# Morphology and habitation in eastern Himmerland, NE. Jutland

By Viggo Hansen

Abstract

*A certain region of the Danish peninsula Jutland is studied from the aspect of habitation, the development of which is compared with the different relief features and with the progress in agricultural technics.*

Himmerland is the name of a province and a peninsula in north-east Jutland, bordered on the east by the Kattegat and on the north and west by the Limfjorden. A high watershed, running nearly north-south in the middle of the peninsula, separates two distinctly different landscapes. To the west lies a system of elongated hills and shallow valleys with smooth running rivers in the bottom, and the base level is the level of the sea. The small streams are surrounded by wet meadowland and bogs only recently reclaimed, and the glacial soils are leached and the yields rather low.

To the east of the watershed the landscape is split up into steep-sided »peninsulas« and »island«s by interjacent deep, flat-bottomed valleys of different geneses. These valleys reach very close to the watershed, from where the streams have cut deep gorge-like, v-shaped valleys in the glacial sub-soil. The gorges open directly into the flat valley bottoms, from where the slope is so slight that the river beds in their further course mostly are canalized as a protection against flooding. The base level thus is not the level of the sea, but rather the point where the streams reach the flat valley bottom.

These barely sloping valley bottoms have a different origin. Danish geologists consider some of them to be pre-quaternary river beds, in which tectonic forces may have played a part. During the ice-age the subglacial rivers followed the previously made valleys or cut new ones in the substratum of cretaceous limestone. When the ice melted away the cold arctic sea invaded the deep valleys and converted the

northeast part of Himmerland into an island and fjord landscape. Remnants of the arctic sea are still to be found as narrow terraces at a level of 60 feet in the northeast and at 30 feet near Komdrup. After an uplift of the land the sea once more transgressed the same area in the Litorina transgression, beginning at about 5000 B. C. But this time the sea penetrated much deeper into the former valleys (see fig. 1), dividing up the land into islands and peninsulas.

In the still waters of the inner fjords sands and muds were deposited, while wave erosion formed the more exposed beaches, particularly along the east coasts. The previous shore lines now lie at a level of 13—14 feet in the southwest and at 20 feet in the northeast. The general uplift of the land after the transgression of the Litorina Sea has been greater in the northeast than in the southwest, thus resulting in the formation of shallow stagnant lakes and ponds in the inner fjords, which have long since been filled up with layers of peat.

On more exposed sites the erosion forms, caused by wave action, dominated. The waves of the Stone-Age sea have cut high nearly vertical cliffs into the flanks of the outer »islands« and »peninsulas«, while in other places the wave currents deposited pebbles and gravels as beach ridges and recurved spits which later became the basis of agricultural settlements.

The rural habitation in the area fall into three groups:

I. Villages on the inner morainic plateaux.
II. Villages on terraces and raised beach ridges.
III. Villages on dry sites in the Stone-Age sea.

I. The villages on *the morainic plateaux* again fall into two groups. An older group with place name terminations in -inge and -sted can be dated back to pre-Viking times (300—700 A. D.), and these villages apparently have preferred more sandy soils. A younger group with place name terminations in -by and -torp was founded between 1000 and 1200 A. D., and these mainly tilled more loamy or clayey soils. Both groups of villages show a preference for more undulating land than for even surfaces.

II. *The terrace site* is a most conspicuous feature in the settlement pattern. In many places there are elongated villages with the farmsteads lying in ribbons on narrow strips of land which rise some feet above the wet meadows, and often they have an old cliff behind. Some of the terraces are remnants of tunnel valley-bottoms, while others are late-glacial or Stone-Age beach terraces. This site at the

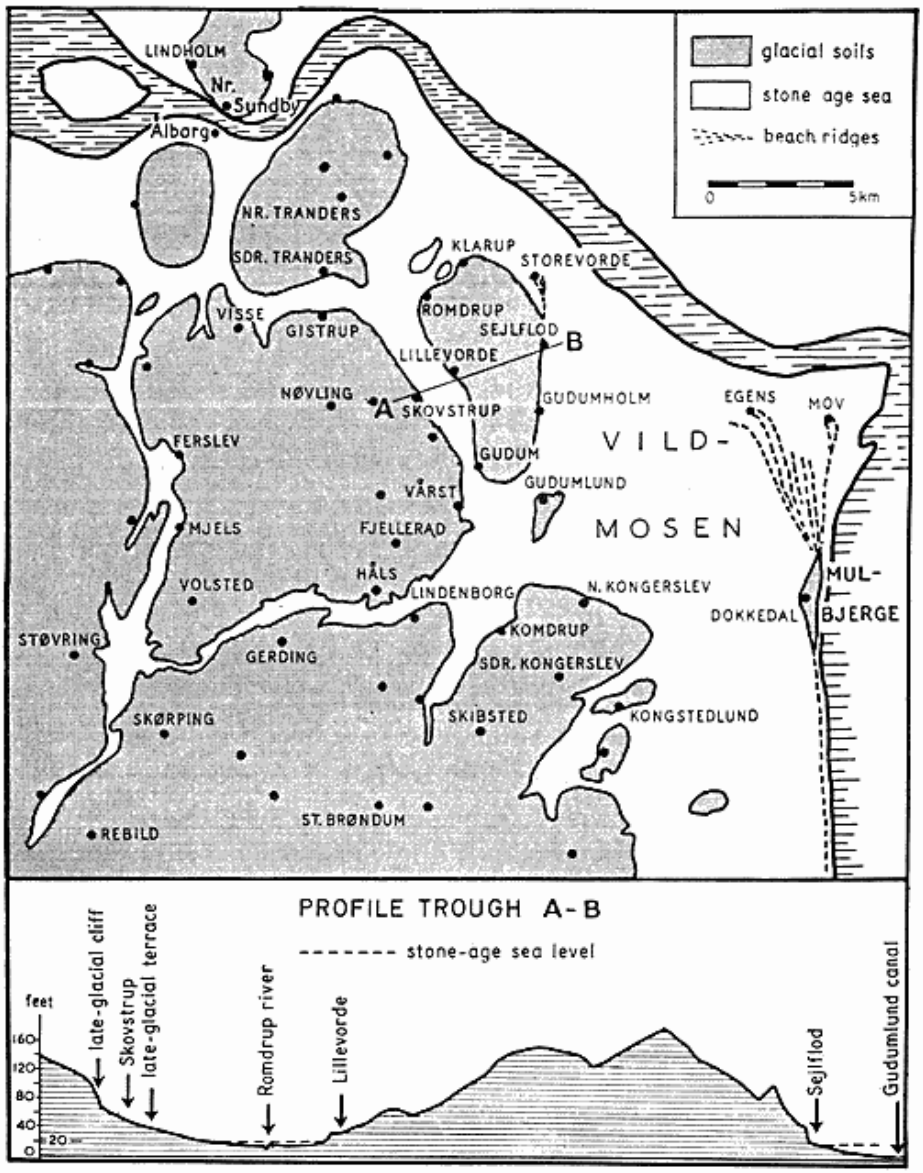


Fig. 1. Map of Eastern Himmerland, showing the supposed maximum extent of the habitations in proportion to the level of the Litorina sea. Scale: 1:250.000.

foot of an old overgrown cliff, yet raised some feet above the wet ground, is favourable for several reasons, favourable for land use, when arable fields occupied the upper glacial soils and the wet meadows were grazed by the livestock, and favourable for fresh-water supply, because rain water, which rapidly seeps down through the porous limestone-subsoil, again emerges at the foot of the cliff.

III. The villages on the marine foreland of *the raised Stone-Age sea* are very few (see map), but all of them show the same features

and originated in the same way. All three are placed on the tip of recurved spits formed through wave action during the postglacial uplift of the land. The spit on which Storevorde lies, clings to a late-glacial raised beach, while the other two (Mov and Egens) are bordered on all sides by marine foreland. The placing is very clear, both are on the tip of a fan-shaped system of recurved spits, built of materials from the island of Mulbjerge. The fan represents two different age groups of spits, an older to the west and a younger to the east. The ends of the spits were chosen for village sites, partly because there were more extensive areas with silty soil outside and in the lee of the spits. In addition the site may previously have been chosen as a harbour for a fishing population because of deep water close to it. From archaeological findings it is known to have housed a fishing population prior to the agricultural reclamation.

The three villages on the spits are undatable from their place names, but they are mentioned in old chronicles from the 13th century. *Storevorde* was then named *Vdræ Wardhæ,* meaning *Outer Ward,* while *Egens* was called *Eigenshaffue (Oak-ness forest).*

Until now only clustered habitations have been mentioned, because they are more easily datable; but scattered farms may also have existed in earlier times, even though such farms generally are supposed to be younger than villages and most often originating from the end of the eighteenth century onward.

Detailed studies of the newer development in habitations have been made of a specific region in the east central part of the map section, namely the three parishes of Sønder Kongerslev, Nørre Kongerslev and Komdrup, together comprising a peninsula with glacial soils and the adjoining raised sea bottom from the Stone-Age with soils of sand, silt and peat.

