

## **Intra-regional diversification of society, economy and cultural landscape in Late Medieval Drenthe (Northeast Netherlands)**

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### **1. Introduction**

In many European countries during the transition from the Late Middle Ages (1300-1500 AD) to the Early Modern Period (1500-1700 AD) we can see an increasing interweaving of local and regional rural economies to a much stronger inter-regional and internationally structured protocapitalistic market economy (Wallerstein, 1974-1988; Nitz, 1993). Whereas agricultural production in the High Middle Ages (1000-1300 AD) was still being predominantly directed towards self subsistence or towards supplying regional urban markets, from the Late Middle Ages a much larger scale market system was slowly but surely coming into existence, in which each region gradually made its own niche in the newly created international economic field of force. Important late medieval urban centres were London, the cities in northern Italy and the highly urbanized region of Flanders in Belgium (Campbell et al., 1993; Thoen, 1988; Van Bavel, 1999). The latter were eclipsed by Amsterdam and other cities from the the Western Netherlands from the second half of the 16<sup>th</sup> century onwards.

On a regional basis, the process of transition mentioned above seems to have been formed in many different ways. Thus, neighbouring regions that on first sight seemed to be very comparable, were by the Late Middle Ages beginning to develop in very diverse directions. In some regions farmers opted for either strategies of intensification or for specialisation in one or more promising products for the market. In other regions however we see strategies of extensification, the main objective being to develop market products that can be achieved using relatively little labour and/or capital. It is obvious that such strategic choices of large groups of farmers have had a considerable influence on the development of local and regional societies and cultural landscapes. The transition between the Late Middle Ages and Early Modern Period is thus an important theme when studying the history of the European landscape.

### **2. Problem definition**

Too often in the past historical geographers have assumed that landscape structures and agricultural cultivation methods mainly developed during the population explosion and large-scale reclamations of the High Middle Ages and remained more or less stable until modernisation in the 19<sup>th</sup> and 20<sup>th</sup> centuries (apart from the obvious rigorous transformation processes such as for example the enclosures in the United Kingdom in the Early Modern Period). In particular, in the so-called retrospective research method (German: *Rückschreibung*) landscape patterns discernible on 18<sup>th</sup> and 19<sup>th</sup> century cadastral maps were too readily projected back far into the Middle Ages. Unjustifiably, the spatial, economic and social effects of the above-mentioned process of transition were severely ignored.

In the coming years, one of the biggest challenges for the combined economic-historical and historical-geographic study of the Middle Ages will be to map the regional diversity of the transition mentioned above, in order to analyse the specific factors that have played a role in this transition and to explain why neighbouring, and at first sight in all respects extremely comparable regions, developed in such a diverse way during this transitional period. What were the key factors that made farmers decide to manage their farms in one way as opposed to another? Did it have something to do with the quality of the soil? Was it a reaction to an ever-increasing growth in population? Was it the rapidly growing urban markets that encouraged change? Or was it several kinds of social and judicial factors that compelled or stimulated the farmers to make certain choices? When did it become a combination of all these factors, and which ones were more important than the others? In this way we can get to the

heart of the ongoing discussion that economic-historical and historical-geographers have been involved in for some considerable time now.

For a comprehensible continuation of this discussion not only is there a need for a clear theoretical framework and a suitable interdisciplinary research method, but also for a series of empirical regional studies in which the theory and the working method can be tested. The case study in Drenthe presented here could possibly contribute to such a discussion. The content of this paper is largely based on a recent dissertation in Dutch on the history of the landscape in the province of Drenthe, where considerable attention was also given to the history of other sandy areas in northwestern Europe (Spek, 2004).

### 3. Explanatory models

In relation to the course of the transition process during the Late Middle Ages, various explanatory models have been developed in recent decades, the most important of which will be discussed below.

*1. The Neo-Malthusian model* – This model is based on the theories of the 18<sup>th</sup> century philosopher Thomas Malthus, and has been more closely examined by researchers in several countries (e.g. Le Roy Ladurie, 1966; Postan, 1972; Abel, 1980; Grigg, 1980). The essence of the model is the determining role that demographic processes have played in the development of economic cycles and thereby also on the development of agriculture in the countries and regions concerned. The starting point of neo-Malthusian historians is that in the pre-industrial period there was a constant cycle of population growth and decline. Population growth thus reached a ceiling, the height being determined by the quality of the soil, the size of the cultivated area, agricultural techniques and other factors determining production. Whenever the size of the population reached this ceiling there was a crisis (an epidemic, a food crisis, migration, etc.) that forced the population size down to a new, lower level. After recovery a new phase of growth could begin, that because of advanced technology could reach a higher level than before. Subsequently the theory led to changes in the size of the population and to dramatic changes in the development of earnings and prices and thus also to marked changes in the economic profile. Well-known periods of growth in this model are in the High Middle Ages (1050-1350) and the so-called 'long 16<sup>th</sup> century' (1450-1650). On the other hand, the periods between 1350-1450 and 1650-1750 are known as crisis periods.

*2. The centre-periphery model or the commercialisation model* – Undoubtedly the most well known model for the economic development of neighbouring regions is the centre-periphery model. It was developed by the German rural estate owner Von Thünen in 1842 (Von Thünen, 1842) and subsequently further specified and quantitatively supported by economic historians. The central theme of this model is the economic effect of emerging and already established urban markets. The development of agriculture and the landscape in a certain region, according to followers of this model, are mainly determined by the position the region concerned held in the economic field of force of the urban centres already there or in the intensely urbanised regions. The closer they were to the city, the more intensive the agriculture; the further away, the more extensive the land use. This is how a centre-periphery model in its most theoretical form is shaped from a series of concentric circles. Soil quality in a region and whether or not there is an infrastructure between the region and the city can however result in a rearrangement of this concentric picture. If we relate this model to the transition period between the Late Middle Ages and Early Modern Period in the Netherlands and Belgium, the regions in the immediate vicinity of the Flemish cities (the countryside of Flanders and Brabant) changed towards commercial agriculture at a much earlier stage than areas situated much further away from these centres, for instance those in the central or northern Netherlands (peripheral areas). When in the 16<sup>th</sup> century the economic core shifted from Flanders to the Netherlands, with Amsterdam being the most important centre, the agricultural economies of the various regions of the Netherlands concentrated in their own individual way to the new markets. The most intensive agriculture took place close to the urban focal point (the province of Holland). In peripheral areas such as Drenthe agriculture was much more extensive. It is principally the Wageningen historian Bieleman who evaluated this centre-periphery model for the Netherlands more thoroughly, and formed the *sine qua non* in his *Geschiedenis van de landbouw in Nederland 1500-1950* [History of agriculture in the Netherlands 1500-1950] (Bieleman, 1992).

3. *The Brenner thesis* – An important correction of the two models mentioned above was introduced in the 1980's by the American historian Robert Brenner (1982; 1986). As a neomaxist he noticed that in the Late Middle Ages transition a key role was earmarked for the so-called social property systems, with which he means: (1) the way in which land ownership in a certain region was distributed between various groups in society; (2) the way in which (in a judicial sense) the land was exploited, and (3) the way in which agricultural surplusses were distributed by society. He believes that the completely different way in which independent farmers, tenants, leaseholders or domainial landowners had a hold on the most important production factor of their time, in other words land, strongly determined their choice of strategy. He believes that comparative studies for several countries or regions undoubtedly show the decisive role that this type of social property systems played in the economic development of European countries and the regions within them. Even though this Brenner thesis fuelled a lengthy and intense debate and a lot of critical remarks, his approach nevertheless added an important aspect to the above-mentioned neomalthusian and centre-periphery models.

