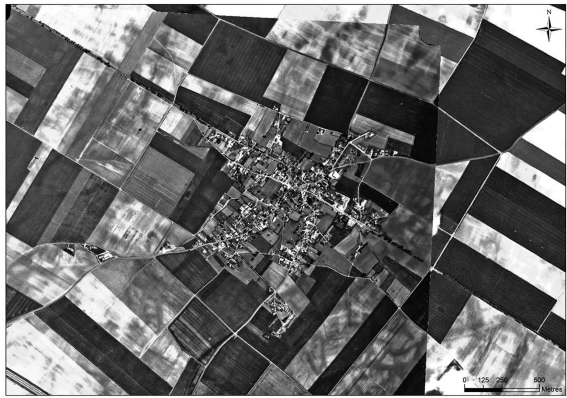
related with the surrounding countryside need to include this multiscale inherited dimension, which cannot be reduced to the traditional question of the parish and seigneurie.

Foundation villages and planned farmland: a European phenomenon

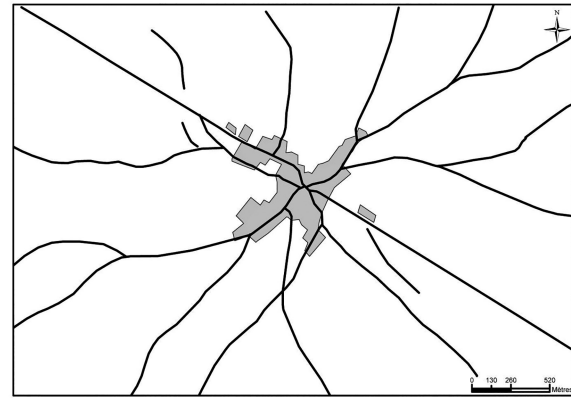
Conversely, planned areas of land are associated with developments devised by powerful people and/or communities of inhabitants. This is where a strictly historical link may be made with a given locality, using written sources (Lavigne and Watteaux 2018).

This major topic, relating more to medieval history than to archaeology, has been eagerly taken up since the late 1990s, with Cédric Lavigne (2002) an early leading figure. In his thesis on medieval bastides in Gascony, rather than looking at the forms of this type of village, as was traditionally the case (particularly in the work of Charles Higounet), Lavigne studied the forms of

Aerial photograph (IGN, 1997) + satellite image (Google Earth, 2007)



Radial road network polarised by Pouillé



Current (in black) and old (in grey) limits of plots of land



Fusion of the two previous drawings : the “radial grid” pattern



Figure 16 Example of a radial grid pattern at Pouillé (Vendée). © M. Watteaux 2007.

agrarian colonisation accompanying these foundations.⁹ His analysis revealed hundreds of coaxial patterns, running in strips. These planned systems stretched out around bastides, either extending the layout of the rectangular urban grid, or adding coaxial strips that could be either rigid or supple (Figs 17 and 18). Their juxtaposition created a very dense pattern covering most of the farmed space.

Attempts to date these regular patterns have given rise to debate (for an overview of the controversy and a methodological discussion, see Watteaux 2011 and Chouquer 2020 [2015], 98–111), but it seems improbable that these patterns are an early modern creation since no early modern document refers to them. Furthermore, the discovery of an increasing number of such phenomena across Europe adds to our knowledge on this topic annually.¹⁰

Before looking at examples outside France, let us consider a final one also studied by Lavigne (2003), in Normandy. He re-examined the old category of the ‘street-village’ in the Aliermont area in Seine-Maritime,

showing that these villages are organized in a network, and planned and associated with blocks of strips of land to be distributed to settlers (Figs 19 and 20). Given the very rich layout of these ribbon-like interfluvial villages, he has posited the idea of a ‘planned interfluvial village’ to describe this phenomenon.