The development in the three parishes is illustrated by five different maps (figs. 2—6), on which are shown the boundary lines between the parishes, the twenty and forty feet contours and the habitation for each of the years. The source of the first map (fig. 2) is the great Danish land register of 1688. From this it will be seen that each parish comprised a clustered village (on glacial soil), and in addition there were three solitary farms (on the edge of the glacial soil). Sønder Kongerslev is on a slope of a dry, late-glacial valley (not shown on the map) with easy access to the meadowland to the east. There was at that time an open green in the middle of the village maybe as a later development from a single row of farmsteads. The place name termination dates it back to 500 A. D., but it may be

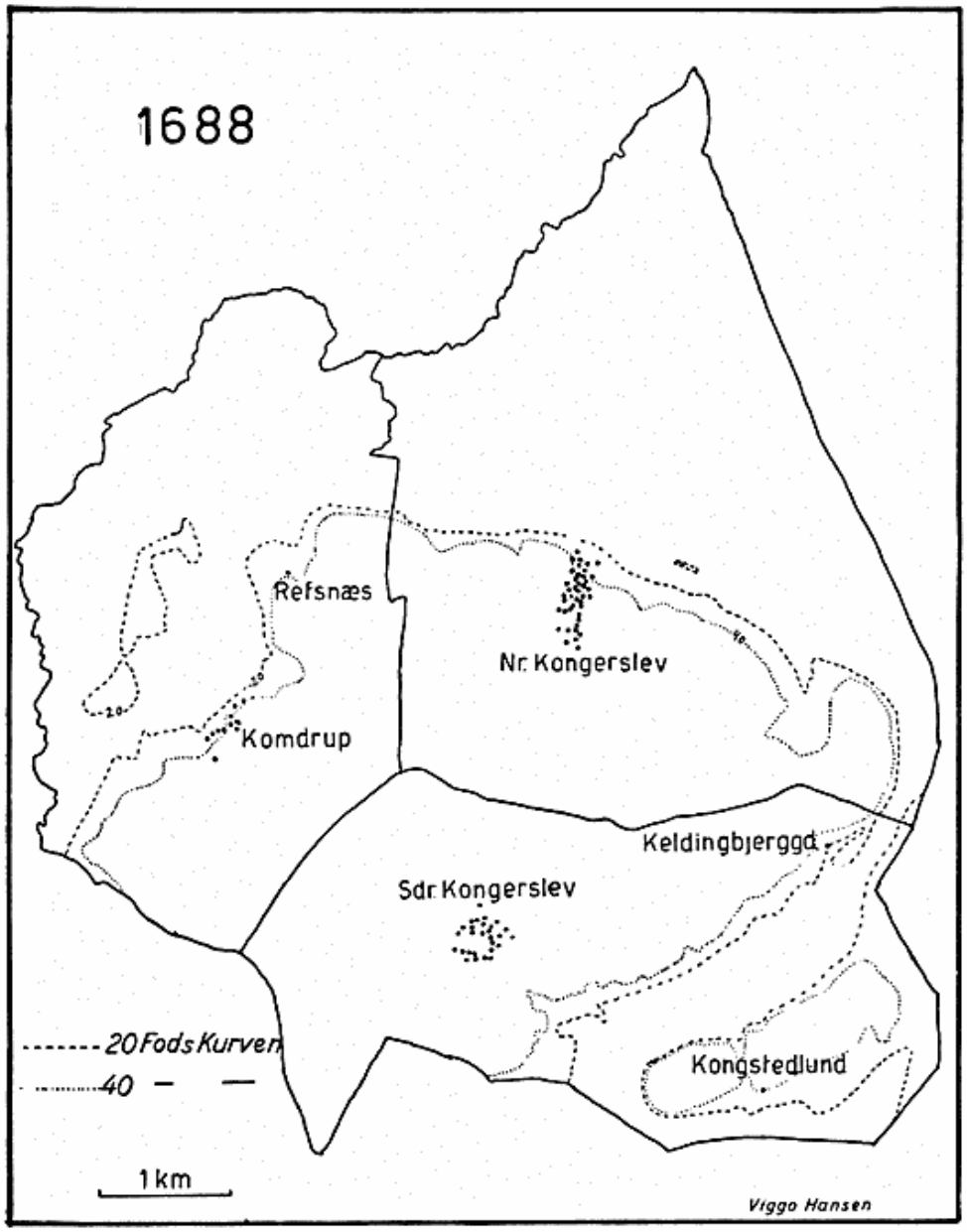


Fig. 2. The habitation in 1688. The three clustered villages are dominating.

much older, because there is a cluster of Bronze Age barrows just to the south of the village, meaning perhaps an uninterrupted farmers' settlement from at least 1000 B. C.

Nørre Kongerslev village to the north of Sønder Kongerslev bears the same name as this one, but still it may be at least a hundred years younger and founded somewhere about 600—700 A. D. The farm grouping is here perpendicular to the old coast line, indicating

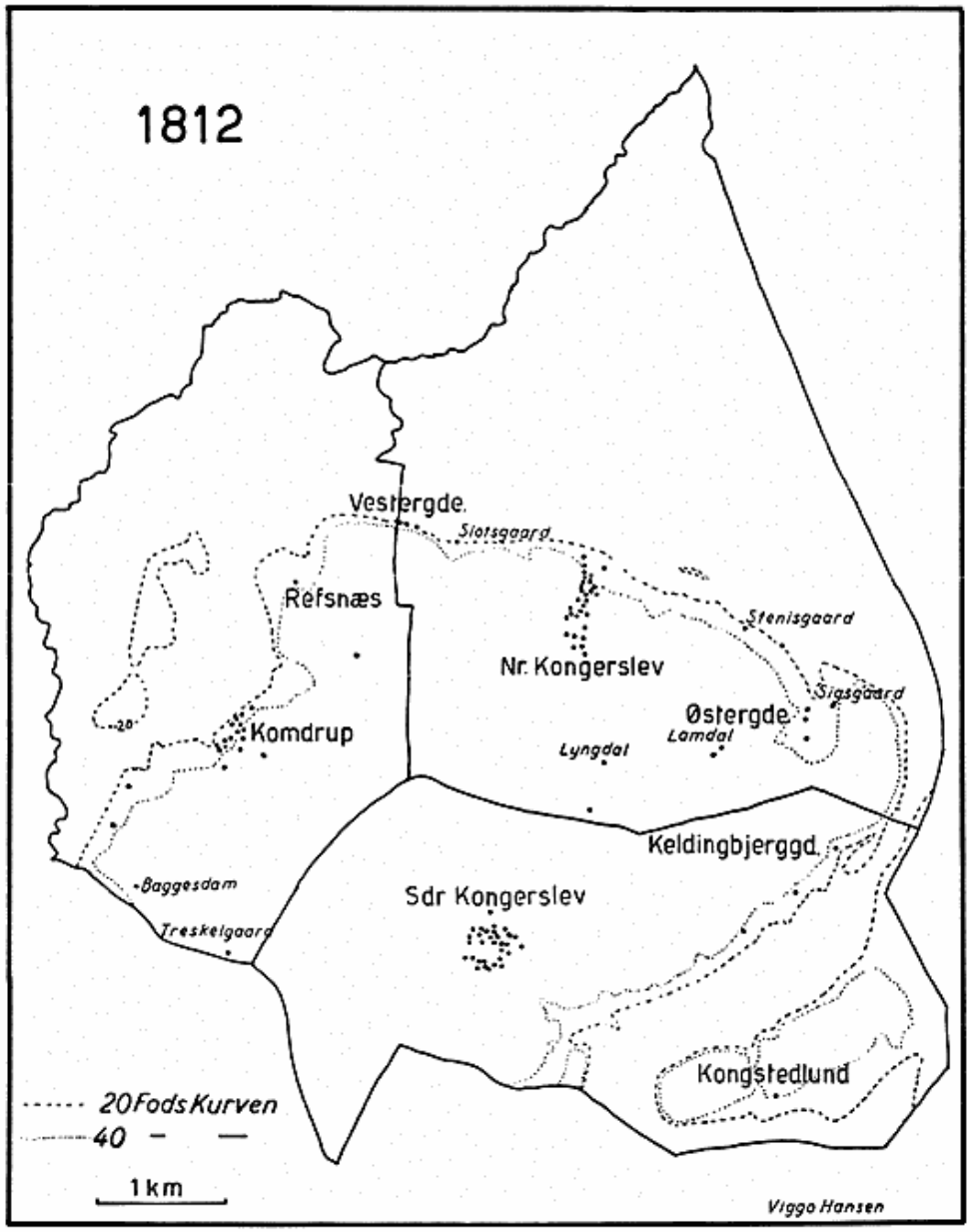


**Fig. 3. The habitation in 1812. Most of the new-built farms are situated between the twenty and forty feet contour lines.**

that the raised sea bottom must have been usable, if only in part, at foundation time. This is supported by archaeological investigations showing that the uplift of the land was not yet complete at the beginning of the Christian era, and because of the climatic deterioration with an accelerated growth of peat mosses round 400 A. D., which made the bog land immideately to the north of the village unusable at least until 600 A. D.

