Including landscape in long-term spatial planning

A pilot study of Västra Götaland
Including landscape in long-term spatial planning – Foreword

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8. Historical time depth in the landscape

In this account of the cultural heritage, the focus is on man’s use of the landscape and its natural resources. The description is thematic and highlights parts of the historical development which have importance for characterization of the landscape and which can have significance on long-term spatial infrastructure planning. History provides an explanation for why the different parts of the landscape look as they do today. In this way this chapter, together with chapter 6 on the form of the landscape and chapter 7 on landscape ecology, provides a background to the regional landscape characterization in chapter 4.

In this chapter you can read about:
8.1 An economic structure with historical roots
8.2 Settlement patterns and society
8.3 Communications


Västra Götaland equals diversity. Few other regions have experienced so much between the arrival of the earliest inhabitants in prehistory up to today’s high-tech knowledge society. It is a story that spans 13,000 years.

From the very beginning, contact was established between the coastal and inland areas and bound the region together. Fjords, rivers, creeks and ridges were for long the natural communication routes. Road systems followed the older routes. Even when the region was divided between the three states of Norway, Sweden and Denmark, and constant wars plagued the inhabitants, contacts and trade continued across borders. Many of the routes planned for future infrastructures will be following a pattern that is a thousand years old.
8.1 An economic structure with historical roots

Perhaps the easiest way to appreciate the extent and diversity of Västra Götaland is to look at its economic structure. The region has five prominent economic profiles that have evolved from the conditions of the landscape and its continuous use over a long period.

When cultivation and animal husbandry was introduced differences arose between the regions, based on soil, climate and access to tools and knowledge. Conditions on the plains were good and gave rise to an agricultural surplus that could be sold. Along the coast the land was unproductive, but fishing put food on the table and sometimes provided a sufficient income. In some areas large forests were used to produce coal and timber. In others man began early to sell handcrafted products.

When economic structures began to develop in western Sweden in the 18th century and especially when industrialisation took hold in the 19th, these depended greatly on the availability of natural resources and human skills. Here, former supply patterns are easily recognised. Industries with distinctive manufacturing requirements made their entrance into various parts of the region. In Bohuslän the canning industry, stonemasonry and boatyards took hold. In the predominately agricultural areas, such as the plains around Skara–Vara, abattoirs, dairies, other food processing plants and fodder industries were located. A dynamic textile industry developed in Borås, in Sjuhäradsbygden and in the neighbouring town of Alingsås. The Göta Älv river valley became a centre for the metal industry and Dalsland for the production of paper. Engineering and shipbuilding dominated in Göteborg. In the countryside the refinement of local produce took on small-scale industrial status.
Five distinct trade and industry profiles (näringprofiler) in Västra Götaland, each with a long history, that create distinct physical features in today’s landscape. Map: KMV Forum.
Sea and stone

“The great herring years”. This was the name for the period between 1747 and 1809 when herring was exceptionally abundant in the Bohuslän archipelago. In such periods of good fishing the small-scale farmers of Bohuslän could supplement their meagre incomes. The herring season in the late 18th century was unusually long, and it coincided with an extended period of peace. It was a true gold rush, the traces of which can still be seen in the landscape. Many new fishing villages emerged, and a variety of processing industries were set up, using such fish as, e.g. salting and herring-oil production. The residual product from the herring oil boilers was sold as fertilizer. A large portion of the fish products were exported. The fishing industry provided many jobs, which led to a large-scale migration to the coast. The wealth created by these fisheries also led to a particular style of architecture. Large residential buildings from this time, two-storied and painted in bright colours, still characterize the fishing communities in Bohuslän.

Deregulation within shipping in the mid-19th century, along with new transportation facilities, i.e., the steamboat followed by the railway, resulted in a new period of intense growth. Herring from Bohuslän which could now be sold fresh in Stockholm, competed with the herring fisheries in the Baltic Sea. In modern canneries herring could be processed further. Efficient and inexpensive transportation also created opportunities for the emergence of the stone industry. Bohus granite became a popular building material exported to several countries in Europe, but also further afield, including South America.

The steamer also made travelling easier and it became possible for most people to visit places outside their own community. Those who could afford it could go on longer trips as tourists. By the late 19th century the west coast with its invigorating spas, had already become a popular destination for the social elite. At the beginning of the 20th century the strict bathing culture was replaced by freer attitudes, with open-air baths along the coast, vacation homes and seaside bathing resorts.

After the Holidays Act came into being in 1938 the public bathing culture was classified as a recreation, and the west coast became a major tourist destination. Holiday villages began to be established at bathing resorts. In recent decades, tourism has grown all the more. The major sites include Göteborg with its many attractions and events, and the tourist beaches, camp-sites and holiday villages along the coast.

In Bohuslän, the fishing and canning industries expanded with the shipbuilding industry in Uddevalla and oil refineries off the coast of Stenungsund and Lysekil. The shipyard era was short, but the petrochemical industry lives on, stronger than ever.

Examples of imprints upon today’s landscape

- Fishing villages with characteristic buildings
- Canning industries
- Quarries and other remains from stone masonry activity
- Tourist resort settings from the clubhouses and summer villas of the 19th century to today’s beaches, camping grounds and holiday villages.
- Oil refineries
- Boatyards
Fishing and seafaring were central to the communities then as now. Then tourists arrived for bathing, and today there are more holiday visitors than permanent residents in the fishing villages. Photo Tobias Noborn.

Once there were herring seasons and herring-oil boilers, today there is the canning industry. Photo Tobias Noborn.

Once shipyards, dependent on seafaring, and now oil refineries.

The stone-cutting industry is a feature of the Bohus coast, and has left its mark on the road network in particular, as, during the depression of the 1920–30s, the Unemployment Commission used out-of-work stone cutters in their road improvement schemes (so-called AK-roads) Right: Stone guards which once held wooden rails on Road 634, east of Jörlanda. Photo Johannes Kruusi.
The combination of waterways and forests was fundamental to the industrial development of Dalsland with its ironworks and paper mills. Today, this combination is an asset to developing tourism. Photo Västra Götaland, Bengt Schibbye.

**Water and forest**

In Dalsland as in other forested areas, the use of forest resources has always been an important ancillary to agriculture. With such activities as tar production, charcoal burning and timber extraction, incomes could be improved. At the end of the 17th century the forest and hydro-power from the Dalsland rivers began to be used by industry. A total of 17 iron works were built in which the pig iron from smelting in Bergslagen was further processed. Ironworks were also established in the forest district of Tiveden.

The demise of the iron industry at the end of the 19th century hit Dalsland hard. Forestry and related industries like sawmills, pulp and paper mills now dominated the landscape and became next in importance to agriculture. Since then Dalsland’s industrial profile has been characterized by these basic industries, particularly the production of paper. Today there are three paper mills in operation. As a result of a one-sided political stance the area was badly hit by the industrial closures of the 1960s–70s. The loss of jobs was offset by various regional operations, such as the establishment of factories in support of the automobile industry. The repeated crises since the 1990s within that industry have further affected the population.

Today, the forest and watercourses have again become important resources to Dalsland. Now it serves as an opportunity for recreation and outdoor activities. The wilderness draws tourists.

*Examples of imprints upon today’s landscape*

- Remains of forestry activities, tar pits, charcoal pits, charcoal waste, etc.
- Ironworks and remains of iron production
- Paper and pulp mills
- Hydroelectric dams and other hydroelectric production
- Sawmills and sawmill ruins
Including landscape in long-term spatial planning - Chapter 8. The time depth of the landscape


Power station in Ödeborg. Photo Mia Björckebaum.
Including landscape in long-term spatial planning – Chapter 8. The time depth of the landscape

Leather and textiles
Southern Västergötland has a long tradition of textile crafts thanks to agricultural specialization in animal husbandry. The industrial textile era began in the 18th century when the first manufacturing plant opened in Alingsås. In Sjühärad district the textile craft developed into a proto-industry where goods were sold by travelling hawkers (knallar). The production system that later evolved was to engage a large proportion of the rural population. Weaving was carried out at home according to the orders of the producers, who also provided the weavers with material. This profitable business is manifested by the many producers' stately homes and farmsteads in Sjühärad bygd. In the 1830s the first step towards a large-scale textile industry was taken in the Viskan and Haggan Valleys where the Rydboholm Weaving House was founded.

During the industrial era the district of Sjühärad was Sweden's most important region for textile production. Borås lay at the centre of the activity, and it grew into one of the nation's largest cities. Textile factories expanded production and created many new jobs, especially for women. Labour was brought in from northern Sweden and Finland. The trading traditions of the travelling salesmen (knallarna) were taken over by the mail order business.

Deregulation, along with foreign competition, initially from southern Europe and then from south-east Asia, undermined the Swedish textile industry in the 1960s and 70s. Almost all large-scale industrial production was demolished during the textile industry's crisis years.

Today the textile tradition lives on in the Sjühärad district in terms of production of speciality textiles. Mail order companies also continue business, but trade increasingly takes place over the Internet.

Examples of imprints upon today's landscape
- Producers' farmsteads
- Factory sites for the textile industry
- Shopping centres, outlets, etc.
Proto-industry developed into industry and the area surpassed Norrköping as a textile centre. Today the textile and clothing (T&C) industry is still strong, manufacturing many well-known brands, and housing outlets and mail-order firms. Maps from The National Atlas of Sweden: cultural landscape and buildings volume.

Cattle provided leather and soon a leather and textile business developed, with handicrafts, shoes, clothing and hawkers. The proto-industrial system of a producer-steered cottage industry is typical for the Sjuhärad district and explains the provinces’ many grand country houses which belonged to these rich producers. Photo Tobias Noborn.
Metals and the engineering industry

The 19th century was the era of great inventions. New communications and production methods, particularly in the steel and engineering industry, created opportunities for rapid industrial growth and large-scale production. Hydro-power could be converted into electricity with the help of new, improved water turbines. A large number of revolutionary innovations, such as the telephone and the motorcar, changed people’s lives. Workforces for the new factories and plants were found in the rural areas where there was a large, impoverished population. More and more people made their way to the towns in search of a better life.

Nydqvist & Holm, who built their mechanical workshop beside the waterfalls in Trollhättan in the 1840s, was an early industrial company to use the new technologies on a large scale. In Göteborg, the invention of the spherical ball bearing led to the founding of SKF that quickly grew into a multi-national corporation. During the 20th century, the area around Göteborg and Trollhättan was a centre for Swedish automobile manufacturing.

Today, the service sector has taken over as the largest source of income in the region, but the manufacturing industry still has a strong position. The industry is highly cyclical and has experienced both ups and downs. The largest companies, such as SKF, Volvo and Volvo Cars, all have several manufacturing sites in the region, along with SAAB whose future is currently uncertain. There are also a large number of subcontractors. The region’s industrial ambience is still a good breeding ground for new innovations, many of which have grown into major industrial companies.

Examples of imprints upon today’s landscape

- Hydro dams and other hydroelectric production sites
- Engineering industry and automobile factory sites
Agriculture and the food industry

Agriculture has evolved into industrial food production in the central plains of Västra Götaland, where growing conditions are so favourable. The development from self-sufficiency to overproduction took place early on, leading to sales and a refinement of the locally produced material. For example, cheese production had started in Falbygden as early as the 16th century. Water-powered mills were built on waterways. From the end of the 19th century dairies, slaughterhouses, feed mills and other related industries were constructed, especially in relation to railway communities.

In recent decades, the central farming communities have merged and now embrace large-scale agriculture, with outsized animal barns for meat, and food production plants. At the same time a trend in the opposite direction, of numerous small plants manufacturing locally grown and organic foods has started elsewhere.

In recent years, wind farms have emerged as a new sideline sometimes with a greater economic impact than agriculture. The signs of this trend are most evident in the great plains.

Examples of imprints upon today’s landscape

- Mills and evidence of watermill use of rivers
- Dairies, slaughterhouses, feed mills, food industries, large/scale production sites
- Wind turbines

The plains, if managed correctly, provide the prerequisites for large-scale industrial production.
Agriculture has become a major industry. Vadsbo Plain. Photo Mia Björckebaum.
Before the land was parcelled out, settlements were clustered into villages on the plains. The countryside was a combination of pasture, cultivated fields and meadows, used collectively among the many farms. Today only a few villages remain. The picture shows Long village, a window on the past, surrounded by a changed farmland.

When the land was divided farms moved out from the villages to new sites, and the land was remodelled into separate sections for efficiency. The meadows were transformed into tilled fields. The plain beyond Kväänum is a clear example of a parcelled landscape with straight highways, access roads, and many scattered farms.

The plain at Saleby shows how rationalization has continued down to the present day. It gives the impression of a "tidied-up" plain without any landscape features. On the left, Saleby Church village which has medieval roots.
Agriculture as the base economy

In Västra Götaland agriculture has had a vital role to play in building up the character of the landscape and its roots lie far back in history. But the effect on the landscape varies from one location to another, depending on differences in terrain, climate, demand and tradition.

In the Neolithic and Bronze Ages, the cultivation of crops and care of livestock was subsidiary to hunting and fishing for a long time. The light soils on the moraine hills and in the valley slopes were cultivated by clearance and crop rotation. Remains of this earliest agricultural practice, such as the clearance cairns in southern Västergötland, are usually found in areas that today are forested or lie bare. The structure of today’s agricultural landscape took shape during the Iron Age. The climate grew colder and animals were stabled over the winter. This facilitated the collection of manure and its use as a fertilizer in the cultivated fields. With new iron tools, heavier and higher-yielding soils could be tilled. Agriculture now became the basic means of livelihood. In southern Västergötland a reorganization of field systems took place during the Iron Age. Long narrow plots began to be used fenced in by stone rows or embankments.

In the Middle Ages the plough and other agronomic innovations increased agricultural yields and the agrarian economy flourished until the Black Death of the 14th century, which in Bohuslän wiped out almost half of the population. This resulted in many vacant homesteads and a temporary stagnation in agriculture. Survivors found improved conditions for cattle breeding, as newly deserted farmland could be used for meadow and pastures. During the following centuries the regional variations in agriculture became more pronounced and left their impact on the landscape. On the plains, cereal cultivation and an abundance of meadows and pastures developed. Animal husbandry continued in the countryside. In some areas heavy pressure from grazing converted lean forests into moorlands. Svältorna in central Västergötland is a famous example. In the forested regions a varied economy of agriculture was complemented by forestry and handicrafts.

From the mid-18th century, agriculture could no longer feed the growing population. With the help of three land reforms, of which the regulated land parcelling of 1827 had the greatest impact, farming was reorganized. The medieval villages were “exploded”, i.e. farms were relocated outside the villages. The worked land was gathered into large contiguous parcels around each farm. In areas where villages had been large, such as the plains and in Falbygden, this changed the whole farming landscape.

The 18th and 19th centuries were also the time when life in the mountains of western Sweden flourished. Here there were commons which colonisers could settle for a fee. In just a short time large areas became cultivated. But farming was not profitable on these lean soils and after a few generations of exhaustive labour, most farms were left to their fate.

Industrial innovations also affected agriculture in the form of improved farming methods and new crops. The collective structure of the land reform was reinforced and farmland was gathered into larger fields and rationalized. The drop in water level of the lakes also increased acreage and new drainage improved the soil. The result was an entirely new landscape of regular fields and straight roads. The plains were converted to a landscape of fields. Developments in western Sweden were accelerated by the organized export of oats in the mid 19th century. Oats were also grown in forest areas, such as Dalsland, where extensive land reclamation took place. By 1900 the oats era had ceased. Large areas of arable land and heath land were replanted with spruce.
Stone cairns and walls are among the diagnostic features of the cultivated landscape. Cultivation cairn south of Herrljunga. Photo Mia Björckebaum.

Working farm in Kymbo, in the borderland between Falbygden and the mosaic landscape. Spruce plantations on the unusable land beside the farm buildings are typical of the rationalized farming of the late 20th century. Photo Mia Björckebaum.

Cultivated landscape in Färgelanda, Dalsland. Silage bails are a modern sign of a working farm, at least just after the hay harvest. Photo Mia Björckebaum.
After World War II, Swedish agricultural policy targeted self-sufficiency. Production was subsidized by the government, agriculture was rationalised and tree-lined avenues, stone walls, clearance mounds, ditches and other impediments to cultivation were removed. This was followed by a conversion period where the land was left fallow or planted with forests. Today the plains are dominated by tightly streamlined grain cultivation. The agricultural landscape has been restructured through the acquisition and merging of farms. Many farmhouses now lie empty amidst this heavily cultivated landscape, while new farm buildings are being constructed to suit large-scale management. Beyond the plains, arable land is increasingly being used for recreational purposes. The small peri-urban farms are being transformed into horse farms or holiday homes. Agriculture has also been strongly affected by the various EU support programmes.
Examples of imprints upon today’s landscape

- Fossil fields from both prehistoric farming and new developments of the Middle Ages
- Traditional pastures with long continuity, in some cases from as far back as the Neolithic Stone Age with grazing vegetation such as ribwort plantain
- Stone walls, clearance cairns and cattle paths
- Heather covered heath land
- The remains from charcoal making, tar pits and traces of other forest activities
- Farm and settlement locations from the period prior to the land reform
- Large-scale land reform parcelling of arable land with relocated farms, straight lines, stone walls and clearance cairns
- Lower lake levels, straightened ditches and waterways
- Remains of 18th-19th century agriculture and crofts in the mountain areas
- Spruce plantations from the late 19th century and throughout the 20th.
- Industrial agriculture, rationalization into open unbroken farmland in the 1960–70s removing landscape features, and adding large buildings for machinery.
- Conversion period, replanting fields with spruce and willow.
- The effects of current agricultural policy promoting environmental landscape management and the farming of specific grain crops, such as corn.
- Swine pens and free range “activity” stalls, in line with modern animal husbandry.
- Today’s deserted farms on the plains, peri-urban horse farms, holiday homes.
Trade
Trade has always played a major role in the west of Sweden. It had a strategic location by the sea and was close to the borders of Sweden, Denmark and Norway. As early as the Bronze Age trading in handicrafts and other goods became increasingly important to the area with contacts directed primarily toward the west and south. The major seaway along the west coast was Northern Europe’s most important trade route in the Iron Age. Like Lödöse in the Middle Ages, so is Göteborg today an important trading town. It has a long tradition of foreign trade and shipping. In the 17th–18th centuries trade with countries in Asia, Africa and America increased. Trade was conducted by trading houses such as the Swedish East India Company.

Many trading houses started in Bohuslän where the nobility, unlike in the rest of Sweden during the 17th–18th centuries were allowed to engage in trade and shipping. The possibilities for income from land ownership were small in barren Bohuslän.

Strong trading traditions are also associated with the district of Sjuhäradbygden on the old border between Sweden, Denmark and Norway. The travelling merchants of previous centuries have merely been replaced by mail order and internet sales. Trade is still strong along the border between Sweden and Norway. Trading in Strömstad and northern Bohuslän has an annual turnover of billions and generates thousands of jobs. As in other parts of the country since the 1970s external trade has developed strongly throughout the region, in the tracks of the automobile industry creating major trading areas.

Examples of imprints upon today’s landscape
- Commercial buildings in the Göteborg area and Bohuslän, manors
- Border trade at Strömstad
- Shopping centres and commercial areas

Trade then and now. Left: then: related to sea transport; Göteborg’s Warehouse. Right: now: used for cars. Photo Tobias Noborn.
8.2 Settlement patterns and society

The region we now know as Västra Götaland bears the marks of thousands of years of human and social processes. What did the first inhabitants think when they reached the islands of this sparse archipelago? They at least stayed, to judge by the settlements that survive. When the people of 6,000 years ago began to cultivate the soil, bury their dead in magnificent stone chamber tombs and form communities, areas such as Uppland in east central Sweden still lay under water. In the Middle Ages, churches were built and towns were founded. It was a mixed area of Norwegians, Danes and Swedes until the mid-17th century when Sweden gained power over the region. During the Industrial Age a rapid social transformation began that led to the welfare state. During the 21st century, global issues are increasingly gaining attention.

The first people arrive, permanent settlements are established

About 13,000 years ago, the last Ice Age had released its grip on the western edge of today’s Västra Götaland and left behind an archipelago landscape. There were protected beaches where the hunters and fishermen of the time could build their camps. The oldest settlements have been found in central Bohuslän, around Lake Hornborga and the lakes Mjörn and Anten. The inhabitants probably lived in family groups that met regularly for various gatherings. The different groups also had contact with each other; we know this from the similarity of the tools found. In western Sweden the hunting and fishing culture of the Mesolithic lasted for more than 5,000 years. Towards the end of the period, the population began to become more sedentary and to use increasingly sophisticated tools.

The transition period when people began supplementing hunting and fishing with farming and cattle breeding is usually described as the start of the Neolithic. In western Sweden this happened about 6,000 years ago. The nomad lifestyle was replaced by fixed settlements, which in turn increased the need for a more structured society. It began to be important to show one’s affiliations and social status. Nowhere in what we today call Sweden, can this development be observed more clearly than here in the west.

With the new lifestyle came new ways to bury one’s dead. The result was large stone chamber graves, so-called megalithic tombs. These are usually divided into three types that partly follow after one another in time. The dolmens were the oldest type, and were most common in Bohuslän. Passage graves dominated in central Västergötland, and stone cists were the most recent. The tombs are collective burial sites. They
often contain the remains of several individuals, sometimes up to a hundred. That the people had become permanent settlers can hardly be manifested more clearly. The stone chamber graves also indicate the great significance of the area at this time.

These graves in today’s Västra Götaland share similarities with burial rites further south in Europe, especially along the Atlantic coast. This indicates how contemporary groups had contacts and connections with one another over great distances.

**Examples of imprints upon today’s landscape**

- Mesolithic hunter–fisher settlements. These often lie well hidden under today’s ground surface and what mostly survives are the waste pieces of quartz and flint from tool production. Traces from this culture are therefore difficult to find without expert knowledge.
- Neolithic farmers’ stone chamber tombs. Dolmens (most common in Bohuslän), passage graves and cists.
- Settlement patterns in Falbygden with continuity from the Neolithic.
Developments during the Bronze Age

The former districts of central importance, i.e. Bohuslän and central Västergötland including Falbygden, Varnhem, Kålland and Kinnekulle, etc., retained their high status during the Bronze Age which began around 4,000–3,500 years ago. The surviving ancient monuments indicate that at that time new areas were being settled, e.g. the drumlins in Västergötland, the south Swedish highlands and Dalsland. Large burial cairns and mounds, along with finds of precious bronze objects, indicate an increase in social inequalities during the Bronze Age. Local magnates began to forge alliances with each other to increase their positions of power.
Examples of imprints upon today’s landscape

- Burial cairns and burial mounds that indicate Bronze Age social structures
- Other relics including chipped stone (found in waste from the formation of platforms and mounds and burial sites) and simple rock art
- Settlement patterns from Bronze Age colonization

Map showing density of known ancient monuments from the Bronze Age. These are still concentrated in Bohuslän and Falbygden but new central settlement sites have emerged e.g. around Herrljunga and Vårgårda. The map is based on a selection of monuments from the National Register of Ancient Monuments.
New social structures created during the Iron Age

The social structures and cultural areas which are still visible in the landscape date from the Iron Age, which began about 2,500 years ago. The c. 2000 known cemeteries have a relatively even distribution throughout the region, suggesting that the resident population spread quickly to new areas. Intensive colonization took place throughout Bohuslän, in the central parts of Västergötland and southern Dalsland. Sometimes there was a major exodus from the old centres to new places. An example is the move out of Falbygden to the surrounding plains.

In the old farming districts settlements were relocated to areas giving better yields. Land and cultivation became more strongly linked to a homestead which contributed to the formation of villages. This development can be clearly seen in the rift-valley landscape. In Bohuslän, the cultural landscape of today is the result of activity during the Iron Age.

From a regional perspective magnates obtained greater power and formed small kingdoms which often became the basis for subsequent administrative divisions.
Examples of imprints upon today’s landscape

- Settlement patterns from Iron Age colonization
- Common types of graves in the Iron Age were various stone settings (circular, square or triangular) with central structures and standing stones
- Towards the end of the Iron Age small shallow graves, of even size, stone circles and especially mounds
- Cemeteries from the Viking Age
A Church and three realms with ambitions of power

The Middle Ages was a very important period for western Sweden, but it witnessed power struggles, war and harsh times for the local population. During the 10th century Christianity appeared in the West, and when Olof Skötkonung had himself baptized in Husaby, shortly after the year 1000, its spread was rapid. A Swedish state based on the dual structure of a monarchy together with the Church began to take shape. Västergötland stood at the centre of this development. A bishopric was established in Skara in 1020 and its cathedral was consecrated around 1150. Hundreds of churches were built in rapid succession and even today the area south of Lake Vänern shows this density. Parishes and district (härad) divisions were introduced to support the new administration. Although the organization was new, these subdivisions were often built on older social structures.

Throughout the Middle Ages, the border area of western Sweden was a battleground between Sweden, Norway and Denmark. Constant power struggles took place between the three kingdoms and between ruling clans. This had a harsh affect on the population. Along the border a total of forty castles and fortifications were erected. Many castles were not for defence alone, but used by the castle lords to also control trade in their local area. The stone house at Torpa in southern Västergötland is the most famous medieval castle in the region.

The diocese town of Skara which received city rights as early as the 11th century remained the Swedish area’s centre of power throughout the Middle Ages. Other towns were founded by state powers in order to control trade and collect duties and taxes.

In the Middle Ages the most important Swedish port and market town in this area was Lödöse. Norwegian medieval towns were Kungahälla (Kungalv), Marstrand and Uddevalla. In rural areas a comprehensive recolonization of forested areas took place at the beginning of the period, while the villages grew in the former outfields.

The monasteries in the Middle Ages had great importance as mediators for innovations, technology, art and culture introduced from the Continent. In Västergötland the Cistercians in Varnhem and Gudhem played an important role as disseminators of agricultural innovations. The mendicant orders, the Franciscans and Dominicans, sought out the towns. They founded monasteries in Skara, Lödöse, Kungahälla, Marstrand and Dragsmark on the peninsula of Bokenäs in Bohuslän.

Some churches are visible from afar and form landmarks in the landscape, if e.g., they are positioned on high ground or have towers; others are less visible. Both bear witness to the development of society, and often that of the road systems. Left: Mellby’s large 19th-century church on the Skara–Vara Plain was built after the population explosion, and the favourable oats-export period; and is clearly visible in its surroundings. Photo Kajsa Christensson, Västergötland Museum. Right: The small medieval church in Omunga south of Vårgårda is barely noticeable today on account of its physical environs. Photo Mia Björckebaum.
In the mid-14th century the whole of present-day Västra Götaland was ravaged by the Black Death. In Bohuslän almost half of the population died. Recovery was slow and in some areas farms became deserted forever.

