# VERSATILE LAND, HIGH VERSUS LOW. DIVERGING DEVELOPMENTS IN THE EASTERN NETHERLANDS<sup>1</sup>

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Regional studies on landscape history are sometimes biased to some extent by a tendency to focus on the most intensively cultivated and investigated areas. Moreover, the concept of 'landscape' is at times applied uncritically, resulting in a homogenized and simplified reality, with interesting developments and contrasts being easily overlooked. It is the aim of this paper to show that fundamentally different historical developments may have occurred within one and the same "landscape". The focus will be on the Pleistocene covers and landscapes of the eastern Netherlands. Here, already during prehistory, higher, dry areas of land were being transformed into relatively open, intensively used, compartmentalized and — to some degree spatially stable landscapes that were very much "cultural". The little-studied lower areas that surrounded these cultivated "islands", on the other hand, remained essentially natural in character; forested, unpartitioned, extensively used and probably spatially dynamic in terms of spatial structure until well into the Middle Ages, when reclamation began. Unlike the situation in the fossilized "old land", new and rapid physical geographical (and social) developments took place in these lowlands, especially from the medieval period onwards. This high-low dichotomy deserves more attention, also in other areas. Its social dimension will be discussed separately (Groenewoudt, in prep.)

#### Introduction

Whether or not they display characteristics of "landscape biographies",<sup>2</sup> some studies on the history of man and landscape (especially those that betray a leaning towards archaeological sources) are to some extent imbalanced in that they focus on the nuclei of human activity and settlement, i.e. on well-ordered, "domesticated" landscapes, or "the world of man". Less intensively used landscape zones, often covering the greater part of research areas, tend to play a subordinate role. Until quite recently, substantial parts of the human environment throughout Europe consisted of semi-natural and extensively used areas: outfields, "marginal land", "waste land" and "wilderness" (Svensson and Gardiner, 2009). This duality (a deliberate oversimplification) may have been a reality on more than one spatial level.



Fig. 1. Dutch sandy landscapes (light grey)

Perhaps the overlooking of specific areas and specific types of land use can be attributed to our perception of the past (and of landscape and land use), which is blurred by the fact that our modern lives are largely spent in fully domesticated, man-made landscapes (it is an undeniable fact that urban elites perceive far-away "marginal" areas very differently than its inhabitants do; e.g. Svensson, 2009). Geographically speaking, our location can literally determine — and limit - our field of vision, for following the basic definition by Dickinson, 'landscape' is simply "...the view within the range of an observer's vision" (Dickinson, 1939, 1-2). Also physically, what we see depends on where we are standing.

Another problem is that the terms 'landscape' and 'area' (or 'region') tend to be used interchangeably, as if they hold the same meaning. It is clear what an area or region is: a spatially delimited part of the earth's surface. The term 'landscape' can be defined and applied in a variety of ways (see e.g., Muir, 2000). When an explicit definition is lacking, it would appear that there is an implicit leaning towards a definition that em-

phasizes general and connecting properties, both physically and culturally. As a result, uncritical, or rather, ill-considered use of the concept of 'landscape' may have the unintended consequences of homogenizing and simplifying, potentially leaving fundamental aspects of landscape history overlooked as a result. Metaphorically speaking, we may be gazing at only one side of Janus's face. Whether or not this is really the case (or at least a real possibility) will be investigated on the basis of data from the eastern Netherlands, that are part of the somewhat higher Pleistocene sandy soils roughly encompassing the eastern half of the present-day country (Fig. 1). This short paper is obviously not an all-embracing landscape biography; its sole aim is to draw attention to the fact that it may be fruitful to purposively search for differences, for evidence of versatility, within the context of landscape historical research.