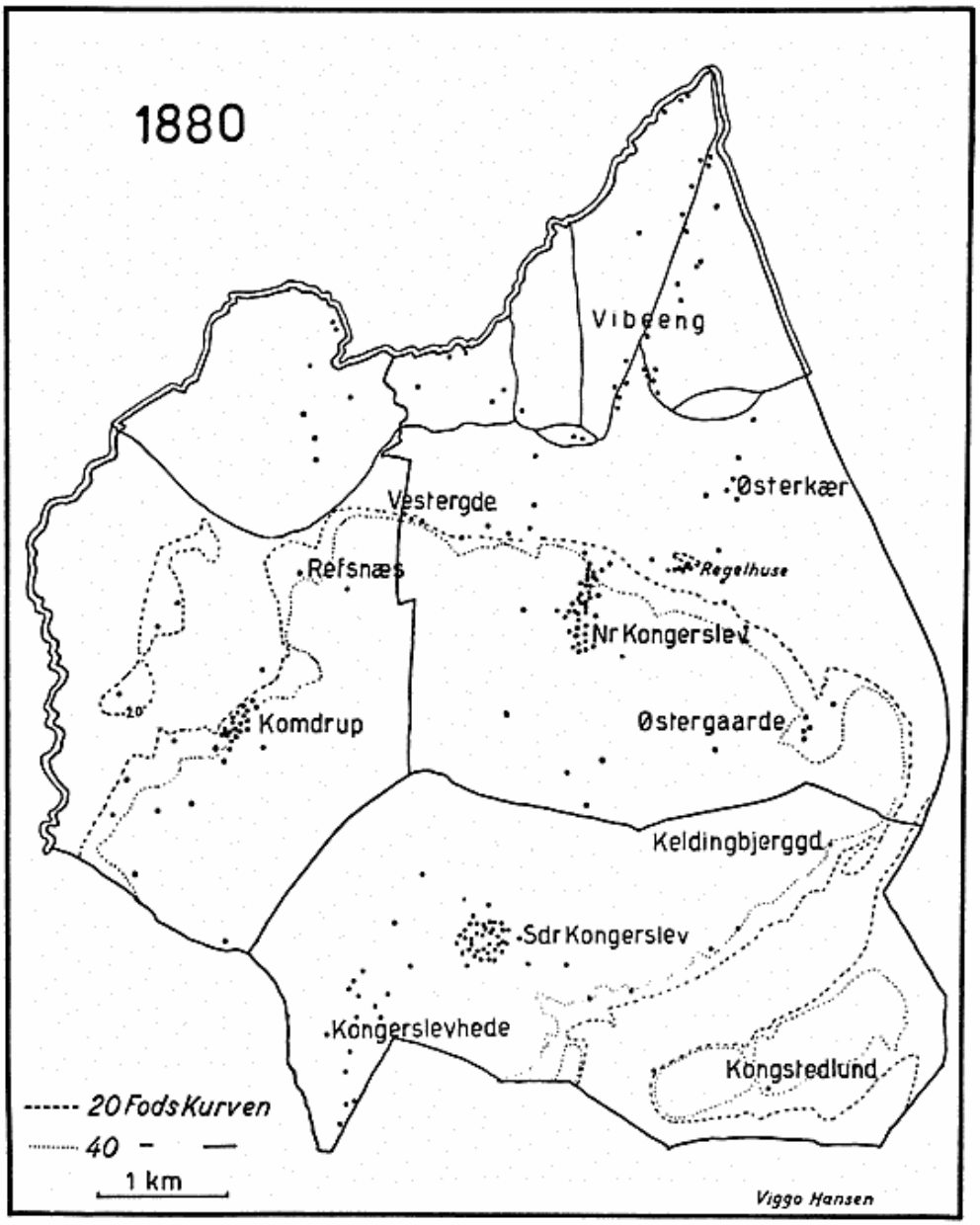


Fig. 4. The habitation in 1880. The thin lines in the meadows to the north and the extra line along the parish boundary indicate the position of the water courses at the beginning and the middle of the 19th century.

Komdrup village is the younger of the three and goes back only to Medieval times (1000—1200 A. D.). The farmsteads are here grouped on a line parallel to the Stone-Age shore line, indicating a more intensive use of the low-lying meadow lands, which at that time had dried so much that livestock grazing was of importance.

