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No. 1 Housing in the past

April, 2015

Brickstones made in Europe – The way housing influences our lives in a common Europe



HOUSING IN THE PAST

Although it varies according to climatic differences, housing constitutes one of the most universal forms of material culture, being found in all except nomadic societies. From a sociological point of view, housing has a major part to play in ensuring continuity of community life.

Housing is part of an individual's or a nation's standard of living and hence is properly related to the general wealth or poverty of the individual or the nation. Housing represents the largest single lifetime investment to most individuals. However, others will see the importance

of housing as a shelter and to fulfil their fundamental needs only. There is also a close interrelationship between housing and family organization. In all cultures and at all times the type of housing has corresponded in some way to the organization of the family and has in turn sustained and reinforced existing forms of family organization.

Houses tell us something of the people who built them and of the times in which they lived. In many ways, the current energy crisis is forcing us to reexamine our past.

Concerning to our project, we would like to make students get aware of how houses were built in

the past, which materials were used and how the environment has influenced the way they were built. Another aspect would be the social as well as ecological issues of housing and in how far they are still relevant today.

The presentation of model houses, made by the students, and the additional background information will make teachers and students not only get acquainted with their own cultural heritage but also with the cultural heritage of the other European partners. Because of the countries' geographic diversity, a wide variety of traditional housing types were embraced.

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GERMANY

August-Renner Realschule Rastatt

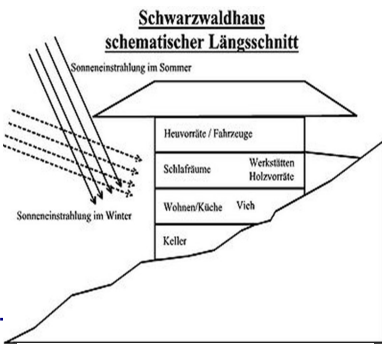
**Housing in rural areas
Black Forest farmhouse**



The Black Forest



People and animals live under the same roof. The roof is a hipped roof supported by big wooden beams. It is either a thatched roof as shown in this picture. The house is built at a slope. A footbridge is leading to the room under the roof so that hay can be transported there easily. The big roof protects against the sun in summer and allows sun coming in winter. It also protects against the snow. The whole house is made from wood as most farmers own part of the surrounding forest. You need 400 trees to build a house. Wood is also important for heating and cooking.

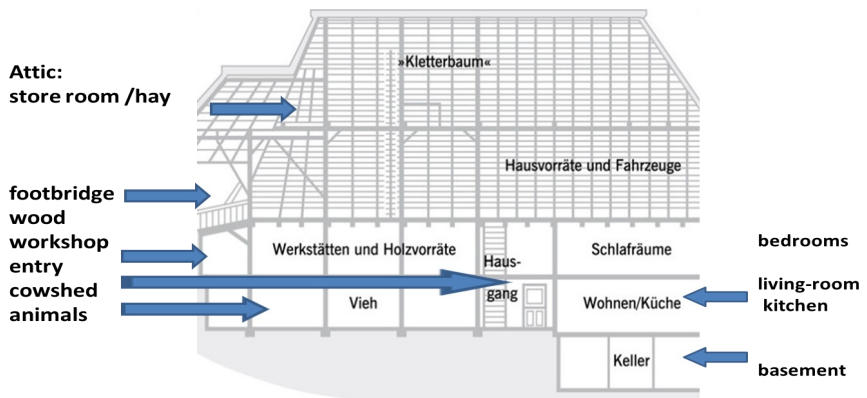


Cross-section of Black Forest Farmhouse



In the winter time all farmers would make things out of wood and sell them in the market towns. They would produce brooms, brushes, rakes, shingles etc. The most famous product that the farmers made out of wood is the **cuckoo clock**. It was sold by people carrying them on their backs who would walk from town to town.

“Wood is the most important material and it is also sustainable!”



Stefan Strumbel „Rock your Heimat“



Living room



Bedroom with cradle

There would be a fire in the kitchen all the time so that cooking and heating the rooms would be possible. The smoke would leave the house through a smoke outlet/chimney. Here ham would be smoked and preserved for the winter.

Kitchen with chimney/outlet



Town House Rastatt in 1904



The house is situated in Rastatt, a town of about 40000 inhabitants in the south of Baden-Württemberg/Germany. Rastatt lies in the Rhine valley which has a milder climate than the neighbouring Black Forest. