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Merovingian Oegstgeest: the setting

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Oegstgeest

A riverine settlement in the early medieval world system

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1 Merovingian Oegstgeest: the setting

Corrie Bakels

The Merovingian settlement at Oegstgeest was founded in a landscape of which the first and foremost element was a large river, the river Rhine. This river has its source in Switzerland, flows through Germany touching France, and ends in the Netherlands where it discharges its waters into the North Sea. Together with another large river, the river Meuse, the Rhine formed a large delta with an apex located on what is at present the Dutch-German border (fig. 1). Nowadays both rivers have their main course in the southern half of the delta, but up to and including the Early Middle Ages, the main channel of the Rhine was to be found in the delta's northern part, with its mouth near Katwijk.

Oegstgeest is situated 4 km upstream from Katwijk. The early medieval settlement was therefore founded in a deltaic setting not far from the sea. In the following the former landscape will be described, starting from the mouth of the river Rhine and following the river some 20 km upstream, as this is the kind of landscape in which the site inhabitants likely lived (fig. 2). The greater part of the description is based on Van Dinter's published work.¹

Since the Early Middle Ages, the Dutch shores have receded, and the Merovingian beaches are presumed to have been located a km further to the west than they are today. The landscape along the coast was characterized by a series of former beach barriers and low dunes with strips of lower lying land in between. The present-day higher dunes did not yet exist. The river cut through this belt of barriers with a narrow, funnel-shaped mouth. Ebb and flood accessed the hinterland via this funnel and the tide influenced the inland landscape. The land near the river was brackish – salty in the west, but with diminishing brackishness towards the east. The eastern limit of an occasional brackish influence is held to have been situated 15 km upstream. At right angles to the river channel the influence of salty water fell off with the incidence and reach of flooding by river water.

The river was accompanied by natural levees parallel to the river bed. During peak discharge, the lower parts part of the levees and the flood plain behind were inundated. Such discharges mainly occurred in winter and spring as a result of enhanced precipitation combined with melting snow in the Alps. The levees were regularly broken through during such discharges, resulting in the formation of a gully and new deposits behind the levee (a crevasse). Other crevasses could form during high tides when the river discharge was blocked.²

The levees were sandy, and in the flood plain behind them clay deposition took place. In distal places of the flood plain, where circumstances were quiet and the water supply fresh, peat formation occurred. This resulted in fen peat at the margins, grading into mesotrophic peat more inland and into true oligotrophic peat further away. This part of the landscape drained its excess of (rain) water through a series of small watercourses which discharged their contents in the main river. Crevasse gullies and small streams dissected the levee, including on the spot where the settlement was founded.

In this westernmost part of its course the water of the river Rhine flowed through not one, but through two channels which regularly merged and divided again, creating islands. In combination with the crevasses and watercourses draining the hinterland, this resulted in a patchy environment where watercourses alternated with relatively dry areas and wetlands. The higher parts of the levees along the river were the drier, inhabitable parts. These were precisely the locations chosen by the inhabitants of Merovingian Oegstgeest to settle on. They were close to the wide river channel that gave access to foreign lands upstream and to the sea downstream.

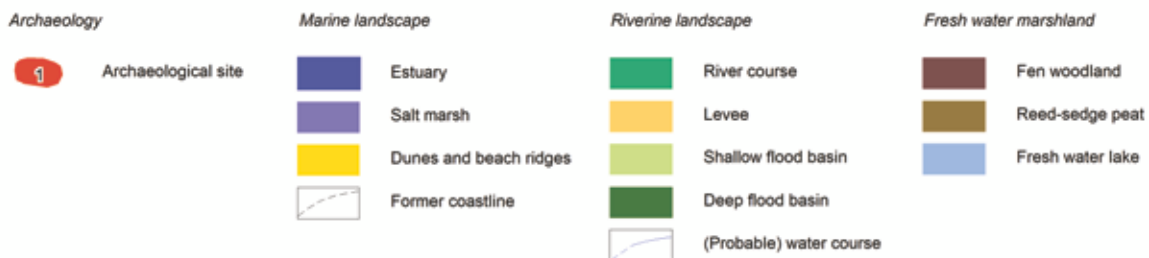
The climate at the time was relatively cold. It is known as the Dark Ages Cold Period.³ After the relative warm period that

(1) Van Dinter 2017. (2) Berendsen 1982. (3) Riechelmann/Gouw-Bouman 2019.

