2. Family, income and labour around the North Sea, 500–1000

Jean-Pierre Devroey and Anne Nissen Jaubert¹

From antiquity onwards, north-western Europe was divided into two large bodies, both from an economic and social point of view. The first was constituted, to the south of the Rhine, by the former provinces of the Empire conquered by the Romans at the end of the first century BC and in the first century AD. In the third century Barbarian tribes on the borders of the Roman Empire (the *limes*) exerted growing pressure on this territory which was expressed in various forms: military raids, then systematic occupation of the territories after the withdrawal of Roman troops (Great Britain, Toxandria), or accommodation, by the infiltration of families or the settling of groups sanctioned by treaties between the Germanic tribes and Romans. Ancient Gaul was totally occupied from the sixth century on by the Franks, who progressively dominated the whole of the Great Northern European plain, towards the east as far as Saxony and to the north as far as the border of Denmark. The second body had as its single common point the fact of never having been conquered by the Romans and consisted of Germanic, Scandinavian and Celtic populations (Wickham, 2010). Within these two zones, peasant families were faced with very different agricultural systems and landownership structures before the Germanic conquest. In Great Britain, the withdrawal of Roman troops was followed in a few decades by the abandoning of earlier forms of ownership and settlement systems. On the continent, the processes were more complex in the sense that the changes which affected the settlement of the countryside could stretch over several centuries and that the new forms of ownership and land occupation resulting from these changes were spread by conquest, from the seventh century, from Frankish Gaul towards the north and the east (Frisia, Saxony), and to the west (the Anglo-Saxon kingdoms) by the influence exerted by Carolingian ideological models (Wickham, 2009). In this chapter, we examine three regions during the early middle ages: 1) north-western Europe under Frankish hegemony (northern France, Belgium, the Netherlands, and north-west Germany), 2) England, and 3) Scandinavia. These lands were in constant contact through ideological and religious influences, mainly from the Frankish regions, migration, trade flows and wars. The place occupied by the family unit in rural production at the beginning of the period studied is still poorly understood today in terms of the whole of the regions of northern Europe. The study of family morphology and the structures of rural production show that the narrow family group, composed of a couple and their children, became the principal unit of production, reproduction and organisation in the rural society of the West. It took on its fundamental features during the early middle ages at the moment when conjugality became the ideological model spread by Christianity and

¹ Our thanks to Chris Wickham and Alexis Wilkin who reads the first drafts. Version postprint: © Jean-Pierre Devroey et Anne Nissen Jaubert pour di-fusion. Making a Living: Family, labour and Income, edited by Eric Vanhaute, Isabelle Devos and Thijs Lambrecht, Turnhout, Brepols, 2012, pp. 5-44 (Rural Economy and Society in Northern-western Europe, 500-2000).

[map]

where small peasant farming was the normal framework of existence for the free and the non-free alike (Toubert, 1986).

2.1 The family and demography

What was the place of the nuclear family in the structures of production in the countryside before the year 500? Regarding the areas under Roman domination, historians and archaeologists alike have traditionally attributed a predominant place to the network of villae (the estate buildings designed for residential and farm use) and their estates, considered as the foremost expression of the ancient rural landscape and serving as a framework for an extensive and often specialised mode of agriculture. This paradigm rests in part on the archaeological visibility of the villae, and on the place they occupy in the sources and in historiography. More recently, numerous large-scale excavations of preventive (or rescue) archaeology in the framework of territorial alterations have yielded evidence of small farmsteads isolated or grouped in hamlets or villages.² For antiquity and the early middle ages, this latter distinction is hardly operable, and it finds hardly any echo in the texts and in the Nordic languages. The settlements of the early middle ages most often comprised a half dozen farm holdings and only rarely exceeded a dozen. These small establishments are often considered as dependencies or satellites of the villae. Nevertheless, in many cases, they continued an Iron Age occupation, indicating their autonomous character (Ouzoulias, 2009). Their frequency varied according to regional contexts or the nature of the soil, but it leads us to qualify the place accorded to the villa in the Empire's northern provinces. If certain territories were strongly marked by the villae network and by a tendency towards the concentration of property in favour of large estates from the end of the second century, family agriculture dominated elsewhere. Furthermore, we do not know the proportion of slaves, barracked in the villae, and of tenant farmers, free or otherwise, at the end of antiquity (Van Ossel and Ouzoulias, 2000; Brulet, 2009: 253–255).

In contrast to the Roman agricultural system based on cereal growing and some specialised productions (wine, oil), the Germanic world was a peasant society structured in villages, with agro-pastoral activities. Tacitus' Germania (first century AD) projects a conjugal model onto Germanic society. It is not to be ruled out that it was highlighted by Tacitus less out of a concern for an 'ethnographic' description than with the intention of criticising the family organisation and morals of the Roman society of his day. Nevertheless the author of Germania emphasises the same features concerning the non-free in stating that the agricultural slaves, contrary to their Roman counterparts, were not allocated on the basis of their activities. The organisation of the rural settlements on the coasts of the North Sea confirms this observation. Up until the end of the second century farm holdings were made up of a longhouse, at the

Family, income and labour around the North Sea, 500-1000

-

² Requiring the presence of a church or a castle to define a village comes down to using non-rural criteria to exclude large parts of northern Europe and to date the village to the eleventh-thirteenth centuries (Nissen Jaubert, 1998; Watteaux, 2003).

most accompanied by a granary and a byre, implying that the members of the household were sheltered under the same roof. However, from the end of the second century in Scandinavia and, in the north of Germany a few decades later, as well as in regions close to the *limes* such as the Drenthe province in the Netherlands, the longhouse increased in size, due on the one hand to larger byres, and on the other to the addition of more rooms whose function often remains unknown. Certain large houses in the Vorbasse of the third-fifth centuries thus reached around 40 metres in length and, in the north of Germany, the Bremen-Rekum and Arschum sites offer examples of houses measuring over 60 meters long (Haarnagel, 1984: 179, fig. 55; Hvass, 1986: 67–71, Zimmermann, 1997: 428–431, fig. 14). For the eighth-tenth centuries, in the Saeddinge settlement, the house of the largest farm measured 50 meters in length (Stoumann, 1980: fig. 14). At Arschum, floor and hearthstone conservation attests to the possible existence of several habitable rooms. The houses change at the same time as the settlements and their agricultural units which - surrounded by regular enclosures - number more annex buildings, which clearly distinguishes them from previous periods. More spacious, these farmsteads must have provided habitation for dependants as well as masters. As for the dead, the organisation of funerary spaces brings to light the grouping together in families or households. The notable differences in funerary furniture could reflect the varied social status of these farming units (Jørgensen, 1987).

2.1.1 Demographic patterns

The demographic question is closely linked to the manner in which historians problematise the processes which accompanied the end of antiquity. Since Pirenne this period of transition has been mainly studied by observing the transformations that affected the 'encompassing society' which dominated the countryside: towns, commercial exchanges, the situation of the elites, institutional structures, etc. (Delogu, 1998). The reader of Wickham's *Framing the Early Middle Ages* discovers other fields of observation: 1) the crisis and then the end of a state based on taxation, supported by extensive cereal growing and the network of *villae*, and its replacement by peasant societies, based on the agro-sylvo-pastoral triangle, centred on family-owned farms and the village; 2) the framing of the countryside by seigniorial domination (Wickham, 2005 and 2010). These phenomena hinged on profound changes in the topography of the settlement of the countryside and on two large demographic cycles, one of progressive decline, in all likelihood set in motion in the west of the Roman Empire, at the end of the third century up until the middle of the seventh century, with a low point in the sixth century, followed by slow and discontinuous growth (c.650/700 – c.950).

Since Gibbon (1776), the beginning of the middle ages has been linked to the idea of demographic decline resulting from the disintegration of the Empire and its fall (Ward-Perkins, 2005). The decline of the population is sometimes presented as the result of endogenous factors, sometimes as the result of catastrophic exogenous factors which jeopardised the economy and shook Roman society in its entirety: epidemics (Antonin plague in 168, the plague of Justinian from 541), military disasters (the Barbarian invasions of the

third, fourth and fifth centuries), a temporary deterioration of the climate (Devroey, 2009). For Europe (excluding the ex-USSR), evaluations by demographers divide the European population by two with: a) a maximum in the year 200 (44 million); b) a minimum around 600/700 (22 million); and c) a restarting of growth from the eighth century (30 million in the year 1000) up to a peak in the fourteenth century (70 million) (Biraben, 1979: 16). If these general trends are reliable, the figures offered are founded on no direct data. It remains extremely difficult to measure the real extent of the shrinkage of the European population from the third century onwards and to model the causes of this decline of long duration. Nonetheless, thanks to a new generation of historians who ally their discipline with archaeology and thanks to a renewal of the data resulting from the contribution of archaeology and environmental studies, we today have available more solid bases from which to evaluate the possible consequences of 'catastrophic' events.

2.1.1.1 Population and epidemics

The arrival of the plague (Yersinia pestis) in Europe in 541 (Drancourt et al., 2007), with recurrences up to the middle of the seventh century, is frequently invoked to explain substantial decreases in the population and a demographic nadir in the sixth century. Nonetheless, according to the written sources and the paleodemographic data available today, the impact of the pandemic seems to have been much more pronounced in the East than in the West and these outbreaks do not seem to have prevented regions greatly affected by the plague, like Syria in the Middle East, from experiencing agricultural expansion in the olive and wine growing sectors oriented towards the market during the sixth-seventh centuries (Wickham, 2005: 443-459; contra Kennedy, 2007). In western Europe, the available documentation remains today almost entirely reduced to the written, which does not allow for a quantitative approach. It suggests greater devastations in Italy and in the south of Gaul: the plague, miraculously halted at Rheims, spared western and northern Gaul and the greater part of Germany. England (on two occasions in the seventh century) and Ireland (in 544 or 545) were also affected, but it seems more selectively (McCormick, 2001; Little, 2007). A more precise cartography is expected in the years to come thanks to the possibility of detecting the presence of Yersinia pestis in human remains. Whilst the Black Death of 1347-1352 was a global pandemic, affecting the towns and the countryside equally throughout the whole of Europe (with a yet more marked abnormally high urban death rate for epidemiological reasons), it seems that the geographical impact of the plague of Justinian in the West above all remained limited to commercial and exchange routes. Archaeozoological data show that the black rat, host to the insect that was the vector of the plague (the flea of the European rat), gained a foothold on the European continent in the first century AD. In temperate areas, the black rat was 'the obligatory commensal of man', who could not move on its own. It was human beings who were responsible for the spread of infected fleas, either through the agency of their clothing or the merchandise they transported, or through the presence of dead rats with their fleas in transported materials (ship grain-holds, bundles of clothing, etc.). According to the data of archaeological sites the black rat appears to have only saturated

western Europe in the eleventh-thirteenth centuries. Before that, its gradual expansion was at first linked to areas crossed by exchange currents between the East and the West. These hypotheses lead to two different epidemiological models: a limited geographical extension of the plague in the sixth century, resting on a substrate of rats restricted in space; a general expansion from 1347, resting on a complete colonisation of the continent by the rodent (Audoin-Rouzeau, 2003) and the globalisation of exchange on a European scale. The first model is predictive of a weak impact of the sickness in the countryside, with the exception of regions (or communities such as the monasteries) which could have been struck by pneumonic plague with intense interhuman contagion (England?) and rural locations which were in regular contact with the outside world through the intermediary of the circulation areas of the estates of large property owners. The plague of the early middle ages, despite dramatic consequences on a local level, seems to have been a marginal event in the West, without long lasting consequences. Gaul's gateway to the East, Marseille, struck several times by the plague, did not begin to decline until the end of the seventh century (Loseby, 2000; McCormick, 2003; Audouin-Rouzeau, 2003; Drancourt et al., 2007).

2.1.1.2 Population and climate

The dendrochronological series of the north-west of Europe and Chinese written sources bear witness to the impact of a major geological event (a volcanic eruption or the impact of a celestial object) in 536, leading to a sudden cooling of the temperatures (by a 'nuclear winter' phenomenon extending over several years), but it seems quite unconvincing to link such an episode to systemic changes such as the disappearance of an ancient Roman agricultural system or the widespread decline of the European population (Arjava, 2005; Devroey, 2009). Today, the increase in the amount of paleoclimatological data allows us to situate the social crisis and the complex structural changes that went hand in hand with the passage from antiquity to the middle ages within the framework of a long period of climate deterioration, wetter and colder from the end of the fourth to the seventh century, in the northern hemisphere (Cheyette, 2008: 158–163). However, the climate should not be invoked as a final cause, but as an element having played a role, amongst others, in the centuries' long crisis of European societies. The system of extensive cereal growing deployed by Rome in the Great European plain during the Roman era could have been incapable of reacting in the long term to this worsening of environmental conditions, leading to a fall in productivity, whilst the agro-sylvo-pastoral triangle spread the risks throughout the whole of the year and diversified its food sources, which explains the rapid disappearance of the villae after the retreat of the Roman troops in England or in the Netherlands towards the end of the fourth century-450 (Theeuws, 2008).