4. *Van Bavel's transition theory* – The Dutch medievalist Van Bavel recently bundled together the most important elements of the three above-mentioned models in order to obtain a coordinating explanatory model of the Late Middle Ages development of the various rural economies in the Netherlands (Van Bavel, 1999). In his book published in Dutch *Transitie en continuïteit* (Transition and continuity) he emphatically opted for a comparative approach, because only through mutual comparison of agricultural, political and/or economic regions, could more insight be gained into the determining factors of the transition process. Just like Brenner, Van Bavel attached great value to the social structures and the distribution of land ownership in the regions concerned. It is interesting that he did not consider these to be independent phenomena but much more a part of a historically developed social-economic complex which, influenced by soil quality and medieval land occupation, can be formed very differently in the various regions. For example, areas that had been inhabited in the Carolingian Period (8<sup>th</sup>- 9<sup>th</sup> centuries) were, in the later Middle Ages almost always heavily influenced by domainial land ownership, even once the old domainial system had fallen apart in the High Medieval Period. The number of independent farmers remained relatively limited here. On the other hand the effect of domainial land ownership was, as a rule, considerably smaller in areas that had been colonised during the reclamation period of the 11<sup>th</sup> – 13<sup>th</sup> centuries. In this way completely different regions evolved next to each other, and it was this intrinsic difference that according to Van Bavel strongly determined the reaction of the various regions to the changing demographic links or the establishment of urban markets. The regional framework of the land ownership formed as it were a prism whereby the process of commercialisation could be turned in completely different directions. Some regions specialised in cultivating labour-intensive and capital-intensive crops, others much more towards less labour-intensive arable crops and animal husbandry whereby, in addition, there could also be many varieties and transitions. According to Van Bavel such a transition model explains the regional variety of Dutch agriculture in the Late Middle Ages and the Early Modern Period much better than the demographic or centre periphery models mentioned above. However, in the near future more regional detail studies will be needed to validate his transition model.

#### **4. Diversification processes in Drenthe during the Late Middle Ages**

The province of Drenthe lies in the northeastern part of the Netherlands. Geologically, the Drenthe landscape mainly consists of a flat glacial boulder clay plateau indented in many places by a fine network of brook systems. These brooks all arise in the more highly situated centre area of the plateau and flow in three main directions to the lower borders. The further downstream they progress, the wider the brook valleys become. Moreover, there is a substantial difference in soil fertility. The narrow upstream valleys are only fed by surface run-off and shallow seepage water and are therefore composed of semi-natural grasslands of inferior quality. In contrast, the broad downstream areas were richly nourished with silt-containing floodwater and seepage water from deep layers resulting in much improved grassland. The soils along the downstream areas however were much wetter than those upstream and midstream, resulting in these regions not being colonised on a larger scale until well into the Middle Ages. On the other hand, the upstream and midstream areas were already well inhabited

from the Late Stone Age (4000 BC) onwards. From an archaeological point of view these last mentioned areas belong to the most densely populated prehistoric landscapes in the Netherlands.

The transition process during the Late Middle Ages in various parts of Drenthe progressed in very diverse ways and continued according to a chain of cause and effect reactions described below. The most important clarifying factor appears to be the physical-geographic and landscape-historical difference between upstream and downstream areas, which definitely determined the occupation history of the late prehistoric and early historic period that in turn put an important stamp on medieval social institutions and land ownership, which in its turn again had important consequences for the demographic development and on the number and size of the farms in the relevant parts of Drenthe during the transition period of the Late Middle Ages to the Modern Period. The distribution of land ownership and the demographic pattern eventually determined – together with the external market – the strategic choices of landowners and thus also the further development of agriculture and landscape in the Early Modern Period. We illustrate this chain of events for upstream as well as downstream areas.