#### "Diversity rules"

In general this Pleistocene half of the Netherlands is far from uniform: there are marked regional differences with regard to the origins and overall structure of the physical landscape. These differences have influenced (not determined!) land use and settlement patterns since prehistoric times, which is why models that were developed in one region should not be applied to another without first critically analyzing their validity there (Van Beek, 2009). The southern sandy soils and soils in the northeast of the country are essentially plateaus, although their geology is fundamentally different; they are cut through by numerous streams and — in the past bordered (in the south) or were completely surrounded (in the north) by extensive peat bogs. The backbone of the central Dutch sandy region consists of a number of large ice-pushed ridges. The eastern Netherlands are different yet again; this area is characterized by diversity. Relatively flat coversand areas (harbouring numerous sandy ridges and hummocks) alternate with somewhat higher areas: ice-pushed ridges and plateaus. Here in the east, "diversity rules", on several spatial levels (Van Beek, in press). No fewer than nine different physical-geographical landscapes have been distinguished (Van Beek, 2009). Significantly, regional variation in geogenesis also brought about marked differences in landscape scale. The southern sandy soils as well as those in the north are relatively large-scale whereas those in the east are not only diverse but also small-scale.

The main focus will be on one of the nine physical geographical landscapes present in the Eastern Netherlands: the southern part of the slightly undulating coversand landscape that encompasses most of the western part of the area (Fig. 2). The coversand was deposited under periglacial conditions during the Weichselian Ice Age. The meta-morphology of the landscape is determined to some extent by buried glacial, glacio-fluvial and fluvial deposits. The alternation of coversand



Fig. 2. Landscape diversity in the eastern Netherlands (after Van Beek, 2009). The research area is indicated



Fig. 3. A random section of the highly fragmented coversand landscape in the eastern Netherlands. Dark grey: low/wet; light grey: "high"/dry

hummocks and ridges of various sizes, and of depressions and low-lying plains gives the area a distinct "archipelagic" character (Fig. 3). The coversand landscape under discussion is the core area of a region called — the Achterhoek. It is situated in the east of the province of Gelderland (Guelders).

# Landscape developments: high versus low

The landscape discussed here has been fairly densely settled for millennia, and probably seeing continuous occupation since the Late Palaeolithic/Late Weichselien (14 500-10 000 BP) (Stapert, 2005) Mesolithic hunter-gatherer settlement sites are more numerous however, and distributed over a much wider area (Musch, 1991; Scholte Lubberink, 1998). Although there are several indications of human activity dating to the start of the Neolithic, the first reliable (palvnological) evidence of human modification of the landscape and agricultural activities dates to R. Bakker's Neolithic Occupation Phase 2 (3450–2600 BC). It is attributed to the middle Neolithic Funnel Beaker Culture (Bakker, 2005), Around 1500 BC, agriculture intensified and settlements concentrated



Fig. 4. Former maximum expansion of peat bogs: dark grey (after De Rooij, 2006; Van Beek, 2009)

on the larger and more fertile stretches of slightly elevated ground (Arnoldussen and Fontijn, 2006; Bourgeois and Fontijn, 2008; Van Beek, 2009; in press). These are almost without exception the same locations that were transformed into open fields, or "essen" after the tenth and eleventh centuries AD (Groenewoudt and Scholte Lubberink, 2007), when settlements moved from the highest parts of these sandy "islands" to the lower fringes. From late prehistory onwards, these same islands became the core elements of a settlement system that underwent phases of expansion as well as contraction (Ten Bosch et al., 1997; Groenewoudt and Scholte Lubberink, 2007). Only periodically did this settlement system incorporate less favourable locations, such as smaller, lower or less fertile sandy ridges. As early as around 500 BC, deforestation had resulted in the emergence of semi-open, intensively used, compartmentalized and - to some degree — spatially stable landscapes that were very much "cultural" (Groenewoudt et al., 2008). This situation remained essentially unchanged until well into the Middle Ages. The ninth century AD was a time of great transformations, during which spatial dynamics decreased even further. Many settlements were relocated to their present locations (Waterbolk, 1982, 1995; Van der Velde, 2004; Van Beek, 2009). The oldest contemporary isolated farms (*Einzelhöfe*) date to this period too. Apart from a short episode during the mid-late Roman period (second-fourth century AD) it was not until the fourteenth and fifteenth centuries that larger settlements and actual villages came into being (Van Beek, 2009; Keunen, in prep.). Gradually, a mixture of dispersed and nucleated settlement evolved.

On closer inspection, however, the aforementioned turns out to be valid only for the "upland" parts of the landscape (though differences in elevation rarely exceed ten metres). From times immemorial, these constituted the civilized world, and it was this face of the landscape — covering less than half of the total area — upon which research always concentrated, as indeed it still does. The rest of the landscape consists of lowlands, in part (former) wetlands, Recent research integrating pedological, historical and toponymic evidence has shown that a surprising percentage of almost 30% of the total area used to be covered by mostly small but numerous peat bogs (De Rooij, 2008; Van Beek, 2009, p. 472). Because the landscape

was so fragmented, marshy lowlands were hardly ever far away (Fig. 4). On average, lowlands cover 50% of the surface within a one kilometre radius from settlement sites. (Groenewoudt et al., 2008). Besides peat bogs ('veen') the lowlands harboured a broad spectrum of other landscape features, that can essentially be identified by the same terms as those in use for the province of Drenthe, northern Netherlands (Spek, 2004; Ter Laak, 2005). Commonly used lowland landscape features are broek (undivided flat and moist pastures, incidentally flooded by nearby streams), flier (similar areas with peaty topsoil), goor (bogland), maat/maten (parcelled out meadowland), laar (pasture within woodland or wood pasture) and horst (hillock surrounded by flat land). Broeken in particular could be very extensive. Contiguous broeken belonging to neighbouring local farmers' communities (marken) could together cover several thousand hectares.

Recent palaeobotanical studies have shown that deforestation and particularly cultivation in lowland areas proceeded at a much slower pace than was the case in the uplands (Fig. 5). For circa 2000 years, the lowlands were very much a reverse image



Fig. 5. Diverging developments: pace and extent of cultivation in "uplands" and "lowlands"

'lowlands'



Fig. 6. In terms of vegetation structure and the ratio between uncultivated (dark grey) and cultivated land (light grey), for about 2000 years the lowlands were very much a reverse image of the uplands (after Van Beek, 2009)

of the uplands in terms of the ratio between uncultivated and cultivated land (much earlier, between circa 1500 and 500 BC the uplands had transformed in a similar way: Groenewoudt et al., 2008; Van Beek, 2009) (Fig. 6). Although there is clear evidence for earlier human impact in the vicinity of settlements, the woodland cover in the lowlands only began to decline systematically during the late Middle Ages. Until then, the lowlands had been covered by a patchwork of dense woodland (predominantly alder carr), more open woodland, shrubs, raised bog, marshes, moorland and strips of semi-natural grassland. It was likely a spatially dynamic landscape with fuzzy borders, characterized by curves rather than straight lines. Remnants of primeval woodland ("wildwood" as Oliver Rackham (1976) prefers to call it) may have survived for a surprisingly long time, at least until the beginning of the Roman period (Scholte Lubberink and Willemse, 2009).

In contrast to the sandy uplands, where the soils were becoming ever more depleted as a result of intensive agrarian exploitation, the lowland landscape became increasingly wet over the course of time (Groenewoudt, in press). As a result, from the Atlantic period onwards bogs expanded right up to the beginning of large-scale drainage, commercial peat cutting and subsequent reclamation. Causes for rising water tables, paludification and the expansion of bogs included a surplus of precipitation, poor drainage and — near the coast — rising sea levels. Initially the causes of the "drowning" process were natural, but from the Iron Age onwards human interference with the landscape had an increasing impact. Rapid deforestation during this period contributed to a rise in groundwater levels (Buishand and Velds, 1980; Dolman, 1988; Spek, 2004), a process that probably accelerated during the Middle Ages (For Germany, see Bork et al., 1998; 2003) when much of the surviving lowland woodland disappeared (see below). Obviously, flat, low-lying areas were particularly affected by rising groundwater levels, since even a small rise there resulted in significantly wetter soil conditions, which in turn stimulated peat growth.