2.1.1.3 Population and settlement

Chris Wickham responds in the negative to the hypothesis of catastrophic exogenous factors. The demographic decline and the simultaneous retraction of extensive agriculture must be seen as the result of a set of economic and social phenomena due to the fall of the Roman

Empire, and not as the result of disasters such as the Bubonic plague. The decline of 50 per cent of the sites of the villae around 450 in northern Gaul and England is confirmed by solid data, not observed elsewhere. It coincided with the population size falling by half. This decline cannot be attributed to the plague (which burst out in 541 in the West), as it had already begun in the fifth century; the sixth century shows a stabilisation of land occupation, the basis of future demographic growth from the seventh century onwards. In England, two isolated outbreaks of the plague in 646–666 and 648–687, despite their possible seriousness, did not interrupt rural growth (Maddicott, 2007: 205-214). In the south of Gaul the general chronology of the evolution of the rural landscape is different: the peak of site abandonments is clearly situated in the sixth, even seventh, century (Favory, 2003), in a long trend towards a reduction in the points of settlement from the second and third centuries onwards. The profound reworking of rural landscapes was laid out in stages regionally between the end of the second century (Scandinavia, Netherlands, the north of Germany and present-day Belgium) and the sixth-seventh centuries (Aquitaine). Beyond the Romanised world, the organisation of settlements and land changed fundamentally. Farms and settlements became less numerous but their size increased, allowing for the grouping together of more inhabitants. This evolution went hand in hand with a significant regularisation of settlements structured around farm enclosures. The oldest examples come from Jutland and the north of Germany and date back to the end of the second century, whilst this evolution was observed several decades later in regions close to the *limes*. The similarity of the farm plots and the organised layout of many settlements recall the plans of many regular villages of the high middle ages. This evolution was nevertheless not linear and could vary within the same site: at Flögeln, in Lower Saxony, the enclosed farms of the second-third centuries form a highly organised arrangement which contrasts curiously with a looser spatial tissue without enclosures in the following phase of the fourth-fifth centuries (Zimmermann, 1997: 420–423, fig. 11–12). The transformation of settlements coincides with the abandonment of Celtic fields. In Sweden and Norway, extensive fossil lands with stone-wall fences demonstrate the setting up of a new system recalling the outfield and infield of traditional agriculture (Widgren, 1983; Nissen Jaubert, 1996). The reduction in the surface areas cultivated thus allowed breeding to be intensified. In this context, it is not possible to establish a direct link between the revival of forestry and a demographic crisis. On the other hand, it is certain that the extensive agriculture of the previous centuries had caused the formation of 'podzols' in numerous regions along the North Sea which made them uncultivable up until farming became mechanised (Groenmanvan Waateringe, 1983).3 The evolution of agrarian landscapes coincided with changes in funerary and religious practices indicating a stronger social hierarchisation structured around elite warriors and the formation of chiefdoms or kingdoms (see below).

³ 'Podzols' are formed in light and leached soils. They are characterised by an ashy or a rusty colour, in which the leaching of ferrous elements can lead to layers which are hard and impenetrable for traditional farming tools.

The length of the demographic decline is also a matter of debate. For a generation of economic historians heavily influenced by the neo-Malthusianism of the 1960s, the obsolescence of agricultural techniques is said to have led to the stagnation of the population over a long cycle of depression lasting six centuries, between c.400 and c.950. Then, a complex of innovations liberated medieval society from the Malthusian 'ceiling': the breeding of horses for agriculture, more efficient harnessing techniques, the improvement of tools, the use of the heavy plough and the spread of triennial crop rotation (White, 1962; Duby, 1962). The resulting agrarian growth allowed for a population increase and the expansion of cultivated areas for over three centuries. Progress in the fields of archaeology and the history of technology refutes the hypothesis of technological breaks between antiquity and the middle ages, in insisting on the gradual and regionally diversified spread during the early middle ages of complex technology (regional metallurgy, ploughing, the growing of winter and spring cereals, livestock) linked to a farming system based on fallow land and heavy animal-drawn cultivation (Henning, 2008: 41, 43-44). The plough offers an eloquent example: its use is attested with certainty to the east of the Roman border in the coastal regions of the North Sea. The regions dominated by the Franks yield possible clues from the Merovingian period onwards, but we have to wait until the end of the first millennium to establish it with certainty (Zimmermann, 1995; Klapste and Nissen Jaubert, 2007; Nissen Jaubert, 2006: 169-172). It would be better to acknowledge that we know nothing about the population levels of the early middle ages. We have to take into account the biases inherent in the sources: funeral archaeology tells us about religious, social and cultural practices concerning the dead, while written evidence grasps the living in seigniorial censuses (a sample selected following economic and institutional criteria). Moreover, there is the qualitative importance of archaeology in terms of knowledge about the physical health and the modes of feeding the population (McCormick, 2001: 38–41). Despite the existence of very rich quantitative sources such as the estate surveys (polyptychs) of Saint-Germain-des-Prés and Saint-Remi of Rheims (800/850) (Devroey, 2003: 48–77), we have to reject the global evaluations constructed on the basis of extrapolating the densities taken from some seigniorial territories in the Carolingian era (Lot, 1921; Schwarz, 1985; Rouche, 1997) or the population growth rates constructed by archaeologists on the basis of Merovingian cemeteries (Hamerow, 2002: 107-109). At best, the available historical and archaeological data enable us to make out some trends. After a steep decline in the number of sites of settlement counted in the field surveys, signs of a resumption of land occupation can be perceived from the seventh and eighth centuries. This expansion of cultivated areas and of the population, in all likelihood rather slow and punctuated by severe episodes of famine, extended up until the tenth century when it accelerated and resulted in the first large cycle of demographic growth which reached its peak in 1300.

To analyse quantitatively the evolution of the European population, it is thus necessary to turn to how the land was occupied. The contraction of the population was very striking in the towns. In the Roman West, the reduction in the urban population can be evaluated as a factor of ten on average, between antiquity and the early middle ages. In the countryside, the

increase in available field surveys enables us to measure rural settlement in terms of the quantity of inhabited sites. Large-scale regional surveys are available for northern Italy (Etruria, Tuscany) and the south of Gaul (the Rhone valley), with converging results: maximum densities were reached in the first and second century AD. In relation to these figures, losses climbed to around between 50 per cent and 60 per cent in the fourth century and, to 80 per cent and over, in the sixth. This sharp reduction in sites is confirmed in the western Roman Empire, but also beyond its borders, in Denmark, in the north-east of Germany and in Poland (Hamerow, 2002: 109-114), which would privilege the impact of a general causal factor such as a climate anomaly (Chevette, 2008) or a pandemic (McCormick, 1998). This attestation must nonetheless be tempered by the phenomenon of a grouping together of settlements observed in the north of Germany and Scandinavia. There it is a question of a farming better adapted to the linking of cultivation and the raising of cattle which in turn provided the manure necessary for soil enrichment (Groenman-van Waateringe, 1983; Nissen Jaubert, 1996). The techniques of the field surveys present significant biases when it comes to evaluating population density: on the one hand, the dating has large margins and covers many human lives, whilst on the other hand, for the whole of the area studied, it turns out that the ceramic objects of the early middle ages (or the recent iron age for non-Romanised territories) are rarer and more difficult to distinguish, because of their brown or grey colour; often their weak firing exposed them to rapid deterioration (Ward-Perkins, 2005: 184–187; Ward-Perkins, 2005: 184-187; Hamerow, 2002: 106). The passing from an architecture based on brick, tiles and stone for the villa of antiquity to constructions in cob and wood, with plant based coverings, made the settlement sites of the early middle ages not very visible for a long time. The important results provided by preventive archaeology have recently changed things greatly. The remnants of settlements now number in their hundreds, but overall summarising studies still remain rare or brief for the south of our study area, notably in France, where a number of research studies under way will add nuances to and revise our current knowledge in the years to come. Overall summarising studies are clearly more numerous for the regions along the North Sea on the other side of the Roman limes, which as a result dominate in the archaeological literature. Amongst them Scandinavian research studies have the merit of bringing together the evolution of settlements with other forms of archaeological remains and fitting them into a larger socio-economic and political context (Hedeager, 1992; Axboe, 1995).

The evolution of vegetation and regional archaeological investigations bear witness to several general phenomena capable of being interpreted in demographic terms. Material remains are a good clue to the level of complexity of artisanal production and exchanges: the end of antiquity marked a simplification of artefacts and a progressive localization of the common circulation of consumer goods; the distribution zone of manufactured objects, including coins, strongly contracted. In most post-Roman regions, the number of settlements decreased, and the extensive and specialised crop cultivation centred on the rural *villa* regressed, giving way

to a more polyvalent agrarian economy based on crops, husbandry and woodlands. Settlement spread in the form of a scattering of hamlets grouping together three to five families. Their occupation might vary from a few decades to several centuries before they were abandoned or more likely moved to another place. As a matter of fact, throughout north-western Europe, this mobility was commonly an integral part of a long-lasting territorial continuity (Hamerow, 2003; Nissen Jaubert, 1999). Furthermore, very often the succession of buildings inside the same farm plots confirms that several generations lived on the same spot. The extensive cereal growing associated with the villa system was replaced by modes of cultivation which spread the risks over the whole of the year (wheat cultivation in the spring and the winter) and which developed food producing mixed farming in the gardens. The reduced body size of domestic animals (excepting the horse) indicates the changes in breeding, with the adoption of species more adapted to domestic animal husbandry and to the grazing of free spaces, such as pigs and sheep, at the expense of large cattle destined to be slaughtered for the urban market (Audouin-Rouzeau, 1993; Lewitt, 2009). From the beginning of the period till about the seventh and eighth centuries, the countryside of antiquity gradually faded out in favour of another organisation which points to the medieval and modern landscape. In the following centuries, the open agricultural landscape expanded; new groups of farms emerged on the margin of the rural territories. During the same period, the presence of a church or a cemetery favoured the concentration of populations and the stabilisation of large habitation sites. As a matter of fact quite a number of the existing villages may date from this period. In the central regions of the Frankish kingdom these phenomena were probably linked to the contemporaneous spread of the Carolingian estate system and a more pronounced social stratification in the countryside areas (Theeuws, 2008: 220). They moreover became more widespread over the course of the tenth century and beyond the year 1000.

The transformation of the western countryside areas thus took place in phases, first of all between c.350 and c.650–700 with the simplification of the 'encompassing society' that dominates it (urban decline, the erosion and then disappearance of the *villa* system, the end of the permanent army and the disappearance of property tax, a reduction in living standards and the size of aristocratic groups) and the empowerment of the peasantry; then, from the Carolingian period onwards, with an increase in the pressure exerted by the aristocratic elites on the countryside and a growing 'caging' of the rural population within the framework of the medieval '*seigneurie*' (Wickham, 2009: 529–551). These oscillations can be read in terms of fluctuations in the overall population in the West: demographic decline and a contraction of the population from the third century, with localised revivals in the fourth and fifth century, the reversal of circumstances and the beginning of a slow endogenous growth of the population of north-west Europe, from the seventh-eighth centuries The military dynamism of the Carolingian Frankish kingdom, from the seventh-eighth centuries (conquest of Saxony, Bavaria and Lombardy; defeat of the Avars) and its Germanic part in the ninth-tenth centuries (the beginning of expansion to the east) adds exogenous factors, by making available to the

Frankish aristocrats lands, material riches and a reservoir of human capital fuelling the transfer of slaves towards the interior of our region (as agricultural pioneers) or towards the Muslim Orient (as human merchandise) (McCormick, 2001: 741–777; Henning, 2008). In northern regions, the part played by the slaves in the rural economy has been much discussed. For some, they were large in number and important, whilst others have drawn attention to the lack of evidence. Certain privileged sepulchres certainly contain the remains of a 'companion in death', but these examples remain exceptional. A single runic stone at Horning in Jutland mentions a slave, a certain Toke, who had put it up in memory of his former master, who had granted him his freedom. On the other hand, foreign sources such as Rimbert, and then two centuries later Adam of Bremen, would have us believe that the slaves were large in number. Danish regional laws suggest the same. Their writing up certainly occurred later, but they contain archaic paragraphs several of which are concerned with slaves (Fenger, 1992). The increase in the size of farms and the number of buildings of which they were made up was a striking fact at the turn of 700. The working of these farms inevitably required a significant labour force, which to a large extent went beyond that of the family framework in the strict sense of the term. The six to seven agricultural units of the Vorbasse settlement of the eighthtenth centuries covered a surface area of between 8,000 m² and one hectare, around four to six times more than that of the third-seventh centuries.

2.1.1.4. A qualitative approach

The rapid progress in paleo-anthropological investigation techniques, mainly for the period 500-700 for which burials in open country, accompanied by the depositing of objects, allow for very precise dating and social typologies, enables us to pursue a qualitative approach. These indications suggest a general poor state of health for the middle of the first millennium: pathologies caused by dietary deficiencies, poliomyelitis, tubercular diseases, isolated cases of leprosy and rachitis. It should be noted that we lack points of comparison to interpret these clues as a deterioration of the healthiness of the population. From the eighth century on dressed burial disappeared and funeral sites were progressively situated closer to the settlements, which prevent us from comparing health data. The studies carried out suffer from methodological weaknesses: the generalising of the data gathered and the difficulty in documenting correctly the historical context of the populations studied (Buchet et al., 2006). New progress requires the setting up of quantitative models of interpretation, through the simultaneous study of the points of land settlement and the cemeteries (Theeuws, 2008) which would allow us to characterise the evolution of how the ground was occupied on a regional scale, by increasing the studies with a local scope, avoiding any generalisation, and by developing health profiles allowing us to measure the dynamic of the populations as a whole (McCormick, 2001). The comparison of the population of two cemeteries, Buckland in England (end of the fifth-seventh centuries) and Munsterhof in Zurich (ninth-twelfth centuries) shows that adult women had a shorter life expectancy than men. Birth and death were very closely linked in these societies: half of the population died before reaching

adulthood, with very significant perinatal mortality; death in labour was the most probable for a woman of a fertile age. To ensure that generations were replaced, at least four births per couple were required. The cemeteries do not enable us to study the social practices linked to birth. Christian sources bear witnesses to practices to limit births, abortion and infanticide amongst the poorest levels of society (Smith, 2005: 66–70).

A regular and adequate food supply is a prerequisite for any sustainable demographic growth. Because of its limited spatial range, the European economies of the early middle ages were able to experience occasions of a local intensification of the agrarian economy, leading to demographic growth and a strengthening of town-countryside links, as in the Paris region in the eighth century (Bruand, 2002). The functioning mechanisms of the Carolingian *seigneurie*, notably the logic of the stem family which in theory regulated the succession of tenants at the head of a family farm, also led to considerable internal pressure, which could explain the high population density figures measured in the property inventories of Saint-Bertin (20 inhabitants per square kilometre) in southern Flanders and of Saint-Germain-des-Prés in the Paris region (50 inhabitants per square kilometre) (Schwartz, 2005; Lot, 1921) and the indicators of the extension of the settlement centres and of land clearing from old settlement zones that had been going on since c.650–700. But this potential local and regional growth was in all likelihood nothing in comparison with the extended growth of the European population which began c.950.

Population structure and demographic variables can be analysed locally on the basis of rural population censuses included in the estate surveys of the ninth century. These documents obviously do not have demographic aims but are linked to the lords' concerns about dominating the population (notably the transfer of legal status or of tenure). The data of the surveys reveal a peasant mobility of unsuspected scope from the large ecclesiastical estates and genuine behavioural differences between the genders. The shortage of women in the censuses resulted from the very pronounced virilocality of marriages between peasants on the manses. Women came in large numbers from the exterior to be married on a manse; the numbers who left the estate were even greater: at Saint-Remi of Rheims, there were 156 men per 100 women within the villae, whilst the emigrants numbered on average only 82 men per 100 women (Devroey, 2003: 56-60). A systematic analysis of the archaeological data from the cemeteries of the Metz region shows that girls were buried with the material attributes of femininity from puberty, whilst masculine attributes only appeared in the graves around the age of twenty (Halsall, 1995). It can be reasonably suggested that women got married between the ages of fifteen and twenty, and men around the age of thirty, perhaps after a period of fulfilling military obligations or at the moment when they became the head of the family farm. This society followed the rules of a patrilocal or neolocal mode of residence (through the creation of new farms to the benefit of surplus couples) linked to the fundamental organising structure which framed peasant populations from the seventh century on, the manse (a farmstead occupied by a family of tenant farmers).

2.1.1.5 Spatial mobility

Population mobility can be situated on many levels: 1) a local mobility which essentially derived from the organisation of the land with the displacements, grouping together and/or dispersal of settlements; and 2) settlement migrations which spread to more extended, regional or supra-regional areas.

Archaeology demonstrates the movements of settlements within territories, whilst population displacements are revealed more by written documentation. Settlement mobility is generally established by archaeological remains, whilst written sources pass over it in silence (if we make an exception for a passage in *The War of the Gauls*, but which indeed concerns a previous period). However, the distribution of land, its revenue and its obligations must have required significant land organisation in order to prevent internal conflicts. This silence can probably be explained by the level of decision making: the estate surveys made a census of the payments due; their appropriateness concerning users' rights must have been settled orally within the communities.

The texts are more explicit concerning migratory flows from Germania, notably in the form of legendary tales which situate the origins of numerous people in the north of Europe. On the other hand, the archaeological data are more ambiguous; characteristic weapons, such as the double bladed axe or the angon, or various female clothing accessories, do not necessarily establish the ethnic origin of the people, even if their possession doubtless stems from a desire for identity display (Hedeager, 2000). Let us note that these types of furnishing essentially derive from privileged graves, for the most part, whilst the relics of settlements rarely offer such 'ethnic' indications. The byre house, emblematic of the Germanic populations of the continental shores of the North Sea, never crossed the Channel, despite the massive arrival in Britannia of Angles, Jutes and Saxons. In Gaul, the byre house of Germanic tradition at Saint-Ouen-en-Breuil constitutes a remarkable exception, and one of short duration (Gonzalez et al., 2001). The decline of architecture built from durable materials in favour of modes of construction in earth and wood doubtless depends more on new social and economic frameworks than on a Germanic influence. Later, in the ninth-tenth centuries, the written sources and toponyms inform us as to the installation of Scandinavians in the West, whilst the settlements hardly leave any trace of it. Evidently their potential markers of identity were expressed through specific decors and funerary practices. Only the establishments of the North Atlantic mark a certain wish to construct in a Nordic style. England and Ireland have yielded significant quantities of furnishings of Scandinavian origin or influence; in Normandy the rarity of archaeological data underlines a rapid integration into the Frankish world.

In England, Scotland and the Hebrides, some open fields that are organised and divided following the sun recall the Scandinavian *solskifte*. The location and the size of the fields repeat those of the farm plots in the village: the farm in the south or the east of the village will have the southern or the eastern strips in the fields and so on. Our knowledge on the *solskifte* and its organisation rests on written sources related to the open field systems of the high middle ages or later. Nevertheless, archaeological, geographical and etymological evidence

may hint at an older origin for some of the basic principles. The numerous place-names with the suffix -tot in Normandy are of Scandinavian origin and derive from the toft denoting the farm plot which had an outstanding function in the organisation of land (see below). The geographical diffusion of subdivision and place-names ending with *toft* may indicate some way or another to organise the rural territories functioning without writing although this is extremely difficult to prove (Nissen Jaubert, 2003b).

Both at the beginning and at the end of the period under discussion, the ancient authors explain migration flows by referring to problems of overpopulation. Jordanes, the first to distinguish the Scandinavians from the other Germans, also mentions a migration from Gothiscandza organised by the Goths. Around 1080, Adam of Bremen explains the Viking raids from Norway by their poverty. In his Ecclesiastical History the Venerable Bede (731) relates that the Bretons had requested the assistance of two Jutish warlords in fighting the Picts, an unfortunate initiative as it ended in the massive arrival of Angles, Jutes and Saxons, who had left their lands of origin deserted. This passage has weighed heavily in explaining the chronological gaps of the sixth-seventh centuries and the reforestation of the fourth-seventh centuries in Denmark and northern Germany. Let us note that the reading of palynological diagrams varies according to the researcher. Danish paleobotanists have insisted on the advance of the beech at the expense of the oak: the new composition of the woodlands (the silva) is thus said to indicate that it was pastured on, as bovines prefer the shoots of oak to those of beech. Livestock breeding could have contributed to a demographic growth which went hand in hand with a new social organisation around 700. A better understanding of the evolution of modes of construction has effectively enabled us to identify a growing number of seventh century sites in Denmark, where the evolution cannot be ascribed to the arrival of new populations. In Lower Saxony, new sites such as Elisenhof or Dalem and the reoccupation of previous sites have been attributed to Frisian migrants filling the gap left by Saxon migrants (Schmidt, 1988). The different interpretations of forest regeneration clearly show that it is not possible to establish a direct link between demographic evolution and the frequency of arborescent pollen. Their presence could also have been integral to a new rural organisation which favoured the resources of the silva (in northern regions they constituted an indispensable supplement to fodder during the winter). The grouping together of settlements observed from the end of the second century, which was accompanied by a contraction of cultivated surface areas, thus allowed the silva to develop. Finally, a dense representation of trees in palynological diagrams is not necessarily synonymous with a wooded landscape; the hedges of hedged farmlands also emit great quantities of pollen. To come to a decision it will be necessary to be able to study the conditions of tree growth in archaeological woods.

After all these considerations which oblige us to strongly relativise our capacity to define quantitatively and qualitatively the dynamic of rural populations during the early middle ages and to fit our observations into a regional or even local framework, it is nonetheless obvious that the period was crossed by a first phase of a significant contraction of settlements, with in parallel a reduction in the population, marked by regional differences, between the end of the

second century until the end of the sixth century. These phenomena were then inversed in a kind of demographic 'long, slow rise' that at the end of the tenth century resulted in the sustained growth of settlements and of the population of the high middle ages (eleventh-thirteenth centuries).

2.1.2 Household dynamics and composition

The adoption of the manse, a family farmstead occupied by tenant farmers, as the principal framing structure of the dependent rural populations in the seigniorial landownership of the north-east of Europe underlines the importance of the peasant household in the countryside of the Great European plain. Vouched for since the end of the sixth century in central Francia, in the Paris region, this new Latin word spread throughout the Rhineland and in northern Gaul as far as the Loire, where it came into general use in the ninth century. From the eighth century on, the mansus and its equivalents in the vernacular languages (Germanic hoba, English hide, Scandinavian bol) designated a dependent farm, comprising a house, land and capital resources (animal teams, cultivation equipment) sufficient to ensure the livelihood of a 'family' of peasants and to deliver the charges and work services due to the lord. The manse was also used to evaluate land wealth and to fix the contribution to the army (ost), to public works (fortifications, the development of the palaces, upkeep of public highways) or to the payment of a tribute. Derived from the verb *manere* (to reside), it very strongly evokes the idea of the permanent (and hereditary) residence of the head of the household (pater familias) in his house. According to the Venerable Bede's (673–735) expression the Anglo-Saxon hide is 'the land of a family'. Nevertheless we should not give the word 'familia' its contemporary meaning (a nuclear family of two generations), but instead the meaning of a 'household'. As for mansus, the etymology of the Scandinavian bol (translated as mansus in the texts), derives from living 'at bo'. Discussions of its nature, its origins and fragmentation have the appearance of being hard to tell apart from debates about the manse. For want of Scandinavian texts of the first millennium, we can note that the bol belongs to the suffixes of the toponyms which appeared during the Viking era. In the Frankish countryside the seigniorial manse (mansus dominicatus) could provide shelter for dozens of servants under the orders of a steward, whilst the simple manse of a peasant habitually housed two generations. By extension, the 'familia' designated all of a master's dependants, regardless of their place of residence, such as the large seigniorial families placed under the aegis of a monastery's patron saint (familia sancti N). Mansus and its Germanic equivalents replaced more ancient expressions based on social origin, such as the Roman colonica, a peasant holding run by a colonus, or systems of property taxation based on the division of the land, such as the former *iugera* or *sors* (lot) (Devroey, 2006: 410–425). The spread of the manse was contemporaneous with the changes in the structure of settlements and of land occupation observed in the north of France (Catteddu and Nissen Jaubert, 2004; Peytremann, 2003). A teleological view must be avoided: the geography of the manse corresponds to the extending of the model of seigniorial framing of rural populations to the north of the Loire; but the mansus incorporated pre-existing peasant realities (the predominance of the small family farm

in the agro-sylvo-pastoral triangle) more than it shaped rural society; it framed it without directly determining it.

The spreading of the institution of marriage to every strata of Roman society began from the second-third centuries. According to the information given by Tacitus, in Germania, slaves could live in their master's household or in their own dwellings in the manner of the Roman tenant farmers (coloni) (Tacitus, De Germania, 25). In the middle ages the ethical and spiritual values accorded by the Catholic Church to marriage extended its range to all Christians, without any distinction in terms of personal conditions. For the non-free, marriage had become an objective reality of life already in the ancient world and came into general use in the whole of the West from the eighth century. These progressions went hand in hand with the erosion of the social group of slaves working in the fields still deprived of family stability. For the master, the state of marriage, the creation of a stable family unit and the installation of a couple at the head of a small farm which would be handed on to the next generation appeared to be fundamental elements of the reproduction of the system of framing the dependent populations and the cultivation of the land embodied by the manse (Toubert, 1998). The function of the household as the basic unit of social life in the seigneurie is confirmed in the practical sources. The indications we have (because of the rarity of the available sources) seem to suggest that there were still quite a large number of servants without family status who lived with their masters in the average-sized farms of the minor aristocracy and the autonomous peasantry at the end of the tenth century. As for the free, the Edict of Rotari (643) shows that all the forms of family community were taken into account by Lombard law. The married state certainly had a Christian ideological justification but its popularity can above all be explained by its functional adaptation to the seigniorial framework for the non-free and the most widespread size of the peasant farm. We thus need to take into consideration the hypothesis of differences in the family morphology (kinship) in terms of economic and social variables.