From a physical-geographic aspect the *upstream and midstream areas* on the Drenthe Plateau are characterised by rather extensive high-lying boulder clay plateaus and cover-sand areas that are criss-crossed with relatively shallow and narrow brook valleys. Upstream, these valleys were really only fed by nutrient-deficient and acid rainwater and, locally, seepage water. Somewhat further downstream the effect of more nutrient-rich seepage water was much greater. The semi-natural grasslands and other types of vegetation that occurred in the Middle Ages were relatively limited in size and were also mainly nutrient-deficient and only moderately nutrient-rich. In contrast, the bordering plateau lands had better quality soil, certainly in the earlier prehistory before these lands became podzolized on a large scale. Thus they were inhabited at a very early stage and, in many cases, the upstream areas had settlement continuity from early prehistory onwards. This explains the heavy concentration of 8<sup>th</sup>-11<sup>th</sup> century domains along the upstream and higher-lying mid-stream areas of Drenthe. In the Late Middle Ages a substantial part of these domains was leased, so that the old ruling that such land could never be divided up by the user was maintained. In addition, during this period there was a new form of largescale land ownership resulting from the growth of various monasteries, hospitals and a larger number of farms, all of which as a rule were not authorized to be divided up by the leaseholders or tenants. As a result, the larger farms dominated in the upstream and midstream areas during the Late Middle Ages and Early Modern Period. The limited resources of the natural environment (restricted grassland, poor soil fertility) as well as the relatively high distribution of the undividable leased farms, made the possibilities for starting up new farms in the upstream areas rather small. The relatively slow growth in population between 1300 and 1700 AD in these areas and the resulting low population density, are in accordance with this. In the 17<sup>th</sup> century, large farms dominated (> 30 hectometres arable land) and because of the limited availability of grassland were managed on a rather extensive basis. The number of inhabitants on these farms was relatively high (about eight to twelve) due to the limited possibility for members of the family to start a new farm elsewhere. The accompanying demographic pattern is that of a rather egalitarian society of large family farms (extended families) with a relatively large number of living-in celibates, a proportionally old marital age and a relatively strong migration to other regions and towards subsidiary occupations (cf Berkner, 1976). In the 14<sup>th</sup> and 15<sup>th</sup> centuries dozens of farmers' sons were working as artisans, especially in villages that had a church.

Farmers as well as landowners in the Late Middle Ages who found themselves in the above-mentioned ecological, institutional-judicial and demographic circumstances would, on the emergence of an external regional or inter-regional market, almost certainly have opted for a strategy of extensification, in other words for farming practices that required less labour. It does not seem to be a coincidence therefore that arable farming in these regions was very extensive until far into the 17<sup>th</sup> century, with the three field system and collective grazing regime of the arable lands being important features. Instead of growing barley – that required a lot of labour to process into malt – the main crop from the 15<sup>th</sup> century onwards was almost exclusively rye. Furthermore, intensive plaggen manuring was only introduced at a very late stage, presumably in the mid 17<sup>th</sup> century, and the result of this is the thin plaggen cover on the arable lands in these areas (cf Spek, 1990). The most important innovation in the upstream areas and in the higher parts of the midstream areas were more to do however with the animal husbandry component of the farms. From the middle of the 15<sup>th</sup> century we

see the beginning of commercial sheep farming, which with relatively little labour and small capital investments an attractive product (wool) could be supplied to the market. This innovation resulted from an important external pull-factor due to the ever-increasing demand for home produced wool from the textile towns of the provinces of Holland and Gelderland. Because the demands of sheep were very low (proportionally), they were exceptionally well suited to the high-lying parts of the Drenthe Plateau. This was less applicable to horses and cattle, because these animals were much more dependent on good quality grassland for grazing. But in spite of this both these forms of animal husbandry expanded from the Late Middle Ages onwards, albeit to a more limited extent than sheep farming.