Of the three solitary farms at least two (Kongstedlund and Refs-

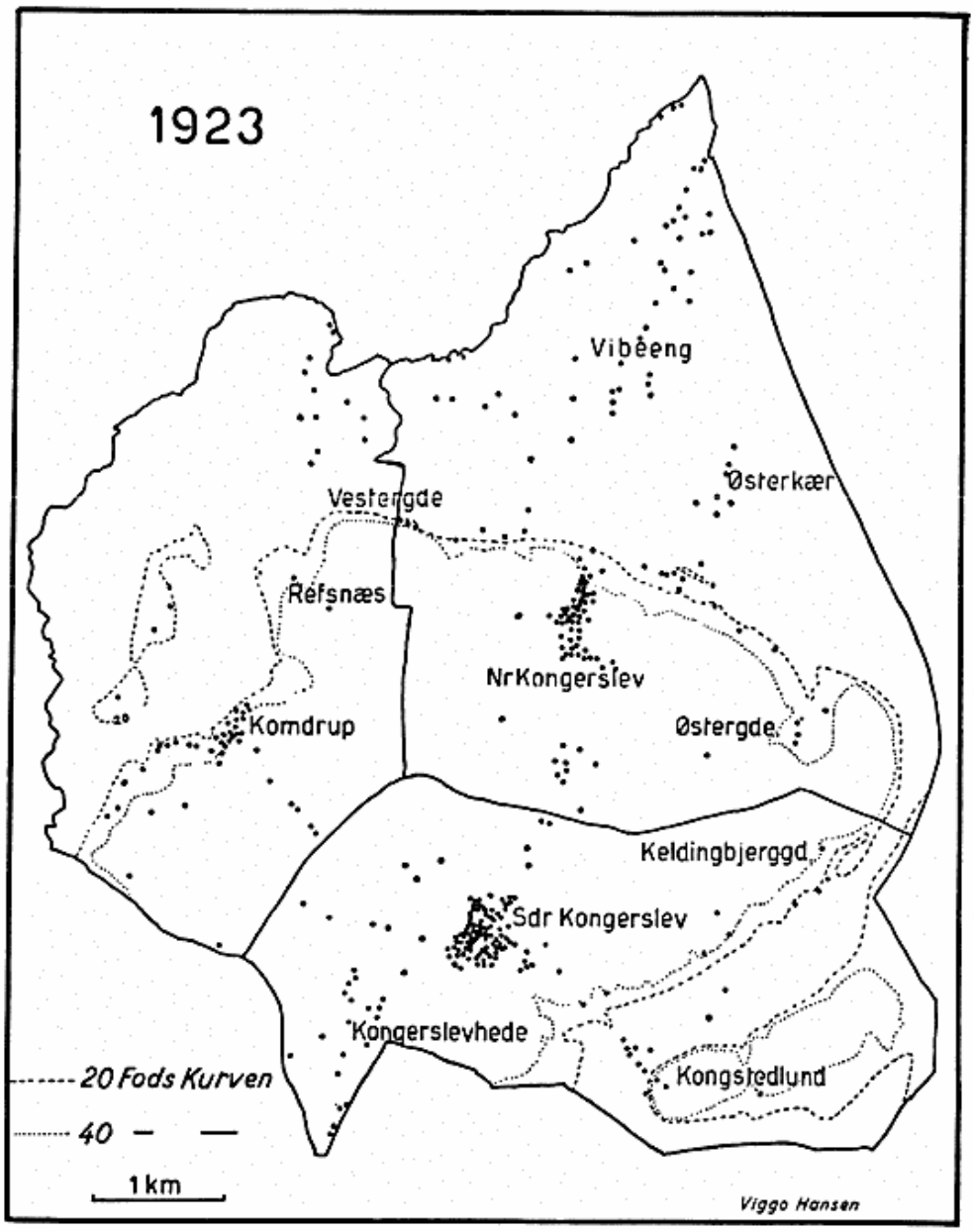


Fig. 5. The habitation in 1923.

næs) can be dated back to the fifteenth century. They were owned and lived on by noble families and had separate enclosed fields, while the villages at that time had their land lying in common.

The nex map (fig. 3) shows the situation in 1812, some twenty years after the passing of the Enclosure Act, when each farmer had been allotted his share of the common fields and now was allowed to move the farmstead out of the village. From the map it will be seen that several farmers made use of this opportunity. But it is also

evident that except for a few (Lyngdal and Lamdal) the farmers moved to certain preferred places, inasmuch as most of them built their new farms between the twenty and the forty feet contours. Just here is a narrow brim of a terrace, an abrasion plane made by erosive wave forces in Stone-Age times. The special attractions of these places are evident from the formation of not only single farms, but even small hamlets like Østergårde and Vestergårde, something between a village and a single farm. Exposed sites were never chosen, not even by the farmers who moved into the central plateaux, as indicated by the place names like Lyngdal (heather valley) and Lamdal (supposedly: long valley), and the other ones had found similar sheltered places.

The time after 1840 was a prosperous one for Danish farmers, and as the population increased as never before, there was an ever growing demand for more land. Fortunately it was possible to meet this demand, because at that time there was still a lot of waste or little used land in the former commons, still mostly growing coarse grasses and heather because of insufficient manure, and because chemical manures were unknown. Another reserve of land in this region were the wide areas of wet meadows that only needed draining to turn the svamps into good agricultural land.

Favourable prices for grain and livestock produce in the years after 1840 were an effective stimulus for converting all formerly waste land into productive agricultural soil by means of more rational methods in the use of manures and fertilizers and in drainage.

Fig. 4 (1880) pictures the result of 40 years' efforts to meet the demand for agricultural land. On the high lands a new habitation grew up on former heathland, Kongerslevhede, while at the same time the empty space between the old villages had to some extent been filled up with farms that moved out of the villages. To the north the low lying meadows were tilled and inhabitated, and two new settlements had sprung up here (Østerkær and Vibeeng). The farmsteads are more and less linked to the canals and open ditches which are also followed by a system of new roads. The nearness to the open canals and to other streaming waters is not only due to better drainage near these, but also to meet the demand for fresh water. For many years at first the water in the ground was saline, and the fresh water problem was only solved by digging open canals or in other cases by laying down pipes from boring on the high land.