The Carolingian polyptychs are the principal source of information on the morphology of peasant households. Let us note, however, that the lists of dependants indicate only the number of the household's members alive at the time of the census, which does not enable us to follow a household's life cycle. The simple nuclear family, composed of parents and children predominates in these 'snapshots', between 60 and 75 per cent, in Italy (Farfa) as well as in north-west Gaul (Saint-Germain-des-Prés, Rheims) (Devroey, 2003: 60-65). In these models, nuclear households composed of solitary people or conjugal families represent close to three quarters of the population. Settlement excavations are also pretty much in line with this image of the couple as the pillar of the small agricultural farm. In northern Gaul the average size of settlement buildings, on the order of 70 m², seems adapted to a household composed of a single nuclear family (Peytremann, 2003: vol. 1, 280-291). The Anglo-Saxon house also comes close to these dimensions, a fact which has moreover led to questions about the reasons for the absence of the longhouse with a byre-area, so characteristic of the lands of Saxon, Jute and Angle origin (Hamerow, 2002: 46-51; Nissen Jaubert, 2003). With the exception of the byre-house, the function of the buildings often remains subject to caution. At Laucheim, analyses of phosphates have thus shown that in the main buildings of the sixthninth centuries two naves had a byre. The probable surface area of living spaces fluctuated between seven to ten meters in length and a width of around seven meters in houses measuring around twenty meters long, in other words 49 to 70 m² out of a total surface area of around 140 m² (Stork, 1997: 301-305, fig. 325). The increased size of longhouses from the end of the second century can be explained above all by the size of the byre and by the addition of supplementary rooms. Certain rooms were certainly used for living in but more often it was a question of spaces intended for storage or for various artisanal activities (Hamerow, 2002: 22–26; Waterbolk, 1991: fig. 25). The section for living in rarely in reality exceeded 12 or so meters in length (or around 70 m² as in northern Gaul). Things evolved over the course of the seventh-eighth centuries. The byres became detached from the main house, first of all in the regions close to the Roman limes, then more to the north, where the section reserved for habitation increased in size. This does not necessarily imply, nevertheless, that its roof provided shelter for more people. It could be a question of social expression, all the more so since farms expanded in terms of increased surface area and numbered more separate buildings which sometimes comprised a central hearth indicating a dwelling function. These large farms must have required a large labour force which exceeded the labour supply of the nuclear family. In certain cases, the longhouses could have taken the form of joint residencies of free farm holders with slaves, rather than expanded family structures. Thus the essential difference between the northern regions and those of ancient Francia and Anglo-Saxon England seems to reside less in a nuclear family structure than in the composition of the agricultural units. In northern Europe these seem to result more from a household than a family farm holding in the strict sense of the term. In Francia, it seems, moreover, that where the manses were 'overpopulated', in other words occupied by several heads of family jointly responsible for the obligations of the land tenure, each of these family units had their own fire. The norm for a household (without possible servants) was thus probably a family of two generations, possibly enlarged over the course of the family life cycle by unmarried brothers and sisters, the husband's mother and grand-children (Fichtenau, 1991: 82–85; Devroey, 2006: 389–390).

Very large families were the exception within the large monastic *seigneuries*. The vocabulary of kinship was scant and concentrated on the basic family (*maritus-uxor-infantes*). Words such as *mater*, *soror*, and *frater* are rare in the polyptych of Saint-Germain. The vocabulary of Farfa's contemporary lists falls back on the restricted family (Devroey, 2006: 387–393; Feller, 1994). To mark their family identity, peasants, including those in Romance language regions, adopted the Germanic onomastic, whose possibilities of thematic variation they used by transferring family lexemes to their children (Goetz, 1987; Bourin, Chareille, 2002): for example the first tenant-farmer couple to be settled on a Gagny manse (in the Paris region), *Ansegarius* et *Ingalteis*, had two living children called *Ansegildis* et *Ingrisma*. From the tenth century on, the vocabulary of kinship became richer in the lists of dependants which progressively took the place of the polyptychs, such as the genealogies of serfs. This phenomenon illustrates a shift from land tenure to tenant in the practices of seigniorial management and an extension of the signs of dependants' subjection to all the residents of the

landed *seigneurie* from the end of the ninth century. Several passages from the polyptych of Prüm (893) bear witness to the early appearance in Germany of charges which show seigniorial domination over an individual person, such as the 'formariage' tax (a tax paid to the lord to marry a man or women alien to the 'familia') and the 'mainmorte' tax (Kuchenbuch, 1978: 170–173).

Extended family groups (from 6 to 12 per cent of households) generally occupied larger holdings. The average surface area of the manses also slowly grew with the number of living children who lived with their parents. In the countryside, the holdings which were the best provided with land and animals were also those which provided housing to the largest number of people. At Saint-Germain-des-Prés, the ratio between the generation of the children and that of the adults was higher on the free manses (1.14) than on the servile manses (1.02) which were on average much less extensive (the free manse occupied by *coloni* contained on average 9.4 hectares, the servile manse occupied by serfs, six hectares of arable land) (Devroey, 2003: 64, 320). These clues permit us to imagine that the broad family and situations of co-habitation between the free and their slaves were more common in the well-off strata of the peasantry. Complex households were also more common in Germany, England and Scandinavia through the co-habitation of the free and the slaves within peasant holdings (see below).

The average peasant household was composed of a couple and two or three living children. At Saint-Germain-des-Prés the size of the household varied from 4.5 to 5.5. It was close to 5 at Saint-Remi. It falls within a range of 5 to 6 in five inventories from the Rhineland dating to the ninth century (Kuchenbuch, 1978: 76–94; Devroey, 2003: 63–65). Comparable figures appear in the south of Gaul and in central Italy which shows that the phenomena which determined the morphology and the size of peasant households were of a range affecting the whole of the West. Measuring fertility amongst the peasantry is largely beyond our reach. A study of the mortality and births amongst the Merovingian and Carolingian queens gives us figures of around four children per mother for the two periods, with a distinct improvement in the interval between two viable children from 3.5 to 2.5 years. These figures tally with a small sample drawn from aristocratic genealogies from the Frankish world: the number of children having reached adulthood per family rises from 3.4 in the seventh century to 3.5 in the eighth, then to 4 in the ninth and to 4.3 in the tenth century (Devroey, 2003: 64–65). For the peasant populations the numbers of children reaching adulthood varied from between 2.6 and 4 per couple in the ninth century. But a considerable unknown remains for the proportion of the singles and of couples without children who represent up to 30 per cent of the households of dependent farm holders in certain seigneuries. Another measure of the dynamic of the households is given by the ratio between two successive female generations. This ratio, generally positive, shows that the families settled on the manses experienced a slight surplus between succeeding generations which enables us to understand the mobility towards the exterior of the estates and, within them, co-residency on the manses, the appearance of divided up manses or of simple cottar's holdings, limited to one house and a basic plot of land of small dimensions.

The situation of co-residency on the land tenures (with two or three households on the same manse) can in all likelihood be explained by economic constraints and by differences in

wealth between the families, because it does not seem as though (at Saint-Germain-des-Prés) the manses with several households were significantly larger than the others. As the manse was the principal basis for the seigniorial levying of cash, products and work, the manses with multiple households or land tenures split into half or quarter manses obtained a proportional reduction in the real tax per contributory household. These divisions (which probably led to a pro-rata reduction in the rights on common land) were perhaps also agreed to by seigniorial agents to the benefit of tenants incapable of meeting the charges of land tenure.

Surplus population is also observed in the cases where we have complete censuses of the local population, which indicates that the large ecclesiastic *seigneuries* experienced potential growth of their population, with an interval, in terms of a doubling of their numbers, in the absence of crises of excess mortality, of between 60 and 150 years (Devroey, 2003: 70–77).

2.1.3 Life course and intergenerational relationships

For the master of a classic large estate, the most desirable form of household on an hereditary holding must have been the stem family (an authoritarian family model), which guaranteed the integrity of the land tenure and its transfer from a parental couple to one of the sons, in sidelining the other children. This holding devolution rule was applied at Saint-Remi of Rheims in the middle of the ninth century. According to the most plausible mortality parameters, at least a fifth of the peasant households must have remained without descendents (and an equivalent number must have had just a living girl). This explains the decision of the master to settle on his servile holdings young men who would be called upon to relieve the aged tenants (Farfa, Saint-Victor of Marseille) or the frequency of situations in which a young slave, seeking a spouse of higher socioeconomic status, made a hypergamic marriage in marrying the daughter of a free tenant (Saint-Remi of Rheims) (Ring, 1979; Feller, 1998: 526-529; Devroey, 2006: 386-387). Nonetheless, the sometimes large proportion of vacant land tenures (mansi absi) bears witness to the difficulties encountered in perpetuating family lineages on the tenures. We do not have comparable data for the autonomous peasantry in the regions studied, but it is likely that the strength of family networks, supported by the entanglement of lands, enabled the free to adapt the morphology of their landownership to the life cycle of the family groups and households. The small peasant landowners in Perche who appear in the Corbon book of traditions included in the polyptych of Saint-Germain-des-Prés, at the beginning of the ninth century, are presented as groups of siblings who maintained the means of developing strategies of matrimonial alliances (masculine hypergamy) and control of access to the land (gifts claimed in perpetual tenures, purchases and sales) (Devroey, 2006: 393–396). In Romagna, the presence of the parents of the lessees, within the confines of lands granted for rent, calls to mind family associations settled on land entities composed only in a formal way of holdings of diverse status and origins: undivided assets, land parcels owned under allodial title or granted in livello (on long-term lease), land tenures, etc. (Montanari,

1984: 70). Research is necessary (but the deeds which would allow us to identify neighbours are rare) in order to establish whether analogous situations existed in our regions. Based on the evidence of the Edict of Pîtres (864), simple tenants did not hesitate to sell their property rights to sections of the manses to their peers or minor local notables, destroying the theoretical link between the head-manse (the residence of the tenant) and the rest of the holding (arable land, fields, vineyards, etc.). The dividing up of the land into manses, thus, did not prevent land mobility. In the present-day south of Belgium and the east of France, the breaking up of the manses into quarters (theoretically the quarter of an entire manse) from the tenth century on went hand in hand with a separation of the habitation (house and garden/peasant's garden plot), taxed separately from the 'quartered lands', whose charges were assumed by groups of co-holders. This evolution, which continued through the eleventh and twelfth centuries, went hand in hand with the appearance of land parcels taxed in isolation (rentable plots, land dedicated to cereal which would be due to the lord) (Genicot, 1943: 226–255), which could obviously modify land accumulation and transfer strategies, previously centred on hereditary land tenure.

2.2 The family and its members

In the manse system, the basis of rent charges was in principle fixed on the level of the holding which had to supply quantities of money, products or work, without taking into account the number of occupants. This model already appears in the Merovingian edicts transferred by the laws of the Alemanni and the Bavarians (first half of the eighth century, with a common background going back to royal edicts of the seventh century). Fixed theoretically by the legal status of the head of the family, the nature of the charges was rapidly determined by the legal denomination of the tenure: a free peasant at the head of a servile manse was obliged to comply with the typical custom of this category of peasant holding, characterised by arbitrary service or service fixed at up to three days per week. In the large landed seigneuries, the demographic weight of the non-free settled on the manses varied regionally and locally. Locally, seigniorial colonisation ventures led over the eighth and ninth centuries to the systematic settlement of slaves, associated with free tenant farmers in order to diversify the profile of rural holdings according to the theoretical division: free/ploughman, non-free/labourer. In these cases, the former slaves settled on the manses could make up significant minorities – up to 50 per cent of the population of a seigneurie. In a general way, between the Seine and the Rhine, the proportion of the non-free and the enfranchised nonetheless did not exceed 10 per cent to 20 per cent of the total population of tenants. This proportion was probably higher in Germany and, in general, in regions which were not principally enmeshed in the estate system, as in Bourgogne (Verhulst, 1991; Bois, 1989).

The tenants did not form the lowest strata of peasant society. They could themselves own slaves or hire occasional day labourers. The Carolingian Sens Formulary (a collection of charters and administrative texts) (820–840) contains several judgement notices. In the two cases where a servus contested his status before the comital court, he had been bought by a tenant farmer, one was a tenant of the abbey (Sigoillot, 2008: 268). Such auxiliary workers

were not rare on the lands of the Prüm abbey (893), as the polyptych makes provision for their contribution to work services in the case of 440 manses out of 1700. Amongst the tenants best provided for of Saint-Germain-des-Prés, at the head of holdings largely exceeding 20 hectares of arable land, it is unimaginable that the head of the family was not aided by others, even though the census criteria exclude mention of these workers, be they permanent or otherwise (Kuchenbuch, 1978: 76–80; Sigoillot, 2008: 268). Situations in which a family group, who owned the farm holding, and domestic workers lived together were also more common amongst the higher levels of the village elites, free peasants, seigniorial officers, priests, the minor aristocracy, and in the large aristocratic households.

2.2.1 Family economy

The peasant societies which set themselves up in the whole region during the third-fifth centuries were characterised by the activities of multiple cropping, livestock breeding and domestic artisanal production. Technological simplification and the local circulation of products (i.e. commodities) are particularly pronounced for everything concerning the home and the life of rural populations. Materials, furnishings and everyday utensils made from wood and textile materials for clothing were made by and within the family unit, as is corroborated by the evolution of construction techniques and the dissemination of objects linked to weaving in the settlement sites of the early middle ages. During the 400–700 period, the presence amongst funerary deposits of quality metallic artisanal products and ornaments and the circulation of objects crafted from bone and glass as well as ceramic objects produced within the urban centres bear witness to the latter's penetration into the privileged strata of rural society, but these objects are incommensurable with the degree of commercialisation measured before the Barbarian invasions.

After 700 the pressure exerted by the lords on the peasants became stronger. It encompassed a part of the farms' food and artisanal production, particularly concerning cereals and certain rare and sought after products such as wine and wood, either in a rough state or designed for the construction and upkeep of buildings. Archaeology also demonstrates the presence of specialised artisans such as blacksmiths and millers on a village scale. At Dalem an excavated hut housed a weaving loom over 4 metres wide. Its unusual dimensions indicate an artisanal specialisation which it is very tempting to link to a trade in Frisian woollen cloth (Zimmermann, 1982). In Denmark the coastal site of Selsø of the eighth-twelfth centuries has yielded the relics of several artisanal activities (metallurgy, luxury goods and textiles). Textile activities there occupied a predominant place, which seems to suggest the fabrication of sails for the boats whose presence is attested to by numerous rivets (Ulriksen, 1997: 44–79, fig. 4). At the same time imported goods became more numerous and widely diffused, including domestic utensils such as hand mills made from Rhineland tuff, steatite receptacles or whetstones originating from Norway, etc. (Sindbæk, 2007: 310-311). Against the background of the subsistence family economy, land domination thus included the dependent peasants in an extended circulation which profited the power elites. Nonetheless, a proportion of peasant charges consisted of perishable or difficult to transport goods which had to be

consumed on site by redistribution mechanisms or wages paid in kind. Another part remained in the hands of seigniorial agents, which encouraged local stratification. The same is true for the obligatory tithe which appeared in the second half of the eighth century and earmarked a proportion of its yield to assisting the poor, to the local church and to the upkeep of the local priest. At the same time peasants had access to markets where they could realise part of their surplus. In regions in which a certain specialisation of family based production was developed, such as textile production in the regions of the north-west which bordered the North Sea, or viticulture in the Paris region, it is clear that peasant families were directly involved in the circulation of part of their produce, notably in the hinterlands of large urban centres such as Paris or Cologne and the English, Frisian and Danish wics (see Corn, vol. 2).