*Examples of imprints upon today’s landscape*

- Society’s administrative division into parishes and districts (*härad*) – often still visible through the relationships between the centre and periphery and sparsely populated border areas
- Medieval churches and church sites, remains of monasteries
- Medieval towns, see the map on page 153
- Border markers, castles, fortifications
- Settlement patterns in areas of medieval colonization
- Settled villages

Churches in Västra Götaland, from the Middle Ages to the present. Christianity and social patterns are interrelated: the earliest parishes became the organizational basis of society and each parish had its own church. A high density of churches indicates a district of central importance and a sizeable population when built. When Christianity was established in Sweden the area around Skara was an important centre of power. It was the hub of many important trade routes and the rich land facilitated intense agricultural production. The towns provided markets for the farming produce. Source: The Settlement Register of the National Heritage Board (RAÄ Bebyggelseregistret).
Increased influence of the State
In the 1520s Sweden was becoming a nation, and the control of trade and military strategic areas was important. A long period of war began between Sweden and Denmark (which had taken over Norway in 1536). The population in the border area, both rural and urban, suffered greatly. Thousands of farms and several towns, including Kungälv, Marstrand and Skara were destroyed. In Bohuslän, the population decreased over long periods. When peace was restored contacts resumed across the borders and trade flourished. This led to economic growth and increasing population. During the 16th century, the forests in northern Dalsland, Tiveden and Västergötland’s border regions at Halland and Småland were heavily populated. This was also the destination for immigrants from the forests of Finland in the late 16th and early 17th centuries.

The towns of Mariestad, Alingsås, Vänersborg, Borås, Ämål and Strömstad were founded by the State, mostly on the sites of older trading places, in order to take control of trade in the 16th and 17th centuries. Göteborg was founded on the estuary of The Göta Älv river in 1618 to replace the medieval town of Lödöse. The city quickly became the region’s shipping and trading centre and later also an administrative centre.

When Sweden took over Bohuslän (and Halland) after the Peace of Roskilde in 1658, the old border lost its significance. A time of “Swedification” began. At the Reformation the State’s power grew at the expense of the Church and monasteries. Many of the medieval towns, such as Skara, lost their importance. The Skara diocese was divided up and the neighbouring town of Mariestad became the administrative seat of Skaraborg county. Vänersborg became the seat of Älvsborg county.
The establishment of modern towns in Västra Götaland also indicates the importance of the area during the Middle Ages. Kungälv (Kungahälla), Skara and Lödöse have been shown to go back to the beginning of that era (red). During the 16th–17th centuries many trading towns were established (yellow). In the 17th century Göteborg, Vänernborg and Mariestad received the status of administrative seats of residence.
The period of the mansions

During the 16th–17th centuries the power of the nobility increased in western Sweden. The nobility controlled large land areas by fiefs, e.g. on Kålland and southern Västergötland. Several small manors were built in areas outside the established villages where access to pasture was good. In Bohuslän where land ownership and agriculture did not provide equal incomes, the nobility concentrated on commerce, navigation and fishing. As a manifestation of their position these nobles erected stately mansions. These reflect each period in architectural style more clearly than in any other buildings. Western Sweden has several magnificent buildings from the Caroline era of the 17th century.
During the 18th century the nobility lost its exclusive right to own freehold land. In western Sweden, this meant that new estate holdings might be built by merchants, mill owners and senior officials. The mansions in the region represent all stylistic ideals.

**Examples of imprints upon today’s landscape**

- Manors and mansions of varying character

The sites of manors and grand houses can be linked to older types of large-scale land cultivation, but not always. The coastal manors are associated with seafaring and the development of trading houses. Source: the Department of Agriculture’s database TUVA.
**Industrialization and the construction of the welfare state**

The industrialization that started in Sweden in the mid-19th century marked the beginning of a rapid transformation of society. The construction of a welfare state began with local government and social reforms including an investment in public services. Public schools, hospitals, fire stations and other buildings for new social activities were built. The military was reorganized and a large number of regiments were formed. The new railway towns and industrial centres grew in importance. Lysekil, Mölndal, Trollhättan and Tidaholm were granted town status in the early 20th century. The old towns and parish centres lost out to the new building.

The workforce for the emerging industries in western Sweden often came from rural areas where the population had suffered from the decline in the oat export trade. In Dalsland most ironworks were closed down because of strong competition from the new industries and many people lost their subsidiary incomes. The result was mass migration from the countryside to cities and industrial towns, and a wave of emigration – first to Norway and then to the United States of America.

After World War II, industry boomed in the west. There were plenty of jobs and workers were brought in from Finland, Italy, Yugoslavia and Greece as well as from Swedish rural areas. Many settled down and contributed to the cultural diversity of the region. This resulted in a rapid population growth in many of the towns in the region until the 1970s brought industrial closure.
Examples of imprints upon today’s landscape

- Towns of the 20th century
- Industrial and residential settlements from the industrial era, suburban towns, garden towns, private houses, functionalism’s suburbs
- Buildings for public activities such as schools, kindergartens, hospitals, fire stations, libraries, community centres, etc.
- Barracks and other military installations
- Local assembly halls, free churches, temperance lodges, community halls, etc.
- Leisure buildings such as cinemas, cafés, etc.
Västra Götaland takes shape

After 1950, the map of western Sweden was redrawn from scratch. In conjunction with the municipal reforms of the 1950s and 70s cities, towns and rural municipalities were merged into new counties. The municipal services were concentrated in the central cities and many previously significant places declined in importance. The economic advantages of centralization became a catchword, even in the public sector. The last major change was in 1998 when the former counties of Göteborg and Bohus, Älvsborg and Skaraborg (except for the municipalities of Habo and Mullsjö) were merged into one large county, Västra Götaland.