In England, Chouquer (2020) has turned his attention to many novel objects of enquiry in Yorkshire, Norfolk, Nottinghamshire, and Derbyshire, showing that many foundations of new villages (irrespective of their form) between the twelfth and fourteenth century were often associated with divisions of farmland into coaxial strips, thus forming numerous patterns (Fig. 21). There is nothing new about this identification of coaxial forms, for it was already known to British researchers (see Silvester, Williamson, Rippon, Harvey, Fleming, Mart and Pears, Hall, Oosthuizen etc.). Chouquer’s point is that medievalists only see the open-field part of this farmland morphology, and thus fail to pick up on an object of agrarian history, namely the *agrarian planning* of the twelfth to fourteenth centuries that becomes visible in these planimetries. He argues that though these fields organized into coaxial strips played a part in the rotation of an open-field system, this is not the reason why they exist, which he instead attributes to the process of agrarian colonisation of land on royal or aristocratic estates, as so extensively illustrated in Great Britain. The question has been raised in similar terms in Italy and in France. Suggesting that we ‘see’ these planned phenomena – *i.e.*, that we name and map them – is thus an important step.

⁹ ‘Bastides’ are fortified ‘*villes neuves*’ founded by the king or great seigneurs in south-western France in the thirteenth and fourteenth centuries, often with a regular layout. They had an economic purpose (accompanying the agrarian colonisation of the surrounding lands) as well as a political and a military function. Their modest size means they are closer to an agricultural village than to a genuine conurbation.

¹⁰ Those interested in it may usefully consult the summary recently published by Chouquer in *Edad Media* (Chouquer 2019), showing how an analysis based on comparing texts and forms makes it possible to establish an object hitherto firmly rejected by medieval historiography.

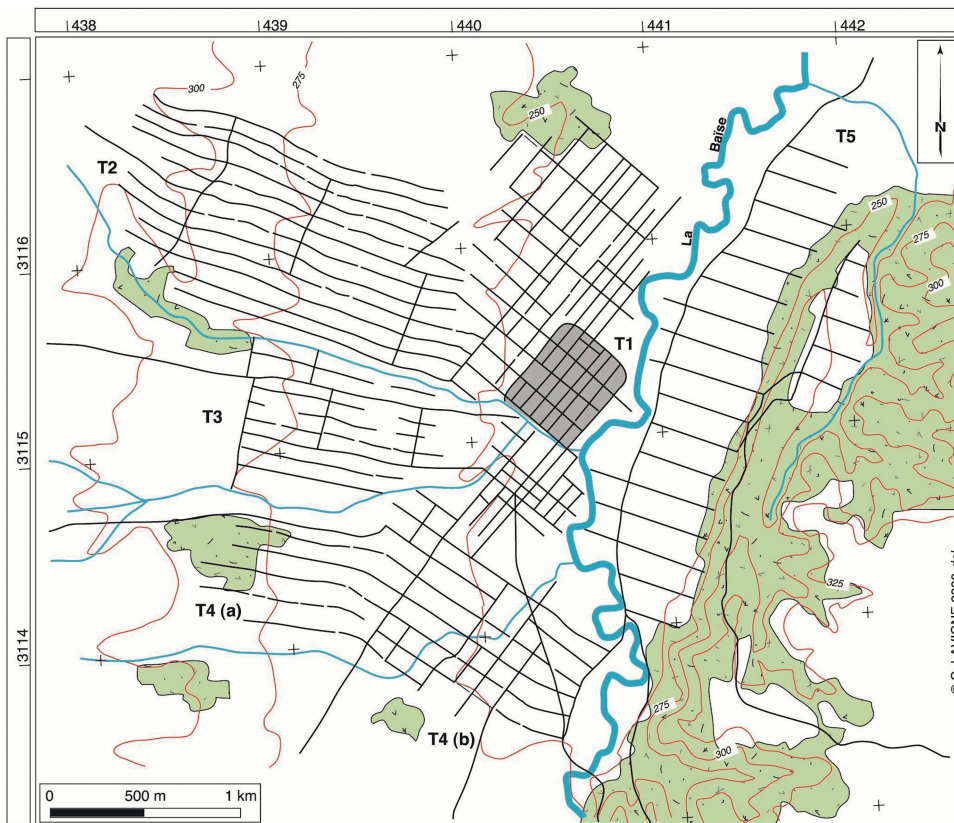


Figure 17
Morphological analysis
of planned farmland
around the bastide of
Trie-sur-Baïse (Hautes-
Pyrénées) (Lavigne
2002).

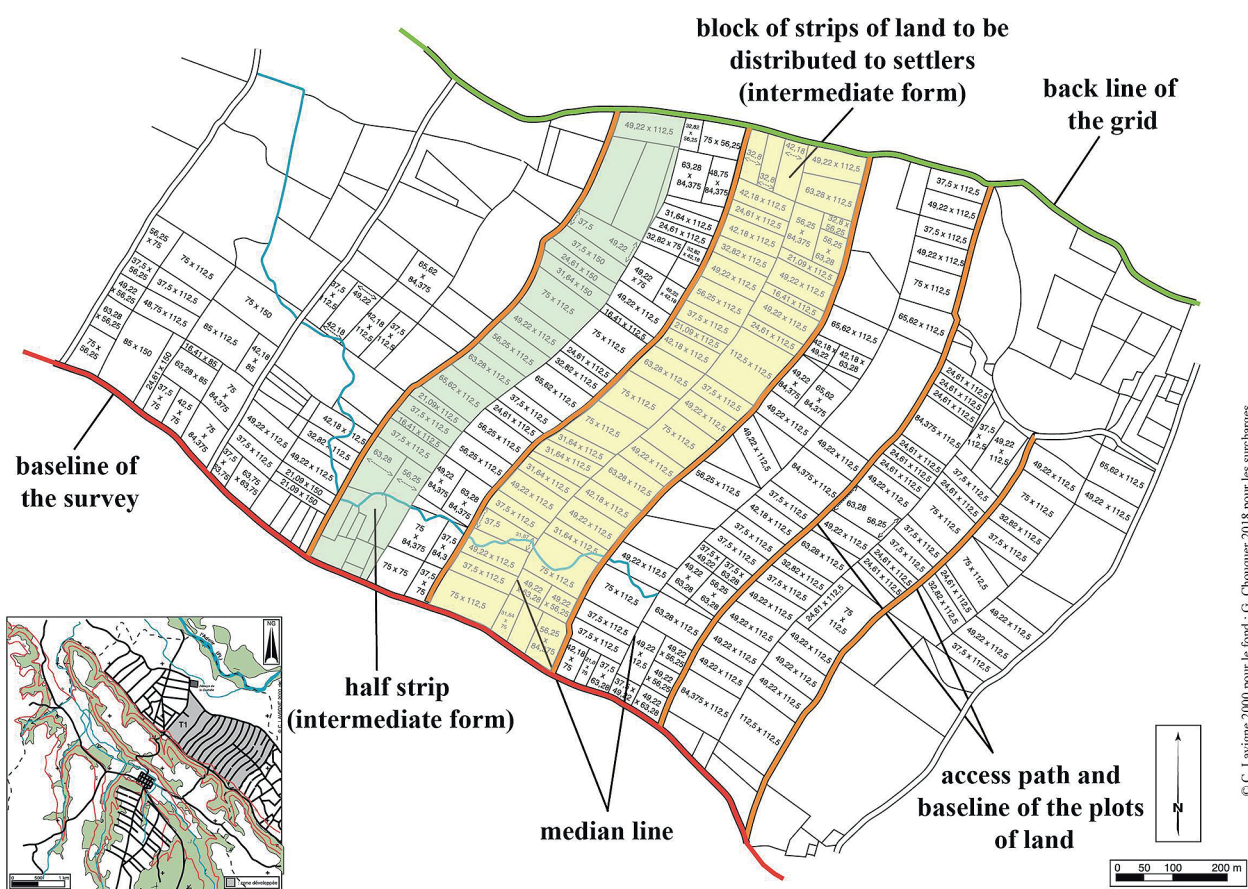
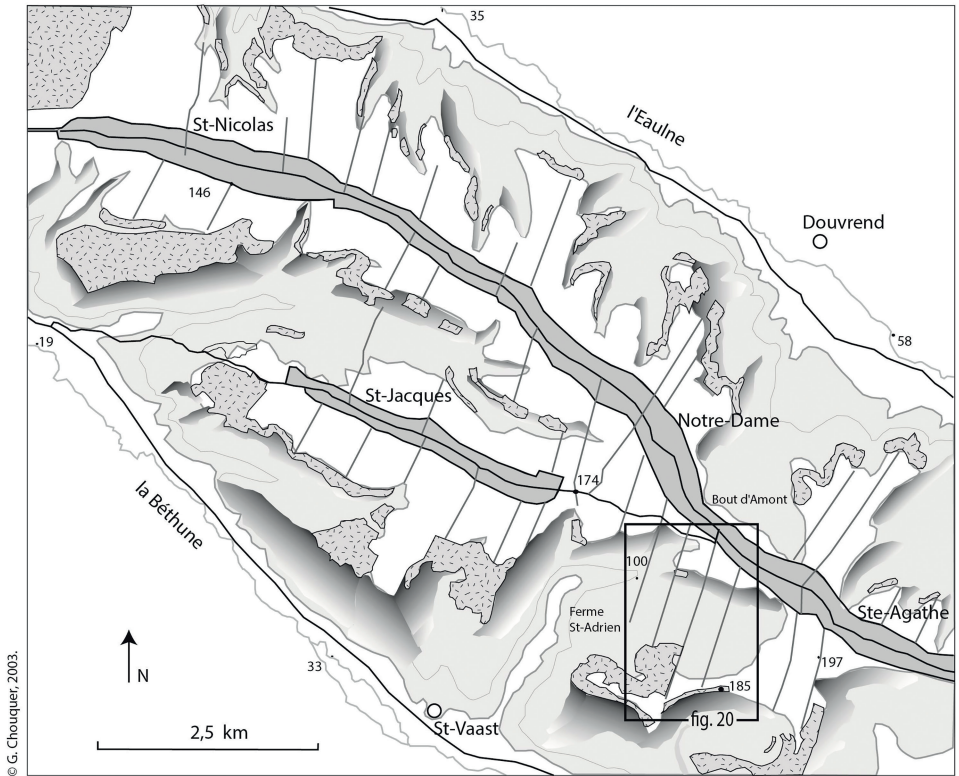


Figure 18 Metrological analysis of parcels of land near the bastide of Duhort (Landes) (Chouquer 2019).



Source : vertical aerial photographs, 1961, Londinières-Roye FR 2009-2409 n°392, 394, 396, 372, 374, and topographical map of the Eawy-Neufchâtel-en-bray forest, section n°20090, E = 1 : 25000e, IGN, Paris.

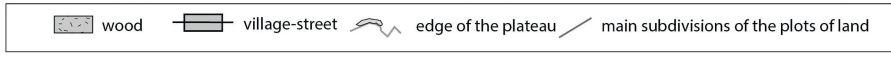
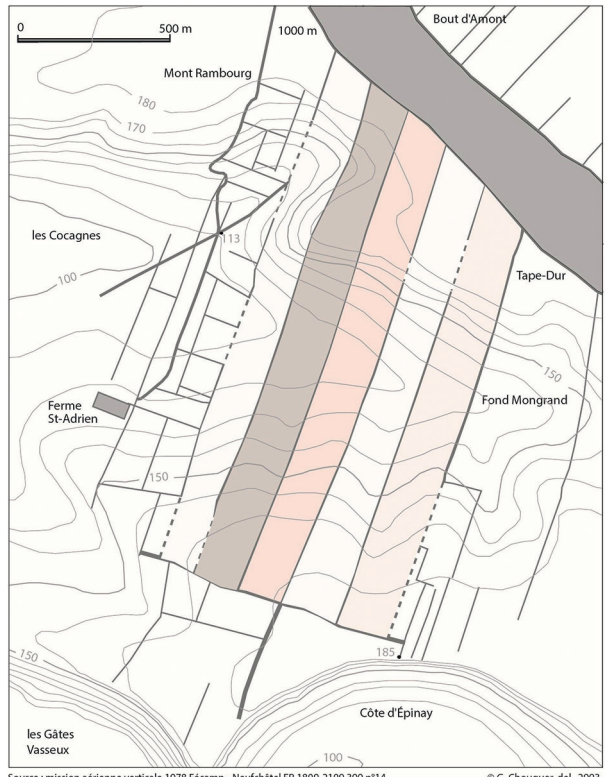


Figure 19 Morphological analysis of 'planned interfluvial villages' and their farmland in the Aliermont sector (Normandy, Seine-Maritime) (Lavigne 2003).



Source : mission aérienne verticale 1978 Fécamp - Neufchâtel FR 1809-2109 300 n°14. © G. Chouquer, del., 2003.

Figure 20 Analysis of a block of five bands in the planned medieval plot near the village of Sainte-Agathe d'Aliermont (Normandy, Seine-Maritime) (Lavigne 2003).

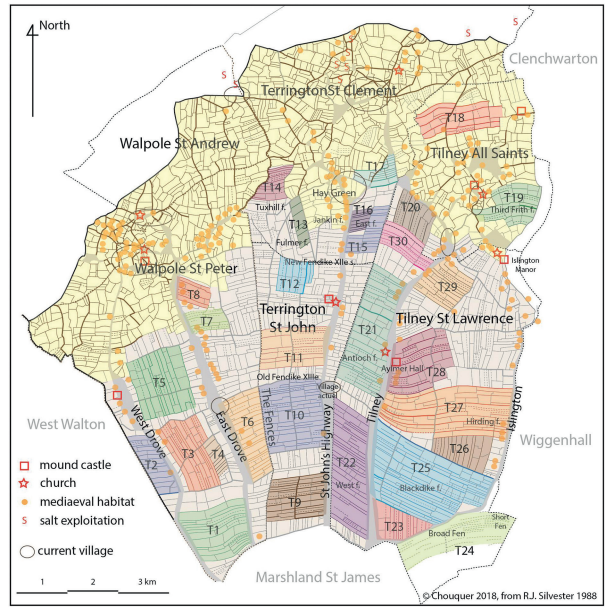


Figure 21 Divisions of farmland into coaxial strips ("T-n") in the land around Terrington, Tilney, and Walpole (West Norfolk) (Chouquer 2020).

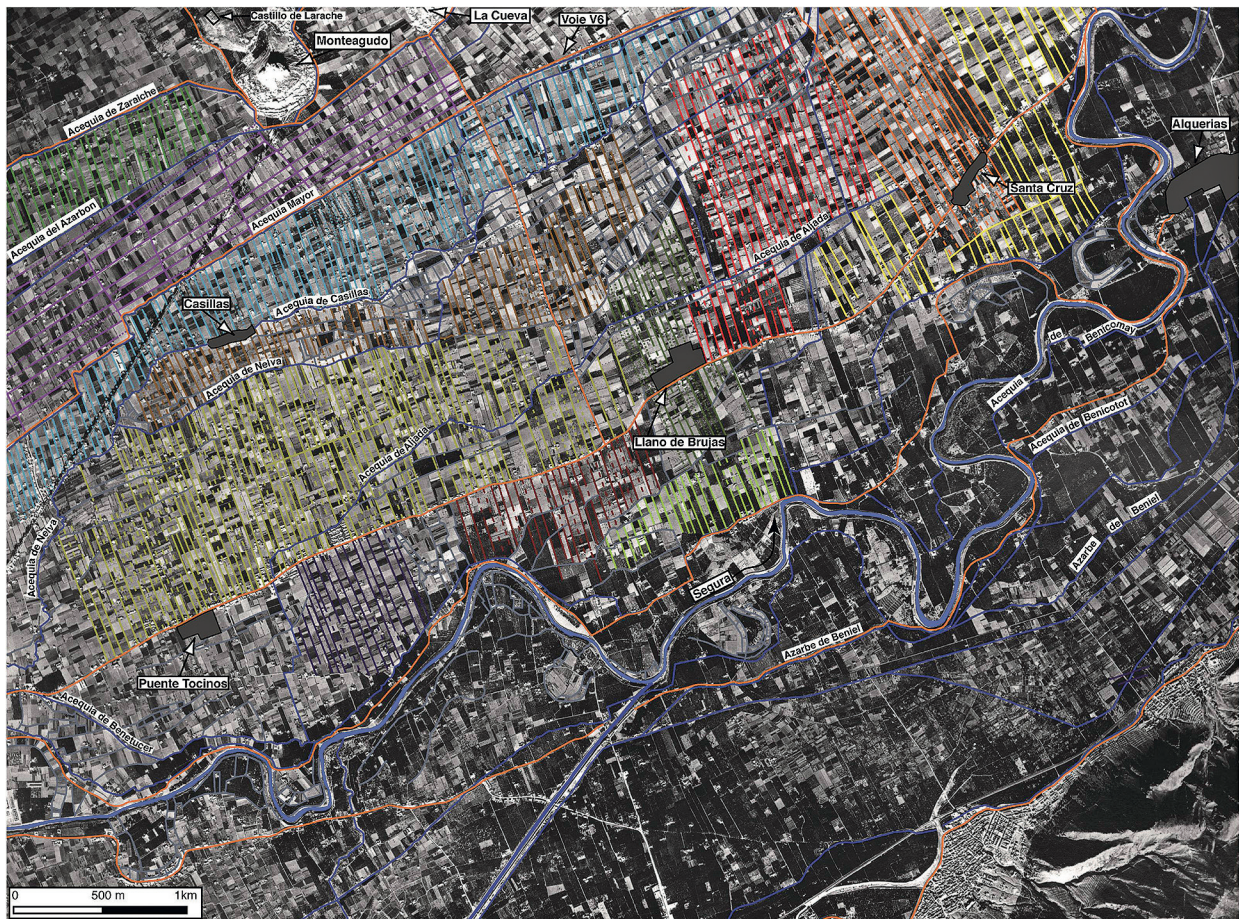


Figure 22 Planned medieval forms of the huerta of Murcia (Spain) assigned by Alfonso X of Castile during the third (1266–1267) and fourth distributions (1269–1270) (Lavigne 2007).

On the Iberian Peninsula, such patterns have also been identified, both in Portugal (Watteaux 2011) and in Spain to the north of Valencia and in the area of Murcia where Lavigne (2005; 2007) has studied sets of very precise texts about how land was divided in the thirteenth century and compared this information with forms observable on planimetric documents (Fig. 22).

Lastly, in Italy many studies have once again shown the existence of coaxial strips associated with foundation villages (Lavigne 2005; 2007; Brigand 2010; 2011; Chouquer 2020 [2015]). These Italian examples are especially interesting for they show how medieval people accommodated ancient legacies, which are very evident in northern Italy. On occasions the strips are quite simply inserted into the Roman grid, such as in the sector to the north of Cittadella (Fig. 23). On others, the foundations were located where *centuria* boundaries intersected, such as at Lugo (Fig. 24). Even more surprisingly, the Abbey of Nonantola, founded in the eighth century in the region of Emilia-Romagna, adopted the Roman centuriated framework for the layout of its landholdings (Fig. 25) (Chouquer 2020 [2015]). Probes have shown that ancient limits (agrarian or paths) did not exactly match those we know today, since the former lay several metres deeper, and systematically to one specific side, likewise by several metres. What present-day documents reveal are, in fact, the ‘medieval centuriation’ lines. Furthermore, textual sources from

the eighth to the twelfth centuries indicate that medieval people used this grid as a location system, referring to it as the ‘*limes Malmeniacus*’ or the ‘*limes ergo*’ for example (‘*limes*’ refers here to the ancient ‘*limites*’ forming the centuriation grid) (Chouquer 2020 [2015]). The case of Italy thus brings out the great variety in planned farmland forms, together with the equally varied and diverse type of foundation villages during the high and late Middle Ages (Chouquer 2020 [2015]).

Conclusion

To conclude, I hope I have illustrated the main contributions that archaeogeography can make to the study of villages, and how it tackles these matters. Planimetry works with multiple legacies, associated with various phenomena and with different periods, which can only be apprehended using diachronic and multiscale analysis. This entails taking the plan and the planimetric documents as the starting point, rather than the text or archaeological survey, and then, in a second stage, comparing and contrasting various types of document. Once again, combining scales of analysis with an interdisciplinary approach can give new impetus to the study of villages and other small localities.

This capacity of archaeogeography constitutes its ‘added value’, making it a tool both for historical enquiry and archaeological prescriptions, even for land-