2.2.2 Relations of gender and patriarchy

Amongst dependent peasants, the hereditary nature of the manse was established for the free tenants by the ninth century at the latest, but according to the principle of a single successor. It was tolerated, if not encouraged, amongst slaves provided with a holding. The inheritance of the manse was part of a primogeniture system that gave priority to direct male filial status and to the eldest. Thus, the 'family policy' of large landowners encouraged the vertical handing over of the holding which enabled the assurance of their permanence and the reproduction of the qualified labour force, the ploughman and his cultivation equipment linked by duty to the farming of the reserve. Depending on regional cultures, access to landownership for women was a little greater in the regions where Roman juridical traditions were perpetuated (more than 10 per cent). In Gaul, north of the Loire, in Germany and in England the share for women was even more restricted, below 10 per cent or even 5 per cent (Smith, 2005: 138-139). Typically, it was higher amongst the free and we more often encounter women as protagonists in land transactions which involved a property being abandoned: at the beginning of the ninth century, in Perche, 25 per cent of gifts with the short-term recovery of property involved women (Devroey, 2006: 403). For land tenures possession could pass from man to man by means of surviving women (through marriage or succession). In Romanic regions, the presence of women as the head of the house or as co-tenant represents only a few dozen of the cases found in the estate surveys. We come across none in the Rhineland estates of Prüm (893), which demonstrates the existence of striking regional differences (Devroey, 2006: 402– 403). At Prüm, there was a large number of 'surplus women', the widows, daughters or sisters of tenants, who had to leave hereditary manses. We often come across women who are single or accompanied by children amongst the holders of miniscule land tenures, houses with or without a garden, possessions reduced to a little field (Devroey, 2003: 306). The division of tasks within a family holding also closely matches gender differences. A particularly powerful taboo reserved ploughing work for men (Kuchenbuch, 1991: 141-142). Religious prescriptions in theory reserved the opera ruralia for men and the opera textilia for women, in the seigniorial workshop and within the domestic framework. Male territory extended to the fields and to the woods, to cartage and artisanship in wood. At the height of the agricultural year haymaking, harvesting and grape gathering were carried out by the two

sexes. A woman appeared as a Hausfrau, someone who both brought up the children and was mistress of the house. The domestic sphere belonged to her, from the house to the garden: making mustard and preparing tinctorial materials, breeding barnyard animals, fruit picking, clearing the kitchen garden and textile production (linen sowing, growing and preparation, sheep shearing, spinning and weaving). Certain roles are sometimes associated with men, sometimes with women: oddly bread making and grain malting, two activities which could have taken place in the family hearth (the 'foyer' in both senses of the French word), in female territory, or in collective facilities such as the ovens situated outside the house, in male territory. Non-free women (ancillae) owed products or textile works on an individual basis, regardless of the legal status of the holding where they lived with their family. In regions where custom fixed the transmission of personal status from the mother to the child (per ventrem), young slave women found it difficult to get married within the world of the tenants (Coleman, 1971). At Saint-Germain-des-Prés (823–828), couples composed of partners with a different personal status accounted for 16 per cent of marriages. At every strata of the peasantry, from the completely free to the slaves, boys found it easier to marry within the framework of the manse than girls of identical status: the cases of masculine hypergamy (see above) account for over 74 per cent of the marriages involving social mixing. Women formed the majority of migrants in the large estates (see above). A non-free woman was doubly disadvantaged, as a slave in the same way as her male counterpart, and as a woman, in the countryside and in the dependent peasantries marked by the primacy of agricultural labour over the *opera muliebria* (Devroey, 2000).

Domestic service seems to have been a world of unmarried people, provisional or definitive. The youngest children of poor peasant families were often relegated to manual tasks, as was the case for the workers who served onboard the Prüm estates' boats (as porters and haulers) or the women gathered together in the seigniorial workshop, the *gynaecium*, to sew and carry out the textile jobs. The seigniorial vocabulary has preserved a trace of these solitary people, be they free or otherwise. The custom of giving the name *puer* or *puella* to slaves, no matter their biological age, dates back to antiquity. These names were perpetuated in the vernacular languages (Obermeier, 1996: 68–69).

2.3 The family and income

In an agro-pastoral system structured by the family smallholding the subsistence economy necessarily claims a predominant share. No family, no farm or property owner, no matter how wealthy, was a self-sufficient, 'insular' entity in the early middle ages.

2.3.1 Income systems and property

As far as what affects land appropriation is concerned, the early middle ages were characterised by the alternation of periods of regular and heavy transfer of land assets to the churches and of intermediate periods of secularisation. Transfers of assets reached a maximum at the beginning of the ninth century: on estimate one third of cultivated land was then in the hands of the Church. Seizures of lands to the detriment of the Church reached their maximum during the years 720-780 (transfer of lands by the Carolingians to the benefit of vassals) and 840–950, when the political and military instability in western Francia led to the disruption of public and religious institutions and favoured local loss of wealth and power to the benefit of the secular aristocracy. The increase in private donations from the eighth century onwards can be explained by the practices of funerary commemoration and the strategies of aristocratic families who were looking to avoid the property divisions and disputes that went hand in hand with the transfer of land amongst blood relatives. The burden of public service, such as participating in the frequent military expeditions, for free peasants from the eighth century on, and the search for protection against the abuses of the powerful, are without doubt important factors in the erosion of the social group of free peasants who abandoned their properties to enter as dependants and tenants under the protection of the lords. This phenomenon is often addressed in the Carolingian capitularies, which were apprehensive about the 'poverty' of the freemen, in other words the free peasants toppling over into dependency. These factors favoured the enrichment of large secular and ecclesiastical landowners, but it is clear that they also widely benefited the base of the aristocratic pyramid and local mediators, as the cases of minor officials or local priests show (Bougard, 1996; Feller, 2005; Devroey, 2006: 335-344). The dynamism of these intermediate social classes is poorly documented by the texts, but well attested to elsewhere, in other regions such as Alemania (the Saint-Gall charter), central and northern Italy and Catalonia. There certainly existed a market for land which threatened the cohesion and the very structure of the manses in the large seigniorial properties, as is shown by the practices denounced by the Edict of Pîtres (864). Beyond the Christianised world, the transfer of land is particularly difficult to perceive. Some rare runic inscriptions underline the importance of owning land. As far as the transfer of land is concerned, regional laws (composed of several chronological layers) clearly show that it was a thorny problem. The gifts and sales of land came into conflict with and disrupted a previous system in which the possession of land and the charges it bore formed a whole with the farm lot – the toft. Land transactions –notably to religious foundations- shattered this coherence. Contradictory paragraphs, certain of which envisage a retrospective annulment of a transfer, give an idea of the size of the problem (Porsmose, 1982: 451–455).

2.3.2 Exchange and credits

The very weak level of the monetisation of the economies of the early middle ages explains why exchanges and credit operations were carried out in kind, which leaves few documentary traces. On the continent, the circulation of money in the Merovingian era, based on standard gold coins which became progressively weaker (mainly a third of a solidus), was in all likelihood linked to the circulation of artisanal products and to the gift/exchange relationships of the power elites. The Carolingian reform, introducing the silver denier, mainly concerned *Francia* (in terms of coin minting sites and coined money). A variable proportion of the charges imposed on the peasants was to be paid in cash, with the obligation of converting a

proportion of the products (lower animals) or the services (army duties) into legal deniers, which must have forced the existence of rural markets to facilitate crop/money exchanges and ensured the centralisation of cash in the hands of the large property owners. The silver denier was also the privileged basis for the raising of exceptional tributes, collected notably to appease the Scandinavian invaders in the second half of the ninth century. But, according to the finds of isolated coins by archaeology and metal detection, entire regions of the Frankish kingdom (Germany to the east of the Rhine, Italy) functioned almost totally without real money circulation, after the introduction of the denier, up until the middle of the tenth century (Rovelli, 2009). Money was used above all as a measure of the value of work and things. For other agricultural products (cereals, wine) redistribution outside the family small holding was assured by levying in kind and transporting crops long distances as part of the consumption of the elites (the populations in the monasteries and aristocratic retinues), the upkeep of minor vassals settled locally and the services due to the State (provisions to the Court and public officers, military logistics). The politico-religious denunciation of the practice of usury in the Carolingian period concerned above all the manipulating of weights and measures within the framework of advances on crop harvests, which probably bears witness to the importance of these forms of credit in the countryside (Devroey, 2006: 338). It seems difficult to say more about this.

2.3.3 Labour markets

The labour market was also marked by weak monetisation. The proportion of slaves in the entire population varied regionally. Their existence did not exclude the presence of free workers on the estates and family farm holdings. The use of forced work by groups of chattel slaves seems to have disappeared from the Roman western provinces, on the basis of a mapping of the discoveries of slave collars (numerous and well dispersed on rural sites before 450). This contrast suggests that the change of agrarian system between antiquity and the middle ages went hand in hand with the extinction of chattel slavery in the countryside. These maps however provide the image of a brusque transformation, whilst the small rural peasant holding, run by free tenant farmers (coloni) or slaves living as a couple on plots of their own, progressively replaced the slave-mode estates in the large and average farm holdings in the Roman Empire from the fourth-fifth centuries. Agricultural workers remained anchored to the soil, but this link came about through less brutal practices, such as the regular distribution of food in the form of food for work (praebenda) and above all the opportunity given to the slaves to live under their own roof, with the obligation to partially maintain their own needs themselves through small-scale animal raising and the intensive cultivation of very small plots of land, rounded out by food distributed by the master in exchange for work. For more demanding work (ploughing and animal-drawn transport), the food handed over by the master also served as compensation for the tenants' services. These practices are less well documented in our regions than in Italy, but probably formed part of the lord-peasant relationship, passed over in silence in medieval sources, which strengthened the relationships

of reciprocity. The distribution of food for work also impacted on the more fragile strata of the rural population, those receiving assistance from the parish, occupants of short-term tenures and defaulting tenants. Around the parish church the priest frequently shared the development of the manse constituting its legitimate endowment (c.15 hectares and four workers) with the occupants who received food in exchange for their work. This situation was common on the lands of Saint-Germain-des-Prés and finds an echo in the ecclesiastical capitularies of the second half of the ninth century, which denounced the abuses of parish priests who exploited the poor by feeding them with the revenues of the parish poor list in exchange for work. Making use of wage systems, of prebendaries and work for food amongst the indigents and inhabitants of *burgs* close to the monasteries was widespread (Verhulst and Semmler, 1962: 117–118).

Whilst a majority of agricultural workers probably lived in biological families of two generations and in their own home, we have to turn towards the large aristocratic households to come across large troops of domestic slaves: in 858 the cloistered nuns of Notre-Dame de Soissons had with them 110 maidservants (famulae) in the interior of the cloister, including 80 employed in the seigniorial workshops. The monastery in addition had at its disposal 130 men, working outside in the gardens and the workshops. In this aristocratic milieu the average proportion was one male or female domestic for per monk or nun (Hocquet, 1985: 662). We also come across workers living in same sex groups near to the Cysoing royal palace (northern France) (three houses for women built in a separate enclosure) and the seigniorial centre of the Annappes head-steward (also northern France) (three houses for men). Even these domestic slaves living under the lords' roof could have benefited from a division of time into two equal parts, to which an 817 Act of Saint-Gall bears witness, specifying that the slaves (puellae) who worked in the seigniorial court had three days to themselves (Goetz, 1989: 218). These workers were above all employed in the gardens and artisanal workshops set up on the periphery of the monasteries and the palaces. The agricultural workers who worked the lands of the Lobbes central estate lived domestic family lives on their own little land plots close to the monastery and at Thuin (Belgium) (Devroey, 2006: 279).

The slave trade and the brutal subjection of the defeated did not disappear in France and Germany, but the foreign slaves who were not destined for the slave trade towards the East (the discoveries of slave chains after 500 are concentrated on the eastern borders of the Frankish Empire and in the Balkans) lived without shackles in continental Christian society. The place of the slaves in the organisation of the labour market, characterised by the large scale passing from slavery to serfdom in the post-Roman provinces and Germany during the transition from antiquity to the middle ages, clearly contrasts with that of the British Isles and Scandinavia where slavery was still important after 1000. Domestic slaves, arising from raids and purchases, were there the principal source of non-free work alongside other forms of servitude: the slaves who could be sold by their master as merchandise were mixed with serfs who were sold along with their house and the land they cultivated. Servitude became commonplace when the French aristocrats exported continental seigniorial practices and

habits after 1066 in England and at the end of the eleventh century in Wales (Smith, 2005: 156–157).