Examples of imprints upon today’s landscape

- Today’s administrative divisions
- The post-war suburbs, The so-called Million Project areas of the 1960–70s, expanses of residential areas
- Converted industrial areas, docklands, etc.
8.3 Communications

Routes unite – Whether on the water, on the ground or on a railway embankment, Or across land borders. In Västra Götaland contacts between the coast and the hinterland have bound the region together since the Stone Age. Waterways were for a long time the main communication routes, then roads were created between villages, churches and towns. Central Västergötland has always had the most roads of any region in Sweden. In the mid-19th century railroads began to appear. They created enormous opportunities for economic development.

Shipping

Today, when we think of communication, most people refer to cars and trains. But there was a time when the most important communication routes were over water. Waterways were essential for Stone Age hunters as they moved between their settlements in the archipelago of the time. During the Bronze Age, when craftwork and trading advanced, waterways were used wherever possible. In Bohuslän the fjords were navigable far into what is mainland today. It was at this time that the unique rock carvings were created. They are often found near major waterways, at places where many passed by.

Boat building developed with the coming of iron. Vessels could be made bigger and stronger with rivets. The success of the Vikings was largely due to their skill as sailors and boat-builders. One of the most important Iron Age trade routes in Northern Europe, Stora Sjöleden, followed the Bohus coast. Rivers such as the Göta Älv river formed important waterways. The importance of shipping in Bohuslän is manifested by the hundreds of hill forts built to watch over the old waterways. Gullmarsfjorden was one of the major transport routes.

In the Middle Ages, the Hanseatic League controlled shipping in the North Sea. In the 17th–18th centuries trade with countries in Asia, Africa and America increased. Trade was conducted by trading houses such as the Swedish East India Company.

The introduction of free sailing in 1832 was of great importance for the economic development of western Sweden, along with the construction of canals. Trollhätte Canal was completed in its entirety in 1800 and Göta Canal in 1832. Dalsland Canal was built in the 1860s to simplify transport for the many ironworks in that region.

The Göta Älv river and its valley have provided an important communication route since prehistoric times. The first sluices were built in the 17th century at Lilla Edet. The river is still an important waterway for Västra Götaland. Photo Emily Wade.
The development of light houses and, above all, that of the steamship, contributed to the expansion of shipping. This enabled regular boat services along the coast and on the larger lakes.

The steamer made travelling easier and it became possible for the general public to visit places outside their own community. Those who could afford it could go on longer trips and so tourism began. By the late 19th century the west coast with its invigorating spas, had already become a popular destination for the social elite. At the beginning of the 20th century the strict bathing culture was replaced by freer attitudes, with open-air baths along the coast, vacation homes and seaside bathing resorts.

The last 100 years of development in the maritime sector has been characterized by successively larger vessels and harbour facilities. An increasing number of shipments are made today by container. The largest container port in Scandinavia is situated in Göteborg.

*Examples of imprints upon today's landscape*

- Rock carvings from the Bronze Age and hill forts from the Iron Age along major sea routes and waterways
- Older harbour facilities, engravings and beacons
- Canals
- Light houses and pilots
- Steamboat remnants, bathing tourism
- Today's docklands
**Roads**

The Stone Age hunters lived an active life, moving from one camp to another in search of prey and other food. In winter, when the elk was an important prey, they moved around on land. A need for more permanent walkways first arose when humans became sedentary during the Neolithic. Local farm tracks were needed for agriculture and longer roads for trading trips. Paths were placed in easy walking terrain, such as along the eskers. Along the main communication routes funerary monuments were placed that showed group affiliations.

Up till the Iron Age inland communication routes followed ridges or elevated land. River valleys were also used for communication, such as the path between the Västergötland and the west coast that followed the rivers of Halland. The most important route was Redvägen along the Ätran, though Viskastigen was also used. Even the Nissan trail from the coast to Jönköping had significance for communications in southern Västergötland.

Road 161 between Bokenäs and Torp in Bohuslän illustrates the typical location of roads in rift valleys, running along the margin between arable and unusable land. Photo Johannes Kruusi.

Road 2221, the Bruddjäll road in Dalsland, has developed from a trackway. It winds through forested areas, turning to avoid blocks of stone and wet and impassible terrain. Photo Mia Björckebaum.

Road 580 on the Kålland Peninsula here runs between medieval churches towards Strö Church. Photo Bengt A Lundberg, RAÄ.
The more rigid social structures of the Middle Ages increased the need for good communications. The diocese town of Skara and the neighbouring town of Skövde were places of pilgrimage and an important pilgrimage route to Nidaros ran through the region. There were also several important trade routes from the west coast to Småland and the Mälar Valley. In the Middle Ages a local network of roads that linked the area’s many churches arose. In the area south of Lake Vänern the roads still criss-cross between the churches and this road network is one of the most closely knit in the country.