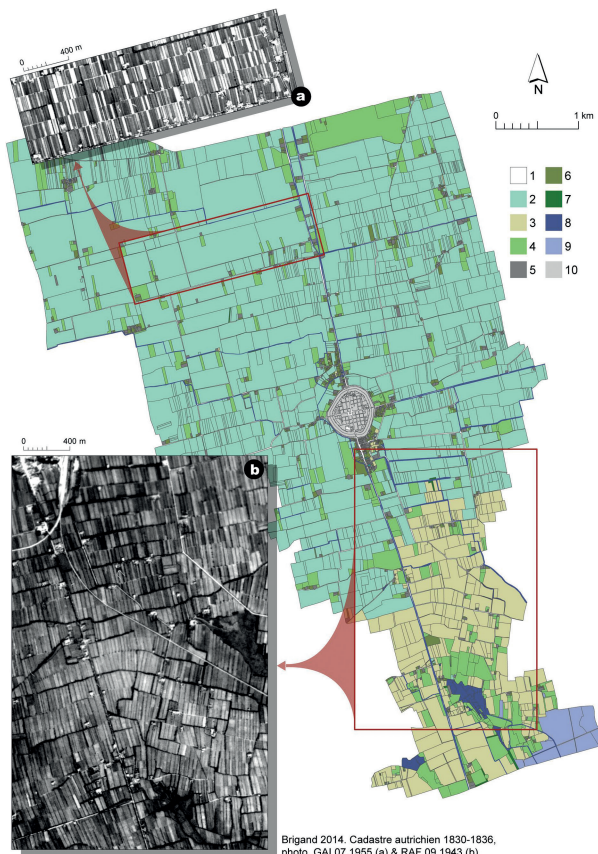


Figure 23 Planned farmland around Cittadella (Italy). The long medieval strips are inserted into square forms inherited from Antiquity (Brigand 2010).

use planning. That is what Lavigne has been working on in south-west France over recent years. For example, the results of his study of the Bègles district – now totally urbanised, but composed in the nineteenth century of three villages and nine hamlets – was enthusiastically welcomed by local politicians, who have used it as a reference document for the history of the town and for thinking about how to develop the municipal territory (Lavigne 2011). Producing maps is something that developers and politicians in charge of a territory can readily relate to, and that is why archaeogeography consultancy is developing so positively in this sphere of application in France. From this point of view, French archaeogeography is close to the British method of Historic Landscape Characterisation which seeks to generate regional-level material for managing landscapes today, or for future development plans as part of debates on sustainable development (Turner 2007, 12–13). This is a very clear source of inspiration for developing large-scale dissemination of the findings of archaeogeographical studies, much more widely than for the single historical issue of medieval villages.

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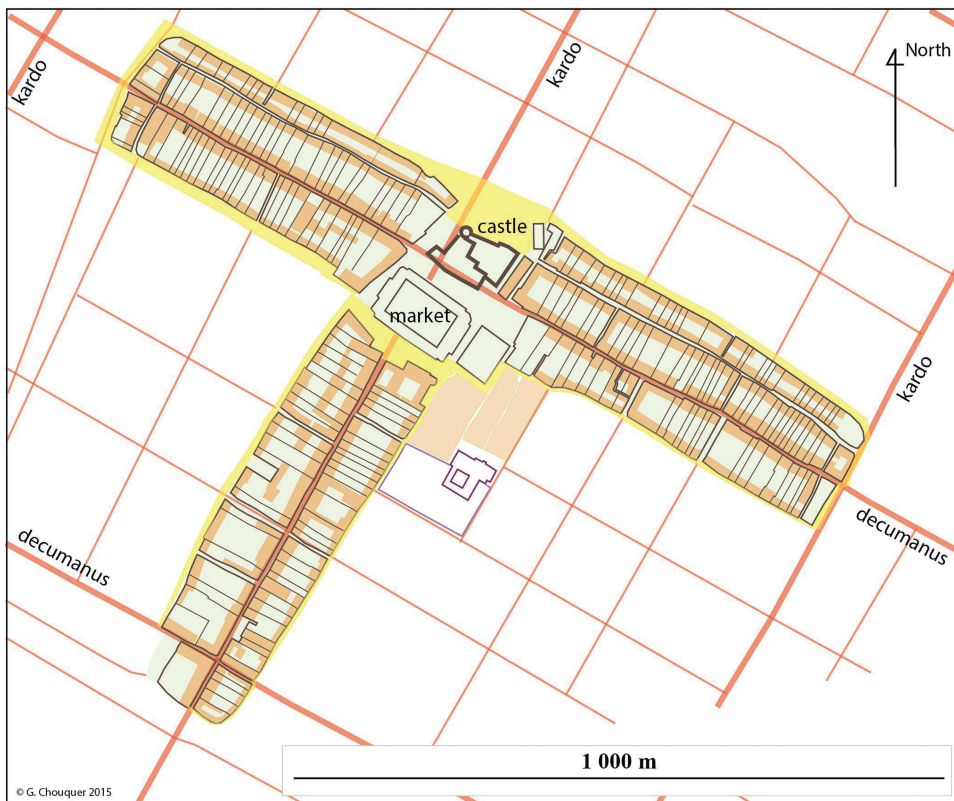


Figure 24 The main urban forms of the villanova of Lugo (Italy) correspond to the ancient crossroads of a kardo and a decumanus (Chouquer 2020 [2015]).