2.4 Family and external relations

2.4.1 Village societies and institutions

Before the seventh century the manner in which the aristocrats dominated local communities and extracted the countryside's surplus product remains very poorly understood. A significant part of these aristocratic resources rested on drawing tributes from sometimes very vast territories and from their inhabitants, in the name of political prerogatives resting on the ties between these aristocrats and royal power. Rosamond Faith uses the concept of 'extensive lordship' to designate these forms of domination of a rural economy 'relatively undeveloped by the local authorities in the form of rights to services and renders from the people of a given territory' (Faith, 1997: 4; parallels in Halsall, 2006). In regions strongly framed by large aristocratic landownership, the rural society can be characterised as a society of tenants (Wickham, 2001: 81), bound together by social characteristics which heralded the main aspects of the medieval village: depending on (and being protected by) the same lord, sharing collective obligations and enjoying the prerogatives reserved for tenants for the use of common wastelands and woods fixed by custom, sharing community elements such as the parish group, religious holidays, the local church (from the ninth century on) or the cemetery. From 650/700 the progressively tighter framing of the countryside encouraged the appearance of village institutions such as the groups of aldermen/scabini (in the seigneuries where legal immunity justified the existence of a local tribunal), or of parishioners who along with the local priest ensured the raising of the tithes and assistance for the poor. The sharing of the use of the commons and the charges associated with them must also have encouraged the crystallisation of village institutions, but which are without material traces in the sources. Forms of peasant association such as the rural guilds and brotherhoods appear only in a fugitive fashion in the sources such as the Rheims synodal statutes (852) which urge the priests to shy away from them. The sphere of activity of these voluntary groups (which seem to have constituted a commonplace structure in the Rheims countryside) touched on traditional forms of fellowship, such as participating in funerary banquets and self-help, but also self-defense. Condemned by Charlemagne as associations of conspirators, these guilds were regularly fought against by his successors: in 821 Louis the Pious banned the serf associations born in Flanders and other regions of the littoral (doubtless within the context of the first Scandinavian incursions). In 859 (see below), the peasants beseeched to fight the Danes were massacred by the powerful. In 884, Carloman, the king of Western France, forbade the people of the villages (villani) from forming armed groups 'which are in their language called guild (gelda) against those who have dispossessed them,' and ordered them to leave it to the their parish priest. He suppressed any form of association (Devroey, 2006: 150– 153). For their part, archaeological relics offer clues as to a collective organisation of space, be it the upkeep of collective spaces such as country roads or common squares at Vorbasse (Denmark) in the fifth century or at Sædding (Denmark) in the eighth-eleventh centuries as well as in the contemporary site of Kootwijk (The Netherlands), in the Veluwe (Heidinga, 1987) or, in Frankish space, common areas on which were concentrated domestic ovens or

storage structures. Communal organisation could also encompass several settlements on the same territory. The small associations of farms which, as at Goudelancourt in Picardy, contrast with the size of the neighbouring Merovingian cemeteries could thus indicate burial sites common to several settlements. On several sites, farms which were grouped together or scattered such as at Montours in France or Bellingegård in Denmark were so close to each other that they must have undergone a certain common management of rural territory (Nissen Jaubert, 1998, Catteddu, 2009: 54–55).

Within dominated peasant societies, the legal dichotomy between the free and the non-free gradually lost its priority over other aspects of social stratification. Whilst tenants' obligations were still regulated within the agrarian laws of the eighth century by the legal status of the head of the family, in the estate surveys of the ninth century, it was still the legal designation of the manse (mansi ingenuiles/mansi serviles) which determined the tenants' charges, irrespective of their status. Secondly, from the middle of the ninth century on, the manses themselves lost their legal designation. These shifts contributed to smoothing out social differences and gradually made the peasants appear as an organic social group defined by its function in society. The progressive disappearance of the autonomous peasantry hastened this transformation and led to the system of the three orders which theoretically encompassed all workers (agricultores, laboratores) in a single social group defined by suffering (brought about by physical work) and servitude. The territorialisation of the seigneurie would contribute to including relationships of domination in space, by placing peasants, whatever their personal legal status or their degree of autonomy, under the domination of a single lord. This dynamic, which made all the inhabitants of a territory the men of a lord (with reciprocal obligations of obedience/protection), acted in parallel with the progressive inclusion of peasants in a functional 'order' in which the formal distinction between the free and the nonfree seems to have been relegated to the background. This process of leveling, mixing free and non-free in the same group, does not mean that economic stratification and social differentiation diminished in the countryside, quite the contrary. If those who dominated them could consider peasant societies as a block, the size and the equipment of a farm holding or the possibility of holding a post amongst the estate's officers determined genuine social stratifications within rural communities. From the beginning of the tenth century the polyptych of Saint-Pierre-des-Fossés, in the Paris region, abandoned the dichotomy between free manse/servile manse to contrast the manses of ploughmen and the manses of labourers (mansi carroperarii, mansi manoperarii), a fundamental division of the western countryside which would remain valid for a long time after the year 1000.

2.4.2 The family, the local community and the state

Tax levying by the power elites certainly constituted the most important part of the revenue which escaped auto-consumption and was put into circulation. The level of the extraction of wealth varied significantly between 500 and 1000, with regional differences depending on the strength of royal power or of the aristocracy. Whilst these transfers have been estimated to be

around a third of gross agricultural product in the Roman tax system (Hopkins, 1980), a tax rate of between 10 per cent and 20 per cent can be considered for the 500–700 period, for the whole of the West (previously Roman or 'barbarian').

From the Carolingian period onwards, the peasant groups that were the most strongly framed by the seigneurie, in the central regions of the Frankish kingdom, experienced a very marked increase in the levels of wealth extraction (perhaps locally as much as 40 to 50 per cent?). Intervening as an arbitrator between tenant farmers (coloni) and their lords in 800, in the region of Le Mans (France), Charlemagne fixed the legitimate level of levying in work to half of the week for manual work, with some exemptions (one or two days a week) for the periods of animal-drawn work, depending on the manse's equipment. This enormous levy on the available resources and work in the countryside included expenses committed to royal service, such as the military tax and participation in the public duties of transport and construction, which were carried out through the mediation of the aristocratic elites (Devroey, 2006: 567-583). This explains why the intensity of levying diminished drastically in the peripheral regions of the Frankish kingdom which were not framed by the manse system and where the effectiveness of central power was weak. In the south of Gaul, land taxes remained a lot lower, with a tribute of 10 to 15 per cent of agricultural production and symbolic work services for the peasants, and few public obligations for the local rural elites. From 765, the introduction of the obligatory tithe further increased the transfers of wealth. Imposed on the lands of Frankish conquest (Bavaria, northern Italy, Saxony), the tithe was put in place in the central regions of the kingdom at the end of the eighth century, but its diffusion was probably slower in the other regions. Its introduction gave birth to a decimal jurisdiction for each local church, a template for the future parish territories. But this spatialisation of the parish took place progressively up until the eleventh-twelfth centuries (Fournier, 1982: 509). Between the Seine and the Rhine the manse was retained as a taxation unit beyond the ninth century, but peasant families, confronted by the crushing weight of land rent, withdrew to fractions of previously entire manses, quarters or even half-quarters which tended to become standard as basic land tenure from the end of the tenth century. Beyond the Christian world the absence of written documents rules out from the start being able to specify the nature and the extent of the pressure exerted by the powerful on rural populations but synchronisms in the evolution of settlements and other material relics indicate rigorous organisation. The regularisation of settlements in southern Scandinavia observed at the end of the second century was set in place at the same time that central sites such as Gudme and Dankirke, in Denmark, or Amrum and Uppåkra, in northern Germany, and southern Sweden emerged. Funeral archaeology indicates a greater social hierarchisation and the great weapons sacrifices in Denmark such as at Illerup Ådal, Nydam, and Vimose bear witness to wide-ranging territorial conflicts and spectacular religious practices. Settlements marked a new fundamental transformation around the year 700, when the founding of emporia at Ribe and Haithabu as well as the increase in trading places mark the development of market trading. At the same time, the construction of great defensive works such as *Dannevirke* and the *Kanhave* canal attests to the ruling elites'

capacities for mobilisation. These chronological coincidences indicate that the warrior elites occupied a central place, and also seem to suggest that the settlements developed in the framework of a system of levying to their own benefit. The regular enclosed farm plots recall the above-mentioned medieval toft which was crucial in the open field systems regulated following the solskifte and bolskifte and which served as a point of reference for the division of lands and taxes, notably to finance the royal fleet⁴ (in the same way that the Frankish manse and the Anglo-Saxon hide served as the basis for the collection of royal tributes). It is very possible that the regular enclosure of settlements had a comparable function. In addition the English villages distinguished between the simple croft and the *toft*, which had a particular legal status. For Normandy, Dudo of Saint Quentin recounts that Rollo divided up the lands among his men with the help of a rope; this strongly recalls the organisation of land in medieval and modern Scandinavia. Moreover the word toft (-tot) is a common suffix for the names of Norman sites. The toft system comes down to us in its belated form, but its principle - sharing out the lands without relying on written documentation - as well as its geographical distribution plead in favour for a much older origin (Nissen Jaubert, 2003). During the seventh-eighth centuries regular settlements can be observed throughout the whole of northwest Europe. At Montours in Brittany, as at Odoom or Gasselte, in the region of the Drenthe, and still many more sites, the layouts of the farm plots and the trackways have been partially transmitted in modern land registers (Catteddu-Marguerie, 2007b; Waterbolk, 1991). At Vorbasse. Porsmose has demonstrated that the width of the enclosures of the farmsteads from the tenth -eleventh centuries respect the same modules as those of the cadastral plan of the end of the eighteenth century, despite the relocations of the settlements. The perennial nature of the enclosures and modules seems to suggest that they served in one way or another in the allocation of lands and, by extension, in that of charges. The question of the dividing up of lands and levies in the landed estates which could not rely on a written administration remains unanswered. It remains to be noted that in *Francia* the *mansus* appears in the accounting documents of the seventh-eighth centuries at the same time that the settlements experienced greater regularisation.

The passing from an 'extensive lordship' to a seigniorial pressure, which was both greater and spatially closer to the peasant lands (to end up in the high middle ages with a *seigneurie* on the village scale), took place with a probable time-lag of one to two centuries in England where the first written documents testifying to this intensification date back to the tenth century (*Rectitudines singularum personarum*, the Tidenham inventory, see Faith, 1997: 76–79). In this 'Carolingian' England (according to Wickham's expression, 2009: 453) of Alfred the Great and his successors, confronted with the Danish military threat, the peasants were also subject to heavier obligations with the development of a landscape of seigniorial manors and great estates which appeared everywhere (including in the regions which had formerly been dominated by the Vikings) in the Domesday Book of 1086. This movement began from inland and from seigniorial reserves, with a greater demand on the part of the aristocrats to

.

⁴ Notice that the toft also designs the bench or the seat for the rowers in the ship.

exploit the peasant labour pool to the benefit of direct production and aristocratic consumption (Faith, 1997). The inauguration of a strong royal power (which maintained and strengthened itself even in the high middle ages, in contrast with the weakening of royal power in France, to the benefit of territorial princes), based on the grand aristocracy, resulted in the augmentation of taxation by the lords. Reduced to land-tenancy, the peasantry was excluded from the public sphere, as had happened in the central regions of the Frankish world (Wickham, 2009: 465–471).

In regions where small and medium peasant ownership was still common, as in the societies of tenants strongly framed by seigniorial structures, the relationships between the State, the Church and the aristocracy operated through local notables and mediators, anchored in rural society at the level of the land. In zones strongly marked by the 'manorial order', communication between lords and peasants took place through local mediators carrying out the functions of estate officers to frame the tenants and ensure the cultivation of the reserve: mayor, dean, keeper of the store rooms, forest keeper, etc. These mediators had access to other sources of revenue which did not depend directly on agricultural activity: a proportion of the charges in money and in kind delivered by the tenants remained in their hands, which enabled them to improve their position by engaging in credit activities and in buying land (Feller, 2009). At Boissy (France, Orne), the monks of Saint-Germain-des-Prés withdrew a portion in money of the ost tax (15 per cent), and of other dues paid by the tenants. A more considerable figure who supervised the abbey's woods in this region allocated to himself over half of the cereals paid by the woods' users (around 300 kg). In exchange the man had to send, in his turn, substantial gifts to the monks: metal cooking utensils, honey, wax, poultry and birds of prey. The range of products represents less the social position of a well-off peasant than that of a minor lord (Devroey, 2003: 299) who belongs to the out-group mediators active on a supra-local level.

At the village level two figures were well placed to rise above the mass of inhabitants: the priest and the mayor, representing the lord. Some priests were accused of abusing the revenues of the tithe to recruit dependants, monopolising lands and investing in lucrative equipment such as watermills. These pastoral offices circulated above all in family groups of comfortably well-off peasants, doubtless amongst the boni homines who retained access to the public sphere. The mayors (their title 'maior' symbolically places them at the head of the local lord's familia) were chosen from amongst the 'average' (mediocres) that is to say from amongst the freemen, capable of taking an oath of loyalty to the king. Recruited in the ninth century from amongst the ranks of the free (according to the estate surveys of western Francia), they were recruited in Germany in the tenth century from among the group of servant officers (ministri) considered legally as non-free. From the Carolingian era onwards they no longer cultivated their lands themselves, contenting themselves with carrying out symbolic services such as cultivating the compulsory boon-work plots as a way of providing an example, and with offering honour gifts. These elements created multiple social distancing and esteem factors: economic (peasants, but not merely producers because they shared the seigniorial levying), functional and social (peasant, but no longer principally farmers because they had their lands cultivated by others), personal and spatial (dependants, but with specific rituals and charges, the honour gifts they gave out to the powerful on whom they depended, as

they moved towards the seats of authority). But these elite local peasants remained marked by dependency: the mayors, as we have seen, no longer carried out themselves the majority of the work services, but remained symbolically bound to carrying out a duty that reminded them of the obedience owed. Their encaging in the *seigneurie* excluded them from the ranks of the *boni homines*, those peasant notables who were able to retain the markers of full liberty: on the economic level the possession of lands in their own right, power over their own dependants and often possession of money; on the political level, participation in the public sphere, through access to the army and the public tribunal. In the case of treachery, a disloyal mayor was punished by the stick in the same way as any other simple peasant (Devroey, 2006: 296–304).