The result of this land reclamation in the later part of the nineteenth century was a rapid increase of farmland as well as of new farmsteads, as shown in the table.

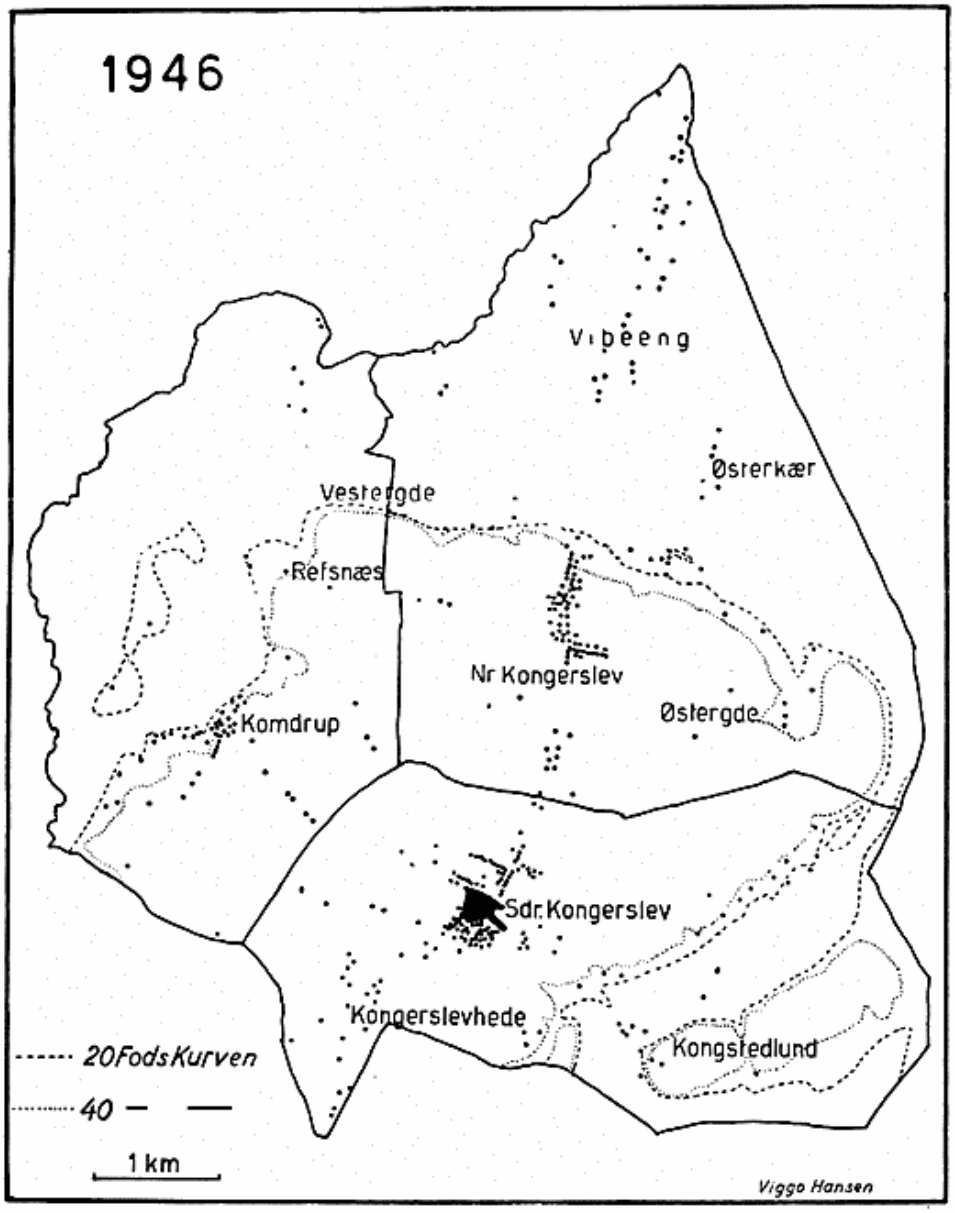


Fig. 6. The habitation in 1946.