During the 16th and 17th centuries a functioning road network was essential to maintain the superpower that was Sweden. Roads were improved and the main roads were marked with milestones. A system of riding stations and inns was built up. Regular mail traffic was introduced in the 17th century. In the 18th century, new road building techniques arrived, and stone began to be used in bridge constructions. Until the land reform of the 19th century, roads characteristically followed the borders between different types of land.

With the advent of the automobile a functioning road network became increasingly important. The old paths built for horse transport began to be converted into roads in the 1920s. These construction works were frequently carried out as employment schemes, so-called AK-roads. Characteristically, such roads are long and straight and pay little regard to the terrain as they bend sharply around obstacles. In Bohuslän, where the stone industry was badly hit by the economic crisis of the 30s, many AK-roads were built by unemployed stonemasons. These roads are characterized by stone embankments and skilful masonry.

In the early 1950s, the car made its breakthrough in Sweden. The road network began to be adapted for mass motoring needs. The idea of traffic separation became popular. In 1958–59 the first two sections of the E6 motorway were ready. The expansion of motorways has continued in stages and in 2013 the whole of the E6 will be a motorway.

Since the 1990s, environmental and road safety issues have been successively included in infrastructure planning. Many older roads have been converted for one-way traffic. One example is the E20 west of Skara which was converted into a 2+1 road in 2006–2007.

Communications are also currently a major factor in regional development and in contexts concerning trade and industry. One example is the major infrastructure investment in the so-called Trollhättan Package.

Examples of imprints upon today’s landscape

- Prehistoric routes, e.g. the roads in Falbygden passing passage graves that have probably been used since the Stone Age, the ridge or valley roads, such as Redvägen or Viskanstigen.
- Roads from the period before motoring, such as medieval roads connecting villages and churches, separating different borderlands, the roads of the 17th century expansion with inns and milestones, stone arched bridges, forest roads.
- Motoring routes, for example AK roads of the 1920–30s, bridges of steel and concrete, trunk roads and motorways, traffic separation.
- Contemporary measures, e.g. for better road safety, the environment, reduced noise and easier commuting.
Including landscape in long-term spatial planning – Chapter 8. The time depth of the landscape

**Cultural roads**

**Era**

1. Roads with prehistoric features e.g. those along ridges and those associated with ancient monuments.
2. Roads with medieval features e.g. church roads, cattle paths, the first highways, e.g. Redstigen.
3. Roads with features from the 16th century, e.g. boundary roads, forest roads.
4. Roads with features from the period when Sweden was a great power, e.g. post roads, containing inns and milestones; and ferry crossings.
5. Roads with 18th century features, e.g. village roads, estate roads, avenues, stone embankments.
6. Roads with 19th century features e.g. straight roads through parcelled land, connections with railways.
7. Roads associated with early motoring, e.g. AK-roads, stone-built, with bus shelters and guide rails.
8. Roads with post-1950 features, e.g. new building material, showing safety and environmental concerns.

Map of surveyed roads and those designated by the Swedish Transport Administration as “cultural roads”. Different eras produce roads of different character and density. Source: Loggbok kulturvägar, Region Väst.
Railways
Although improvements in shipping meant a lot to the development of industry it was the railways that paved the way for the Industrial Revolution. In 1856 western Sweden’s first railway was opened. This was a section of the Västra Stambanan between Göteborg and Jonsered. The entire main line to Stockholm was ready for traffic in 1862. In the following years about 15 different railway projects were completed in present-day Västra Götaland. In particular, the area south of Lake Vänern received a dense network whose main structures remain today.

The railway enabled the iron foundries in Bergslagen to transport their products directly from the factory to the port of shipment in Göteborg, without time-consuming reloading. Agriculture also benefited from the railroad. One example is the so-called Havrebanan, between Herrljunga and Uddevalla built in the early 1860’s for the oats (havre) trade.

Along the railways so-called “station communities” developed with a distinctive urban structure and typical railway architecture. The station communities attracted commerce and other services and often took over the role of the old parish centres as the area’s main hub.

1950 marked a turning point for rail traffic. Now it was the car that was seen as the solution to all transport problems and many railway lines were closed. The negative trend continued into the early 1980s, when the county traffic was reorganized.

Since the 1990s, regional rail traffic has increased dramatically and commuting has become an everyday event for an increasing number. In recent years, safety and environmental issues and the efficient use of railway systems have come into focus.
Including landscape in long-term spatial planning - Chapter 8. The time depth of the landscape

Its station community character is clear even from afar. It still retains the typical layout following the railway line and special station-road buildings. Photo 1947, Västergötland Museum.

Tråvad is a former station community where the railway tracks are no longer in use, but the settlement remains vibrant. The old embankments are an asset for pedestrian and bicycle traffic and facilitate transit within the strictly rationalized cultivated landscape.
The railways had an enormous impact on economic growth in the late 19th century, creating e.g. prerequisites for the export trade in oats. They also created a completely new settlement structure that developed around the railway stations. This still exists today even where the tracks have disappeared. This map shows the better preserved station communities and important stations along the railway lines south of Lake Vänern. Map: KMV Forum.

Examples of imprints upon today’s landscape

- Tracks and railway routes in use today
- Museum railways
- Closed tracks with preserved railway embankments and other remains
- Line inspector cottages
- Railway-station communities, both with and without existing railways, with their distinctive structure
- Station houses and station facilities, warehouses and other railway-related buildings
- Travel centres, commuter stations
- Measures to improve the environment, road safety and efficient use of the railway system
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Character type: _______________________________________________________________________________________

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