Fig. 1.1
Palaeogeographical map of The Rhine-Meuse delta and the location of Merovingian Oegstgeest.
Map provided by H.J. Pierik.



Fig. 1.2 Merovingian Oegstgeest and contemporaneous sites plotted on the relevant palaeogeographical map; 1 Katwijk-Zanderij, 2 Rijnsburg, 3 Valkenburg-Dorp, 4 Valkenburg-De Woerd, 5 Oegstgeest, 6 Leiden-Boshuizerkade 7, Leiderdorp; red dots indicate stray finds. Map by Wilko van Zijverden based on Van Dinter 2017.



lasted from AD 1 to 250, i.e. during the Roman occupation of the greater part of the delta, records of the mean summer temperature indicate a drop of 1.5 °C.⁴ This cold period lasted from AD 250 to 700. Precipitation records suggest a wet period from AD 1 to 500, drier conditions between AD 500 and 800, followed by a wetter climate.⁵ This implies that the Merovingian inhabitants of Oegstgeest enjoyed a relatively dry, though rather cold climate.

The drier climate is also reconstructed for southern Germany and eastern France, which implies that the important discharge of the river Rhine in spring might have been moderate⁶, an aspect that could have been of importance for the inhabitants of Oegstgeest.

The dominant vegetation of the area in this part of the delta, and therefore in the immediate surroundings of Oegstgeest, was that of an estuarine, brackish floodplain, which implies the absence of

Fig. 1.3
Brackish floodplain, source Wikipedia.



trees (fig. 3). Only at its inland fringes, where fresh water conditions prevailed, would the growth of alder carr have been possible. But at a still further distance peat formation, especially in the parts where oligotrophic peat developed, meant that trees were absent again. Exceptions in this tree-less landscape were the higher parts, i.e. the levees and the former beach barriers, where trees might be expected. These sandy elements might have borne true forests. In the previous period, during the Roman occupation, such forests were heavily exploited and especially the levees are considered to have been bared of trees. According to Van Dinter *et al.*⁷ natural woodlands had become scarce both on the levees and in the flood basins before AD 140. To what extent tree growth had recovered after the collapse of the Roman interventions in the region, i.e. after AD 250, is still open to debate due to a lack of sufficient data, especially off-site data, in the area. More on the topic of vegetation is to be found in chapter 23 and the availability of wood is discussed in chapters 15 and 24.

To conclude: the inhabitants of Merovingian Oegstgeest lived on the north bank of one of the most important rivers of Northwest Europe, not far from the North Sea. They built their settlement on the driest spot available, but one that was nevertheless not an uninterrupted dry place as it was dissected by gullies and little streams draining the hinterland. Although they lived during centuries characterized by a relatively dry though cold climate, they had to deal with the constant treat of floods. The immediate environment also imposed some restrictions on certain economic activities. Brackish conditions limited the possibility for raising crops. Moreover, the inhabitants might have been short of wood.

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(4) Gouw-Bouwman *et al.* 2019. (5) Riechelmann/Gouw-Bouman 2019 and the references therein. (6) Büntgen *et al.* 2011. (7) Van Dinter *et al.* 2014.

Abbreviations

AAC	Amsterdam Archeologisch Centrum
AAS	Amsterdam Archaeological Studies
Archis	Archaeological Information System
AWN	Archeologische Werkgemeenschap Nederland
BROB	Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek
DAR	Delftse Archeologische Rapporten
FDI	Fédération Dentaire Internationale (World Dental Federation)
GAS	Groningen Archaeological Studies
HOP	Haagse Oudheidkundige Publicaties
JALC	Journal of Archaeology in the Low Countries
NAR	Nederlandse Archeologische Rapporten
NO	Nederlandse Oudheden
OBSP	Oegstgeest Bio Science Park
OMROL	Oudheidkundige Mededelingen uit het Rijksmuseum van Oudheden te Leiden
ONRZ	Oegstgeest Nieuw Rhijnegeest Zuid
OSLP	Oegstgeest SL Plaza
RA	Rheinische Ausgrabungen
RAD	Rapportages Archeologie Deventer
RAM	Rapportage Archeologische Monumentenzorg
RCE	Rijksdienst voor het Cultureel Erfgoed (Cultural Heritage Agency of the Netherlands)
v.	vondstnummer (find number)

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