It is astonishing to see how the number of complete farms is unchanged from 1850 to 1895. All new holdings are classified as small holdings, the number of which has increased from 43 to 101, and this increase is even confined to the two Kongerslev parishes. The 28 new holdings in Kongerslev parish are the result of heath reclamation in Kongerslevhede, while the 41 new holdings in Nørre Kongerslev parish are on reclaimed meadowland. Similar holdings on former meadowland in Komdrup parish, shown on the map but

*Number of complete farms (F.) and small holdings (H.) 1850 to 1895.*

| | 1850 | | 1860 | | 1873 | | 1885 | | 1895 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | F. | H. | F. | H. | F. | H. | F. | H. | F. | H. |
| Sønder Kongerslev..... | 17 | 12 | 18 | 13 | 16 | 29 | 17 | 35 | 16 | 40 |
| Nørre Kongerslev..... | 29 | 25 | 31 | 28 | 29 | 38 | 29 | 61 | 29 | 66 |
| Komdrup ..... | 19 | 6 | 19 | 8 | 19 | 7 | 20 | 6 | 20 | 5 |
| Total ..... | 65 | 43 | 68 | 49 | 64 | 74 | 66 | 102 | 65 | 101 |

not in the table, are cottages (without farmland) on land owned by Refsnæs manor.

The twentieth century shows a continuous increase in the number of farms and at the same time an acceleration in the general displacement of old farms from the villages into their own plot on the plateaux. New holdings increased by 34 from 1904 to 1940, of which 12 were in Sønder Kongerslev, 11 in Nørre Kongerslev and 11 in Komdrup. But now most of them are State-subsidied, half of them on land below the twenty feet contour, the other half on high lands, mostly roadside houses (see fig 5 and 6 ). There is also a general change of location for many older holdings, away from remote places towards the roads with better transport facilities. The dependence on free fresh water surfaces is no longer urgent, because Vibeeng and Østerkær now get their water supply in pipes from Nørre Kongerslev. It is also obvious that special relief features no longer play a part in the choice of building sites. New holdings are now more or less located along road sides, and predilectively on high spots, where older farms are seldom found.

The village itself experiences a radical change in the course of the twentieth century. Old farms move into their fields (often after a fire), and small houses grow up on theirs sites. But the change is not uniform in all three villages. In Komdrup the influence is only slight, in Nørre Kongerslev rather more pronounced, while Sønder Kongerslev has undergone a complete change. From a purely rural habitation of farmsteads and cottages it has been transformed into a trade and service centre, not alone for the three parishes but also for a big area to the east of the village. The railway came in 1900, and one of the results was the development of a peat industry which took its raw materials from the extensive Lille Vildmose bog in the

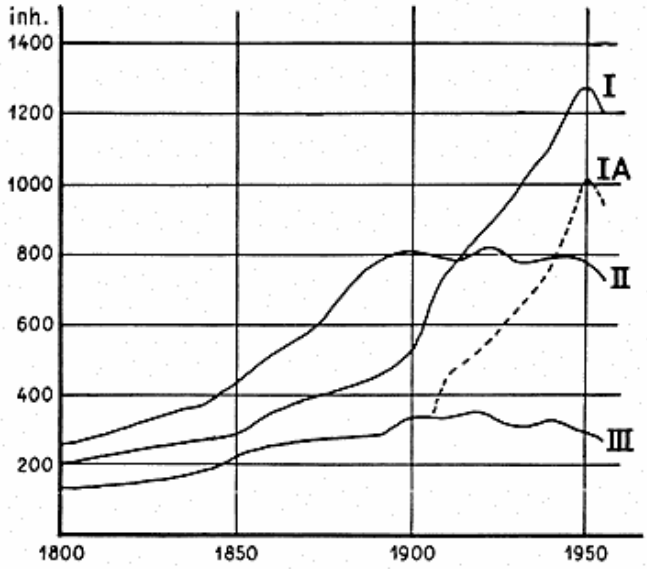


Fig. 7. Diagram showing the development of the rural population 1801—1955. I: Sdr. Kongerslev. I A: Kongerslev, railway town. II: Nr. Kongerslev. III. Komdrup. The railway from Hadsund via Kongerslev to Aalborg was opened in 1900. The rural population has been stagnant ever since the turn of the century, or even decreasing.

east. This industry had a new boom during the Second World War, and when the supply of peat was nearly exhausted, hundreds of hectares of the bog were reclaimed and made into arable land.

Today only a trained eye can find the old village site in Sønder Kongerslev, behind the shopping centre with its many new streets. This new development, which really began with the opening of the railway in 1900, has only affected the town population in Sønder Kongerslev, while the rural population has been stagnant ever since the turn of the century, or even decreasing (see fig. 7). This is a quite normal development for Danish rural districts owing to urbanization and to mechanization in farming.

Even if only a small area has been dealt with in this paper, it more or less reflects what has happened in most Danish rural districts: the reclamation of heathland, the drainage of waterlogged areas, the dispersal of farms and small holdings, the transformation of the old village structure and population flight from rural areas, and the growing up of local urban centres. It is only a question of difference of degree, and the area discussed may be regarded as a pattern of most Danish regions.

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