## Persistent wilderness

Many place names and historical sources in the low-lying heartland of the *Achterhoek* region attest to the long survival of a wellforested, barely cultivated and sparsely populated landscape (Fig. 7). This was already observed in 1944 by Slicher van Bath (1949), one of the founding fathers of Dutch agrarian

history. Departing from the already demonstrated relatively high degree of stability in land ownership in the Middle Ages (Noomen. 1991; 1993; Spek, 2004). Keunen (in press) recently inventoried old domanial properties (AD 800-1100). These are indeed absent in the lowlands of the Achterhoek, despite occurring frequently along the periphery. Furthermore, an eleventh century source defines a substantial part of the border of a county in the territory called "Hamaland" (Utrecht Charter book I, no. 202; Wartena, 1989) as running "per silvam", i.e. through woodland or uncultivated land. Other sources dating from the late tenth to the fourteenth centuries mention Steenrewalt, Furwalde, Berlewalde, Holterwold, Synwede and another nameless "great woldt" (Groenewoudt et al., 2008; Keunen, in prep.), place names that in the Pleistocene parts of the Netherlands probably refer to areas of wooded lowland wilderness rather than to clearly defined forests (Ter Laak, 2005, pp. 136-138; Spek and Van Exter, 2007). Parts of such wildernesses were undoubtedly exploited by people, who are known to have lived along their edges,



*Fig. 7. "Berlewalde". A reconstruction of the medieval landscape of the Achterhoek lowlands before reclamation (artist's impression by Mikko Kriek, BCL Archaeological Support)* 

on isolated patches of cultivated high ground (such as Zelhem, Vorden, Ruurlo), and along streams, particularly the river Berkel. Texts from the thirteenth and fourteenth centuries mention the herding of "forest horses" (e.g. Meihuizen, 1953). These may have been semi-feral horses like those still roaming the Westphalian nature preserve Merfelder Bruch today. Further historical research will no doubt produce evidence of grazed woodland (*Hudewald*) and coppices.

As far as we know there are no comtemporary sources that can inform us as to what an Achterhoek "wold" looked like. However, a number of nineteenth-century sources concerning the Beekbergerwoud in the Central Netherlands (destroyed in 1871) allow us to visualize what densely forested parts of "wolds" were like. The following description is by the famous Dutch botanist and conservationist Victor Westerhoff (1969):

The heart of the forest consisted of extremely tall Black Alders, often covered in ivy, interspersed with Ash trees. Circling it was a zone of Alder coppice. Various shrubs grew amidst them such as Blackcurrant, Bird Cherry, Guelder Rose, Common Dogwood, Spindle tree, Buckthorn and Common Hazel, and at the transitions to higher parts also Dog Rose, Holly and Common Juniper. In wintertime, the forest and adjoining heath were entirely inundated and only accessible to lumberjacks when it froze. In the summertime it was nigh impassable, bar the higherlying hillocks where Oak and Beech grew. ... The wealth of extraordinary moistureand shade-loving mosses and mushrooms was astounding, especially on stools and the many rotting tree trunks that lay scattered throughout the forest.

## **Charcoal burning**

In the *Achterhoek* there is evidence for wide-spread charcoal burning, but only during certain periods. The charcoal served as

fuel in the production of iron (Groenewoudt, 2007). The archaeological dates available thus far cluster around the ninth century. This early phase may be related to the exploitation of newly gained domains by the new Frankish or Frankish-friendly authorities (The part of the Netherlands we are dealing with was incorporated into the Frankish empire during the late eighth and beginning of the ninth century AD). The oldest known historical reference dates to the seventeenth century (see below). Toponymic evidence for charcoal burning is wide-spread (Smalbraak, 2009). Martinet (1790) recounts that charcoal production was a common occupation in the Achterhoek in his day. According to him, the village Zieuwent was renowned for its charcoal production throughout the wider surroundings. Charcoal burning last took place at the start of the twentieth century at Zieuwent and Lievelde, and in the vicinity of Winterswijk (Heuvel, 1914; Hulshof, 1947; Weenink, 1983).

Early medieval charcoal is nearly 100% oak, not only in the Achterhoek but also in other sandy regions in the Netherlands. A 1648 source from Neede (Archive Province of Gelderland: Archief Hof van Gelre en Zutphen, inventory number 5227) speaks of the coaling of oak and alder. In the same area in the post-Medieval period all kinds of wood were used, but predominantly alder (Martinet, 1790). This change from oak to alder likely reflects a more opportunistic use of wood necessitated by wood scarcity, and also a shift towards the exploitation of low-lying areas, such as the heart of the Achterhoek region. During its initial phase, charcoal production was an upland occupation. In historical times it was a lowland activity.