In regions where the peasants were supervised from a much greater distance by the aristocratic elites, the rare rich documentary evidence, such as the Redon cartulary in Brittany (Davies, 1988), show a stratified rural society directly framed by notables acting on the scale of several villages in which they oversaw the positions of the mediators, notably in the organisation of parishes, in the local justice system and the settling of disputes and in the legal validation of transactions. These notables (who were the equivalents of the Frankish boni homines) probably had their own intermediaries but we do not know the internal functioning of the village groups that found themselves in their sphere of mediation. From 850-900 on this social group of peasant notables who still belonged to the public sphere progressively disappeared. A portion of them probably became integrated into the ranks of the aristocracy whilst the others were sucked downwards into the ranks of dependent rural populations. Certain estate officers also looked to attain upward mobility. It is significant that they sought to escape their obligations by claiming nobility (and no longer liberty), as did the mayor, as well as his brother, of the important villa at Antony, in the Paris region, at the end of the tenth century. To return them to their status of Saint-Germain serfs (but were they not in reality descendants of previous free peasants?) and to sideline other attempts in the future, the abbot Walo 'had them hand over the head tax (chevage)' and had all their descendants listed thereby making all the adults also subject to the *chevage*.

Throughout this whole period it was the exclusion (voluntary or forced) from the group of armed people which determined the worsening of the condition of the free peasants and hastened them to the ranks of simple dependants. This theme of the diminution of the class of the free bound to public service (participation in the army and the tribunal) determined the discourse on 'poverty' in the Carolingian capitularies in the ninth century. It disappeared from the texts in the following century. At the beginning of the tenth century, thirteen free men and one free woman (the text terms them *liberi* and *ingenui*) gave their Neauphlette *villa* (France, Yvelines) to the Saint-Germain-des-Prés luminary in order to 'no longer have to participate in the royal *militia*'. They collectively owned these lands under allodial title, with two watermill areas and a church (Devroey, 2003: 253; Sigoillot, 2008). This is *a contrario* the most probable explanation for the persistence of a free and autonomous peasantry in border regions such as the Catalonia and the Saxony of the tenth century, where incessant hostilities with neighbouring peoples encouraged the survival of the local militia and where peasants thus

retained the right to bear arms. In Germany they were probably the precursors of Henry I's agrarii milites who at the end of the tenth century were charged with the construction and the defence of earthen refuge compounds to which the local population could withdraw in case of danger. It is in this political context of the Germanic kingdom that we can identify upward social mobility, between these groups of armed peasants and the knights (milites). In the genealogical tree of the son of a count imagined with clear satirical intent by Rathier of Verona, we encounter, on going up the lineage, a knight (miles) in the fourth generation. 'Who was the father of this *miles*? A man of low birth, pulled from the aristocratic household (a fortune teller, a baker, a masseur or a bird catcher), from the town (a fishmonger or a pot maker, a tailor or a chicken merchant) or from those who travel the roads (a mule driver, an animal-drawn cart operator), or, in the countryside, a worker with horses or a tiller, a serf or a freeman'. The figure of the armed peasant was already unthinkable to the west of the Rhine from the middle of the ninth century, as a passage in the Saint-Bertin Annals for the year 859 seems to indicate: 'the Danes devastated the places beyond Escaut. The common people (vulgus) between the Seine and the Rhine, forming between them an association of conspirators (inter se coniurans), fought bravely (fortiter) against the Danes on the Seine. But as their conspiracy had been established carelessly, they were easily killed by our powerful (men) (potentiores nostres)' (Wickham, 2009: 529–530).

These violent acts, which destroyed the peasantry's capacity for resistance, probably coincided with a 'ruralisation' of the aristocratic elites from c.850-950. From the eighth century on, professional warriors were settled in a permanent manner on the estates of the Church, particularly in zones of strategic importance, but the presence of these military elites, or even that of disarmed estate officers, is difficult to detect through archaeology, as the 'privileged' settlements are not directly distinguished from others by their fixtures and fittings. At Ecuelles and at Ruelles de Serris, in the Paris region, these sites are only detectable by their greater surface area, the presence of larger buildings, partially built in stone, and silos, and their proximity with other polarisation elements in the village, such as the church and the cemetery. At Ruelles de Serris, the construction of a tower in the second half of the tenth century, which could have also been used as a granary, finally allows a command post to be clearly identified in the village (Feller, 2007: 78). The civil wars and instability provoked by the incursions by Viking and Hungarian bands, and the weakening of royal power, encouraged the militarisation of the rural landscape to the benefit of the aristocrats, as it was they who controlled the refuge compounds (as in Flanders or in Saxony) or built private fortifications by using the peasant workforce in the name of the right to command (bannum) which they exercised to their main benefit. The construction of a motte (a fortified mound) was complementary to the monopolising of the parish rights and the tithes in polarising the rural landscape around the church dominated by the local lord and possibly the castle or the fortified seigniorial court. The tithe and the customary manse charges constituted a target (a motive for localisation) for the activities of the lower strata of the aristocracy in the tenth century, by monopolising the powers of military protection or legal prerogatives and parish rights at the level of the village lands. These phenomena perhaps explain why, contrary to what happened during the Germanic invasions of the fifth century,

the crisis of central authority and the aristocratic elites in post-Carolingian Europe did not result in more autonomy and fewer taxes levied for the peasants.

2.5 Conclusions

The north-west of Europe entered into a phase of demographic growth which was very slow (because of frequent intervals of crisis) from the seventh century on. This trend, which would be accentuated at the end of the tenth century and would lead to sustained growth up until the thirteenth century, followed a long phase of demographic decline, set in motion from the end of antiquity, and that bottomed out in the sixth century. The significant drop in the population went hand in hand with a change of agricultural system in the previously Roman provinces in the West, which became 'barbarised' in the sense that they adapted systems of land occupation which existed in Germania and Scandinavia before 500. 'Cerealisation' and the system of extensive occupation of rural space which resulted from it, gave way to a selective occupation of the land, with a contraction of cereal lands and the selection of lands which were the most favourable to mixed farming. The growth of spaces occupied by the saltus and the silva at the beginning of the middle ages enabled the constitution of a significant quantity of land to be reconquered for agriculture, begun by clearing, from the seventh-eighth centuries, under the influence of the demographic growth and the rise in aristocratic demand, and then strongly eroded by the acceleration of demographic growth and the seigneuralisation of the high middle ages. These two processes acted in a dialectic manner, but without us being able to say which one was the prime mover, in the increase of the population and that of the demand for agricultural products by the non-producers.

The period 500–1000 saw the peasant family and its farm holding installed as the major actor of agricultural production in Europe, a position it would keep in the majority of regions until the nineteenth or even the middle of the twentieth century. Its emergence began a little earlier in the northern regions of the non-Romanised world, but essentially we find – in other forms – the same evolutionary stages. In parallel, it became the main work pool for direct agricultural production by the aristocracy, notably for the regions subjected to the process of manorialisation, from the seventh century in Francia and from the tenth century in England. Aristocratic demand thus played a catalyst role in the economic and spatial development of peasant populations (restructuration of lands and stabilisation of settlements). The advent of tenant societies in the early middle ages is a characteristic phenomenon in certain regions of the continent in which the powerful greatly increased their pressure on the peasantry (the heart of the Frankish world, later England), and where the peasants were strongly framed by the aristocracy, used as a major labour pool by the elites and deprived of their freedom of movement. It led to an increase in inequalities within the peasantry, with the emergence of rural elites linked to the process of manorialisation, the progressive erasure of legal borders between the free and the non-free peasants to constitute a class of agricultores or of villeins defined in opposition to the two other orders of society, the warriors and the priests.

Bibliography

Arjava, A. (2005), 'The mystery cloud of ad 536 in the Mediterranean sources', Dumbarton Oaks papers, 59, pp. 73–94.

Audouin-Rouzeau, F. (1993), Hommes et animaux en Europe de l'époque antique aux temps. Corpus de données archéozoologiques et historiques, Paris.

Audouin-Rouzeau, F. (2003), Les chemins de la peste. Le rat, la puce et l'homme, Rennes.

Axboe, M. (1995), 'Danish kings and dendrochronology: archaeological insights into the early history of the Danish State', in G. Ausenda (ed.), After Empire: Towards an ethnology of Europe's Barbarians, San Marino, pp. 217–252. (Studies in Historical Archaeoethnology, 1)

Biraben, J.-N. (1979), 'Essai sur l'évolution du nombre des hommes', Population, pp. 13–24. Bois, G. (1989), La mutation de l'an mil: Lournand, village mâconnais de l'Antiquité au féodalisme, Paris.

Bougard, F. (1996), 'Pierre de Niviano, dit le Spolétin, *sculdassius*, et le gouvernement du comté de Plaisance à l'époque carolingienne', Journal des savants, juillet-décembre, pp. 291–337.

Bourin, M., Chareille, P. (2002), 'Colons et serfs dans le polyptyque d'Irminon. Quelles différences anthroponymiques ?', Genèse médiévale de l'anthroponymie moderne, 5:1, pp. 31–132.

Bruand, O. (2002), Voyageurs et marchandises aux temps carolingiens. Les réseaux de communication entre Loire et Meuse aux VIII^e et IX^e siècles, Bruxelles.

Brulet, R. (2009), Les Romains en Wallonie, Bruxelles.

Buchet, L., Dauphin, C., Séguy I. (2006), La paléodémographie. Mémoire d'os, mémoire d'hommes, Actes des 8^e journées anthropologiques de Valbonne, Antibes, Paris.

Catteddu, I. and Marguerie, D., (2007), 'Une création parcellaire carolingienne: les établissements agricoles médiévaux de Montours (Ille-et-Vilaine)', in A. Antoine and D. Marguerie (eds.), Bocages et société, Rennes, pp. 81–90.

Catteddu, I. (2009), Archéologie médiévale en France: le 'premier Moyen Âge' (V^e-XI^e siècle), Paris.

Catteddu, I., Nissen Jaubert, A. et al. (2004), 'Héritages antiques et temps nouveaux. Le haut Moyen Âge', in J.P. Demoule (ed.), La France archéologique: Vingt ans d'aménagements et de découvertes, Paris, pp. 156–175.

Cheyette, F. (2008), 'The disappearance of the ancient landscape and the climatic anomaly of the early middle ages: a question to be pursued', Early Medieval Europe, 16, pp. 127–165.

Coleman, E. (1971), 'Medieval marriage characteristics: a neglected factor in the history of medieval serfdom', The Journal of Interdisciplinary History, 2, pp. 205–219.

Davies, W. (1988), Small worlds: The village community in Early Medieval Brittany, London. Delogu, P. (1998), 'Reading Pirenne Again', The Sixth Century, Leiden, pp. 15–40.

Devroey, J.-P. (2000), 'Men and women in early medieval serfdom: The ninth-century North Frankish evidence', Past and Present, 166, pp. 3–30.

Devroey, J.-P. (2003), Économie rurale et société dans l'Europe franque (VI^e-IX^e siècles). 1. Fondements matériels, échanges et lien social, Paris.

Devroey, J.-P. (2006), Puissants et misérables: Système social et monde paysan dans l'Europe des Francs (VI^e-IX^e siècles), Bruxelles.

Devroey, J.-P. (2009), 'Catastrophe, crise et changement social : A propos des paradigmes d'interprétation du développement médiéval (500–1100)', Vers une anthropologie des catastrophes, Actes des 9e journées anthropologiques de Valbonne, Antibes, Paris.

Drancourt, M. et al. (2007), 'Yersinia pestis orientalis in remains of ancient plague patients', Emerging Infectious Diseases, 13, pp. 332–333.

Duby, G. (1962), L'économie rurale et la vie des campagnes dans l'Occident médiéval, Paris. Favory, F., Fiches, J.-L., Raynaud, C. (2003), 'La dynamique spatio-temporelle de l'habitat rural gallo-romain', in S. van der Leeuw et al. (eds.), Archéologie et systèmes socio-environnementaux: études multiscalaires sur la vallée du Rhône dans le programme Archaeomedes, Paris, pp. 301–321. (Collection de recherches archéologiques. Monographies, 27)

Feller, L. (1994), 'La population abruzzaise durant le Haut Moyen Âge: les conditions de possibilité d'une croissance démographique (VIII^e-IX^e siècles)', in R. Comba, I. Naso (eds.), I. Demografia e società nell'Italia medievale, Cuneo, pp. 327–349.

Feller, L., Gramain, A., Weber, F. (2005), La fortune de Karol: marché de la terre et liens personnels dans les Abruzzes au Haut Moyen Âge, Rome.

Feller, L. (2009), 'Les hiérarchies dans le monde rural du Haut Moyen Âge: statuts, fortunes, fonctions', in D. Iogna-Prat and R. Le Jan (eds.), Les hiérarchies des élites, Turnhout, pp. 257–276.