In the Later Middle Ages and Early Modern Period the *downstream areas and the lower-lying parts of the midstream areas* developed in a completely different way. From a physical-geographic aspect these areas were characterised by moist and low-lying glacial plateaus, coversands and fenlands that only interchanged here and there with somewhat higher-lying areas. Wide brook valleys, which from a hydrological aspect were fed by moderately nutrient-rich to nutrient-rich regional seepage water and floodwater, crossed the areas. As a result, these areas in the Middle Ages had extensive grasslands which, in Drenthe terms, were of extremely good quality. Due to the dominantly damp character of the soils here, and the more or less impenetrable natural vegetation in the brook valleys, the downstream areas in the prehistory were much less densely populated and also much less continuously inhabited. After a short colonisation phase during the Iron Age, occupation of these areas mainly occurred during the High Middle Ages (11<sup>th</sup> century and later). This relatively late occupation also explains the absence, or rather the limited presence, of 8<sup>th</sup>-11<sup>th</sup> century domains alongside the downstream and lower-lying midstream areas. The majority of land in these areas were therefore in the hands of independent farmers. However, in the Late Middle Ages new forms of land ownership took place in these areas, mainly by noblemen, but also monasteries, hospitals and urban citizens. This trend however did not prevent downstream villages from growing rapidly in the later Middle Ages. In any case, this growth in population seemed to be due more to the presence of good quality grassland than to large-scale land ownership. Splitting up the farms of independent farmers took place with such rapidity that this restraint as a result of large-scale land ownership was nullified. It was only villages that were more or less completely dominated by large-scale land ownership that clearly remained behind in the growth of both the number of farms as well as the number of inhabitants. The rapid growth in population observed in these areas in the Late Middle Ages and Early Modern Period, in Drenthe terms, not only lead to an increased density of population, but also to a marked dominance of peasant farms. The average farm had less than ten hectometres of arable land. Compared with the upstream areas the average number of inhabitants per farm was relatively low (four to six). The accompanying demographic pattern is that of rather small family farms with a relatively small number of living-in celibates, a proportionally young marital age and a comparatively limited migration to other regions.

Once the external regional or inter-regional markets emerged, farmers and large landowners in the Late Middle Ages who found themselves in the institutional-judicial and demographic circumstances mentioned above, would have undoubtedly applied themselves to a strategy of intensification and specialisation, in other words to the cultivation of crops and to animal husbandry that required relatively high labour demands. Labour was of course readily available in this densely populated area. It also seemed to be no coincidence that arable farming in these areas compared with that in the upstream areas was much more intensive. The three field system and collective grazing regime on the sandy soils were abolished at a relatively early stage (second half of the 15<sup>th</sup> century), and intensive plaggen manuring was also introduced quite early on (early 16<sup>th</sup> century). All in all, and with the readily available labour in these areas this explained why the plaggen covers in these parts of Drenthe are much thicker (> 50 cm) than in the upstream areas of the plateau. In addition to the cultivation of rye and oats, many new crops such as buckwheat, beans, root vegetables, brassicas and hops were introduced in the downstream areas from the late 17<sup>th</sup> century onwards. Hops because of their labour intensive and capital intensive character and need for a damp place in which to grow, were especially suited to the small farms in the north of Drenthe. The proximity of the outlet market in Groningen was also certainly significant. Because of the readily available good quality grassland – that from the Late Middle Ages onwards was helped even more due to the extensive irrigation works – animal husbandry was also commercialised from the Late Middle Ages onwards. Given the evidence

of the high value put upon land ownership observed in the 16<sup>th</sup> century, cattle fattening and horse breeding in particular would have moved away from these regions. Compared with the upstream areas, the southwest and north of Drenthe were better situated for the urban market. Not only did the distance to the market play a role, but also certainly the powerful mutual contacts between the regional and urban elite.

To summarise we can see that the different parts of Drenthe, due to their situation in the landscape and their previous history, occupied a totally different position during the emergence of the inter-regional market economy. As a result of this the farmers opted for completely different economic strategies. In the upstream, higher lying parts of the Drenthe Plateau, the emphasis was on extensification strategies, in the lower lying parts it was on intensification and specialisation. Both processes further strengthened the regional differentiation of landscape and society within the province of Drenthe during the Early Modern Period.

## 5. Conclusions

1. The way in which the agricultural economy developed in the various parts of the Dutch province of Drenthe during the emergence of the Early Modern international market economy was not only determined by contemporary economic factors, but was just as much determined by their previous landscape history during late prehistoric and early historic times.
2. This economic transition occurred according to a chain of cause and effect reactions and in the following order: physical-geographic and ecological factors → late pre-historic and medieval occupational history social institutions and land ownership ratios demographic development and size of farms → strategic choices of landowners and tenants in a changing economy → cultural landscape adaptations.
3. Van Bavel's transition theory can be very useful when explaining the process of transition in the Late Medieval and Early Modern Period. For a more realistic testing of this theory a larger number of regional case studies in northwest Europe is necessary.

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