#### Depositions

Numerous depositions of objects indicate that some peat bogs and marshes in Drenthe (Northern Netherlands) were used for 'ritual' purposes from prehistoric times until as late

as the sixteenth century (e.g. Van Vilsteren, 1998; Van der Sanden, 2004). These chiefly natural and generally watery places are designated as sacrificial or ritual landscapes by Fontijn (2002). So far, evidence for ritual uses of Achterhoek bogs is scarce. Three whole millstones from Roman times have been found in the Haaksbergerveen (Van Es and Verlinde, 1977). Millstones are found in bogs in Drenthe, too (Van der Sanden, 1998). An old mention of a find in the neighbourhood of Gorssel (Epse-Klembergen) is intriguing. A concentration of cobble stones (a cobblestone floor?) was found in a depression at the centre of (or near?) a barrow complex, as were a fragment of an oak pole and a cow horn (Pleyte, 1889; Van der Kleij, 2003). The scanty details handed down call to mind the famous Bronze Age sanctuary of Bargeroosterveld (Drenthe) (Waterbolk and Van Zeist, 1961).

#### Lowland reclamations

The empty lowland at the centre of the Achterhoek was situated on the border between the bishoprics of Utrecht and Münster. That clearance and colonisation took place there from the thirteenth century onwards is apparent from a reference in a source from 1265 to an estate Furwalde (Ter Kuile, 1964). The valley of the river Berkel that crosscuts these lowlands from east to west seems to have been an important gateway into the area. In the mid-thirteenth century the Count of Guelders ordered the digging of a drainage channel, the socalled Gravengracht (Count's Canal), to facilitate reclamation and probably also the transportation of peat. As a result, the pace of deforestation, drainage, peat cutting and reclamation accelerated. Large-scale peat exploitation never occurred in the Achterhoek though. The local population generally cut peat for personal use only. This small-scale activity can probably be put down to the generally thin peat layer and the still limited means of transportation. Turf extraction on the communal grounds initially took place via individual turf pits. When that began to cause problems from a water management point of view, laws were issued from the seventeenth century onwards to ensure a more regulated exploitation. In some areas, local farmers' communities and the lords of local manors systematically drew up parcels of land to be sold for the purpose of freeing them of peat, after which the newly exposed subsurface returned to the hands of the original owner. Most peat bogs had already vanished by the eighteenth century (De Rooij, 2006; 2008).

## Deforestation

The area must have been deforested soon after the thirteenth and fourteenth centuries Historical sources inform us that by the end of the seventeenth century there was virtually no woodland left that could be used as woodpasture or for any other purpose in large parts of the eastern Netherlands (Dirkx, 1998; Bakker and Van Tweel-Groot, 1998). By that time open, ultimately virtually treeless landscapes had become wide-spread. The situation in a stretch of common land called Balkenbroek is typical. In AD 1555, alder wood was cut here for road building (De Graaf, 1948), and the last actual record of the sale of woodland products dates to AD 1651. Hereafter, the sources mention only meadows (Keunen, in prep). Parts of the Achterhoek certainly remained somewhat forested for a longer period of time (Slicher van Bath, 1949; Buis, 1985). This much can be deduced from the fact that pannage was practised until at least the middle of the eighteenth century and, again, during the First World War, near Winterswijk that is (Smalbraak, 2009). In the southern Achterhoek lav (and to some extent still lie) the Bergher, Didammer en Silvolder forests, located in elevated parts of the landscape. The Berghse woods had almost completely disappeared by 1800 as a result of overcutting



and the impact of war (Biilsma et al., 2001). Lower lying forests were not in much better condition. It is apparent from the sale of trees that the mostly low-lying lands belonging to local farmers' communities in the former county of Zutphen had until the seventeenth century "partially been covered with trees" (Roessingh and Schaars, 1996, 301). During the course of the eighteenth century, almost all of the remaining forest disappeared, at least in the eastern Achterhoek. This was the case not only for common woodland (used as *Hudewald*), but also — though presumably at a slower pace — open or delimited Bannwald, that was the property of lords and subject to stricter rules of use (Smalbraak, 2009). Basically, only woodlands that were or became private property had any chance of survival. There are exceptions though. The remnants of the large Zwillbroekerbos, a stretch of common woodland in the very east of the Achterhoek only disappeared around the middle of the nineteenth century (Fig. 8). The forest features prominently on