Fenger, O. (1992), 'La société et le droit', Les Vikings, Paris, pp. 120–125.

Fichtenau, H. (1991), Living in the Tenth Century, Chicago.

Fournier, G. (1982), 'La mise en place du cadre paroissial et l'évolution du peuplement', Cristianizzazione ed organizzazione ecclesiastica delle campagne nell'alto medioevo : espanzione e resistenze, Spoleto, pp. 405–575. (Settimane di studio del Centro italiano di studi sull'alto Medioevo, 28)

Genicot, L. (1943), L'économie rurale namuroise au bas Moyen Âge (1199–1429), 1. La seigneurie foncière, Louvain.

Gibbon, E. (1776), The history of the decline and fall of the Roman Empire, London.

Goetz, H.-W. (1987), 'Zur Namengebung bäuerlicher Schichten im Frühmittelalter. Untersuchungen und Berechnungen anhand des Polyptychons von Saint-Germain-des-Prés', *Francia*, 15, pp. 852–877.

Gonzalez, V., Ouzoulias, P. et al. (2001), 'Saint-Ouen-du-Breuil (Haute-Normandie, Frankreich): Eine germanische Siedlung aus der Mitte des 4. Jahrhunderts in der Lugdunensis Secunda, neue Ergebnisse zur Eingliederung von Germanen in den nordwestlichen Provinzen des römischen Reiches', Germania, 79:1, pp. 43–61.

Groenman-van Waateringe, W. (1983), 'The disastrous effect of the Roman occupation: Roman and Native in the Low Countries', in R.W. Brandt and J. Slofstra (eds.), Spheres of interaction, Oxford, pp. 147–157. (BAR Series 184)

Halsall, G. (1995), Settlement and social organization: The Merovingian region of Metz, Cambridge.

Halsall, G. (2006), 'villas, territories, and communities in Merovingian Northern Gaul', in W. Davies et al. (eds.), People and space in the middle ages, 300–1300, Turnhout, pp. 209-232.

Hamerow, H. (2002), Early medieval settlements: the archaeology of rural communities in Northwest Europe, 400–900, Oxford.

Hedeager, L. (1992), Iron-Age Societies: from tribe to state in northern Europe, 500 BC to AD 700, Oxford.

Hedeager, L. (2000), 'Migration period Europe: the formation of a political identity', in F. Theeuws and J. L. Nelson (eds.), Rituals of Power from Late Antiquity to the Early Middle Ages, Leiden, pp. 15–57.

Heidinga, H.A., (1987), Medieval settlement and economy north of the Lower Rhine: archaeology and history of Kootwijk and the Veluwe (the Netherlands), Assen-Maastricht.

Henning, J. (2008), 'Strong rulers-weak economy? Rome, the Carolingians and the archaeology of slavery in the first Millennium AD', in W. Davies (eds.), The long morning of medieval Europe: new directions in early medieval studies, Aldershot, pp. 33–53.

Hopkins, K. (1980), 'Taxes and trade in the Roman Empire (200 BC-AD 400)', Journal of Roman studies, 70, pp. 101–125.

Hvass, S. (1986), 'Vorbasse: Eine Dorfsiedlung während des 1. Jahrtausends n. Chr. in Mitteljütland, Dänemark', Berichte der Römisch-Germanischen Kommission, 67, pp. 529–542.

Jørgensen, L. (1987), 'Family burial practices and inheritance systems: The development of an Iron Age society from 500 BC to AD 1000 on Bornholm, Denmark', Acta Archaeologica, 58, pp. 17–53.

Kennedy, H. N. (2007), 'Justinianic Plague in Syria and the archaeological evidence', in L.K. Little (ed.), Plague and the end of Antiquity. The pandemic of 541–750, Cambridge, pp. 87–95.

Klapste, J., Nissen Jaubert, A. (2007), 'Rural settlement', in J. Graham-Campbell (ed.), The archaeology of medieval Europe.Vol. 1. Eighth to Twelfth Centuries AD, Aarhus, pp. 76–110. Kuchenbuch, L. (1978), Bäuerliche Gesellschaft und Klosterherrschaft im 9. Jahrhundert. Studien zur Sozialstruktur der Familia der Abtei Prüm, Wiesbaden.

Kuchenbuch, L. (1991), 'Opus Feminile. Das Geschlechtverhältnis im Spiegel von Frauenarbeit im früheren Mittelalter', in H.W. Goetz (ed.), Weibliche Lebensgestaltung im frühen Mittelalter, Köln-Weimar-Wien, pp. 139–175.

Lewitt, T. (2009), 'Pigs, presses and pastoralism: farming in the fifth to sixth centuries AD', Early Medieval Europe, 17, pp. 77–91.

Little, L. K. (2007), Plague and the end of Antiquity. The pandemic of 541–750, Cambridge. Loseby, S. (2000), 'Marseille and the Pirenne thesis II: 'ville morte', in C. Wickham and I. Hansen (eds.), The long eighth century, Leiden, pp. 167–193.

Lot, F. (1921), 'Conjectures démographiques sur la France au IXe siècle', Le Moyen Âge, 2^e série, 23, pp. 5–61.

McCormick, M. (1998), 'Bateaux de vie, bateaux de mort. Maladie, commerce, transports annonaires et le passage économique du Bas-Empire au Moyen Age', Morfologie sociali e culturali in Europa fra tarda antichità e alto medioevo, Spoleto, pp. 35–122. (Settimane di studio del Centro italiano di studi sull'alto Medioevo, 45)

McCormick, M. (2001), Origins of the European economy: communication and commerce, Cambridge.

McCormick, M. (2003), 'Rats, communications, and plague: towards an ancient and medieval ecological history', Journal of Interdisciplinary History, 34, pp. 1–25.

Maddicott, J. (2007), 'Plague in Seventh-Century England', in L.K. Litle (eds.), Plague and the end of Antiquity. The pandemic of 541–750, Cambridge, pp. 171–214.

Nissen Jaubert, A. (1996), 'Systèmes agraires dans le Sud de la Scandinavie entre 200 et 1200', in M. Colardelle (eds.), L'homme et la nature au Moyen Age, Actes du Ve Congrès International d'archéologie médiévale, Paris, pp. 74–84.

Nissen Jaubert, A. (1998), 'Habitats ruraux et communautés rurales', Ruralia, 2, pp. 213–225. Nissen Jaubert, A. (1999), 'Ruptures et continuités de l'habitat rural du haut Moyen Age dans le nord-ouest de l'Europe', in F. Braemer et al. (eds.), Habitat et Société, Antibes, pp. 551–570. (Rencontres internationales d'archéologie et d'histoire d'Antibes, 19)

Nissen Jaubert, A. (2003a), 'La maison-étable dans le nord-ouest de l'Europe: contextes culturels, sociaux et idéologiques', Les Nouvelles de l'Archéologie, 92, pp. 28–33.

Nissen Jaubert, A. (2003b), 'L'organisation rurale scandinave au service des colonisations vikings? Réflexions autour des *tofts* et de *solskifte*', in A.-M. Flambard-Héricher (eds.), La progression des Vikings, des raids à la colonisation, Rouen, pp. 171–188.

Nissen Jaubert, A. (2006), 'Le haut Moyen Age', in A. Ferdière et al. (eds.), Histoire de l'Agriculture en Gaule. 500 av. J.-C.-1000 apr. J.-C., Paris, pp. 141–196.

Obermeier, M. (1996), Ancilla: Beiträge zur Geschichte der unfreien Frauen im Frühmittelalter, Pfaffenweiler. (Frauen in Geschichte und Gesellschaft, 32)

Ouzoulias, P. (2009), 'Place et rôle de la petite exploitation agricole dans la Gaule Romaine: un débat en cours', Bulletin de la Société française d'archéologie classique, pp. 149–55.

Peytremann, E. (2003), Archéologie de l'habitat rural dans le Nord de la France du IV^e au XII^e siècle, Paris, 2 vol.

Poly, J.-P. (1976), La Provence et la société féodale 879–1166: contribution à l'étude des structures dites féodales dans le Midi, Paris.

Poly, J.-P. (1980), 'Régime domanial et rapports de production 'féodalistes' dans le Midi de la France (VIII^e-X^e siècles)', in Structures féodales et féodalisme dans l'Occident méditerranéen (X^e-XIII^e siècles), Bilan et perspectives de recherches, Rome, pp. 57–84.

Rouche, M. (1997), 'Le Haut Moyen Âge', in J.-P. Bardet and J. Dupâquier (eds.), Histoire des populations de l'Europe. Des origines aux prémices de la révolution démographique, Paris, pp. 132–167.

Rovelli, A. (2009), 'Coins and trade in early medieval Italy', Early Medieval Europe, 17, pp. 45–76.

Schmidt, P. (1988), 'Die mittelalterliche Neubesiedlung der Niedersächsischen Marsch', in M. Bierma, O.-M. Harsema and W. van Zeist (eds.), Archeologie en landschap, Groningen, pp.133–166.

Schwarz, C. M. (1985), 'Village populations according to the Polyptyque of Saint-Bertin', Journal of Medieval History, 11, pp. 31–41.

Sigoillot, A. (2008), 'Les liberi homines dans le polyptyque de Saint-Germain-des-Prés', Journal des Savants, pp. 261–271.

Sindbæk Sørensen, S. (2007), 'Trade and Exchange. 2', in J. Graham-Campbell and M. Valor (eds.), Medieval Europe, Aarhus, pp. 302–315.

Smith, J. M. H. (2005), Europe after Rome: A new cultural history 500–1000, Oxford.

Stork, I. (1997), 'Friedhof und Dorf, Herrenhof und Adelsgrab. Der einmalige Befund Lauchheim', in K. Fuchs (eds.), Die Alamannen, Stuttgart, pp. 290–310.

Stoumann, I. (1980), 'Sædding: A Viking-Age village near Esbjerg', Acta Archaeologica, 5, pp. 95–118.

Theeuws, F. (2008), 'Settlement research and the process of manorialization in Northern Austrasia', in S. Gasparri (ed.), 774, ipotesi su una transizione, Turnhout, pp. 199–220.

Toubert, P. (1986), 'Le moment carolingien (VIIIe-Xe siècle)', in A. Bruguière and C. Klapsich-Zuber, Histoire de la famille. 1. Mondes lointains, mondes anciens, Paris, pp. 333–360.

Toubert, P. (1998), 'L'institution du mariage chrétien, de l'Antiquité tardive à l'an mil', in Morfologie sociali e culturali in Europa fra tarda Antichità e alto medieoevo, Spoleto, pp. 503–533. (Settimane di studio del Centro italiano di studi sull'alto medioevo, 45)

Ulriksen, J. (2004), 'Danish Coastal Landing Places and their Relation to Navigation and Trade', in J. Hines, A. Lane and M. Redknap (eds.), Land, Sea and Home, Proceedings of a Conference on Viking-period Settlement, at Cardiff, July 2001, The Society for Medieval Archaeology Monographs, vol. 20, pp. 7–26.

Van Ossel, P., Ouzoulias, P. (2000), 'Rural settlement economy in Northern Gaul in the Late Empire: an overview and assessment', Journal of Roman Archaeology, 13, pp. 133–160.

Verhulst, A. (1991), 'The decline of slavery and the economic expansion of the early middle ages', Past and Present, 133, pp. 195–203.

Verhulst, A., Semmler, J. (1962), 'Les statuts d'Adalhard de Corbie de l'an 822', Le Moyen Âge, 68, pp. 91–123 and 233–269.

Ward-Perkins, B. (2005), The fall of Rome and the end of civilization, Oxford.

Waterbolk, H.T. (1991), 'Das mittelalterliche Siedlungswesen in Drenthe. Versuch einer synthèse aus archäologischer Sicht', in H.-W. Böhme (ed.), Siedlungen und Landesausbau zur Salierzeit, 1, In den nördlichen Landschaften des Reiches, Sigmaringen, pp. 47–108.

Watteaux, M. (2003), 'À propos de la 'naissance du village au Moyen Âge': la fin d'un paradigme ?', Études rurales, 167–168, pp. 306–318.

White, L. (1962), Technology and social change, Oxford.

Wickham, C. (2005), Framing the Early Middle Ages: Europe and the Mediterranean, 400–800, Oxford.

Wickham, C. (2009), The Inheritance of Rome: A History of Europe from 400 to 1000, London. Wickham, C. (2010), 'Social relations, property and power around the North Sea, 500–1000', in B. Van Bavel, R. Hoyle (eds.) Social relations: property and power, Turnhout, pp. 25–47. (Series Rural Economy and Society in North-western Europe, 500–2000)

Widgren, M. (1983), Settlement and farming systems in the early Iron Age: A study of fossil agrarian landscape in Östergötland, Sweden, Stockholm.

Zimmermann, W.H. (1982), 'Archäologische Befunde frühmittelalterliche Webhäuser', Jahrbuch der Männer von Morgenstern, 61, pp. 111–144.

Zimmermann, W.H. (1995), 'Ackerbau in ur- und frühgeschichtlicher Zeit auf der Geest und in der Marsch', in H.-E. Dannenberg and H.-J. Schulze (eds.), Geschichte des Landes zwischen Elbe und Weser, Hannover, pp. 289–315.

Zimmermann, W.H. (1997), 'Haus Hof und Siedlungsstruktur auf der Geest vom Neolithikum bis in das Mittellalter im Elbe-Weser-Dreieck', in H. Beck and H. Steuer (eds.), Haus und Hof in ur- und frühgeschichtlicher Zeit: Gedenkschrift für Herbert Jankuhn, Göttingen, pp. 413–460.