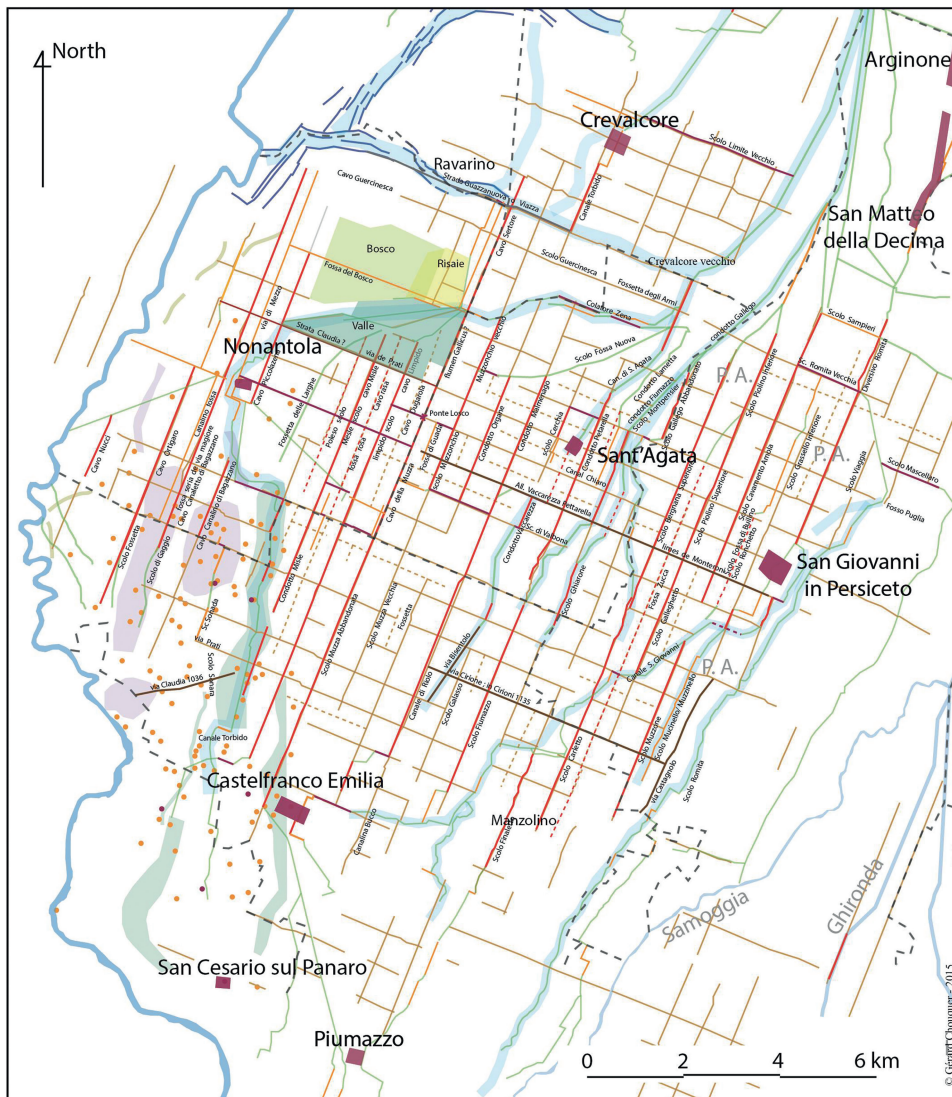


Figure 25
Morphological analysis
of the planimetry around
Nonantola (Italy)
showing the ancient
legacies transmitted
by medieval and early
modern societies
(Chouquer 2020 [2015]).

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