sixteenth- and seventeenth-century maps of the region. In 1784, use rights to the forest were handed out to 42 persons. By 1821, that tally had risen to at least 173. The forest was used intensively for pasture, also illegally. This is doubtless the reason for the forest's disappearance (Tenhagen, 1975: Smalbraak, 2009). Until the end of the nineteenth century, another exception was formed by the so-called "elsweiden" ("alder meadows") and "bosweiden" ("forest meadows") that had up until then been used for charcoal production. These were presumably plots of alder coppices, or strips of alder woodland enclosing meadows. In 1885, people in Winterswijk recommend their removal, because they cannot see a future for charcoal burning (Boxem, 1914). Some "horsten", small sandy hillocks, long remained covered in woods, too. The well-known local historian H.W. Heuvel from Oolde near Laren describes what these hillocks looked like at the end of the nineteenth century: "... they are vast pastures, across which these hillocks



Fig. 8. Marshy and partly wooded common land on a 1599 map (Oeding, along the border between the Achterhoek and the Münsterland (after Smalbraak, 2009, map 1)

are dotted like islands, elevations covered in a wild vegetation comprising oaks, holly the size of trees, bracken, etc. like some Germanic forest" (Heuvel, 1927, p. 392). Nearly all these hillocks fell victim to levelling practices during the twentieth century. At least one *Achterhoek* lowland forest, namely the Meene near Ruurlo, was saved from clearing, although by 1900 only shrubs remained (Vriezen, 2007). The local forest soil attests to the uninterrupted presence of forest here over several centuries (Honnay *et al.*, 1999).

#### Iron extraction

An important new activity in the deforested lowlands was the extraction of bog iron ore for the purpose of iron production. Bog iron ore occurs locally here in the form of compact layers in the ground (Kuiper, 2008). This ore was formed in depressions under the influence of seepage. From the end of the seventeenth century onwards and into the nineteenth century, ore deposits were systematically mined on an ever expanding scale. The ore was transported to iron melting works in the region (Deventer, Ulft, Laag-Keppel and Terborg) to be processed into cast iron. These iron works were able to develop thanks to a unique set of specific regional circumstances, namely the availability of ore, cheap labour and the necessary sources of energy (charcoal and hydropower) (Schreurs et al., 2009). The removal of iron ore was useful from an agricultural perspective, too, for it raised the productivity and value of the land (Kuiper, 2008). From the close of the nineteenth century, a lot of ore was transported to the German Ruhr region. The period between the seventeenth and nineteenth centuries was not the first time that the Achterhoek lowlands had been exploited for the procurement of bog iron ore. There are several indications of earlier exploitation between the ninth and the eleventh or twelfth century (Van der Velde and Kenemans, 2002; Joosten, 2004; Groenewoudt and Groothedde, 2008; Fermin and Van Straten, 2010). Large-scale ore extraction and iron production had been taking place as early as the third and fourth centuries a little to the north near Heeten, in an area comparable to the *Achterhoek* (Groenewoudt and Van Nie, 1995).

#### Rapid changes

The open, virtually treeless lowland landscape described earlier is the one we know from the earliest detailed maps that depict the entire area (late eighteenth century). Stable field boundaries, infrastructure and habitation remained scarce in the lowlands. Here modern field systems and planned infrastructure generally go back no further than the mid-nineteenth century, when all commons were sold, divided, reclaimed and transformed into planned landscapes (Demoed, 1987; Van der Woud, 1987). At the same time, settlement began to expand, and hedgerows and coppices were planted. In a sense this was a revival of previous conditions, since the scale of the landscape was reduced and woodland returned. However, many of these nineteenth-century introductions were short-lived, as they were removed again in the course of various twentieth-century reallotment episodes. Nowadays even fences and barbed wire are disappearing rapidly, as "factory farmers" prefer to keep their cattle indoors. The modern lowland landscape (Fig. 9) is characterized by openness and large-scale, highly intensive forms of agriculture, which has become possible thanks to efficient drainage. In recent years, the lowlands have assumed centre stage in modern agriculture, and in this respect they have — as "new land" — overtaken the old land. In a striking example of "the dialectics of progress", centre and periphery have become reversed.

It can be surmised, however, that in terms of biodiversity and ecological value a contrary development has taken place. As far as bio-



diversity is concerned, wetlands inherently often rank very highly (Westhoff and Den Held 1969; Schaminée *et al.*, 1995; Notenboom *et al.*, 2006). The quotes cited above speak volumes on that score. But little of that remains. The flipside of the agricultural success story is that on average; low-lying areas have likely lost more of their ecological value than have the uplands. The majority of the present-day nature reserves in Pleistocene sandy areas are located in the uplands. This is principally barren land that has escaped cultivation, as in many cases it was deemed not worth the effort.

#### **Expanding settlement**

Initially, the new settlement in the former lowland commons took on a dispersed character. An interesting phenomenon is numerous new hamlets and villages coming into existence in the nineteenth and start of the twentieth century. The background to and materialisation of this new "time layer" in the settlement pattern of the *Achterhoek* have hardly been researched thus far, unlike in the southern sandy regions (Thissen, 1993; Van den Brand and Douma, 2002; Janssen, 2005). According to Keunen (in prep.), we are dealing chiefly with organic growth around nuclei such as new churches, stations and agricultural cooperatives, mostly in low-lying areas. Planned settlements, like "veenkoloniën" (lit. peat colonies) (skirting the sandy soils of both the north and south of the Netherlands) and villages set up for the purpose of heath land reclamation (especially in the south) seem to be rare.

The new hamlets and villages are an interesting phenomenon from a social geographic point of view as well (Groenewoudt, in prep.). Newly formed "veenkoloniën" in the northern Netherlands were often inhabited by religiously like-minded groups. One has the impression that the same was the case for the Achterhoekse *Neusiedlungen* and that this is partly attributable to the strong "pil-



Fig. 9. The modern lowland landscape is characterized by openness and large scale, as well as highly intensive forms of agriculture (photo by Paul Dijkgraaf)

larisation" that characterized the Dutch social geographic landscape between 1853 (restoration of the Roman Catholic Episcopal hierarchy) and circa 1930 as a result of the emancipation of the Catholic faith after centuries of oppression. The new villages in the Achterhoek appear to have taken on a predominantly Catholic identity (Demoed. 1996). The rise of Catholic villages such as Kranenburg, Keienborg, Mariënvelde, Baak and Vierakker was usually the outcome of the founding of a church by prominent Catholic families. A good example of ecclesiastical patronage in the best medieval tradition is the role played by the noble family of Dorth tot Medler in the development of the village Kranenburg in no man's land close to the old village of Vorden (Lindeijer, 2001; Hartelman and Niemeijer, 2007).

## Conclusion

In the introduction I stated that an illconsidered use of the concept of 'landscape' may have the unintended consequences of homogenizing and simplifying, potentially leaving fundamental aspects of landscape history overlooked as a result. Different historical developments may have occurred within one and the same "landscape", some of which may have escaped attention. As it turned out this was clearly the case in our study area: the Pleistocene sandy landscapes of the Netherlands. What the foregoing suggests is that while studying historical landscapes it may be worthwhile to look beyond nuclei of human settlement and activity (including research activity). In our study area from late prehistory onwards, and especially since the late medieval period, low lying areas developed in a fundamentally different way than the "upland" zones did, temporally and physically, and also socially (Groenewoudt, prep.). Things seem to have happened differently here, and - once things got moving — more rapidly. Over time, the contrasts resulting from the "diverging developments" mentioned in the subtitle of this paper have faded, but until quite recently the high-low dichotomy had lost little of its fundamental influence. This reality deserves more attention, not only in research but also when it comes to utilizing the resulting information to initiate and shape future developments, both here and in other areas. After all, contrasts make many things more exciting, including landscape.

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#### Notes

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<sup>2</sup> Such as a multidisciplinary approach, a long-term perspective, and a combination of physical and mental approaches, public participation and policy orientation (e.g. Kolen, 1993; Hidding *et al.*, 2001).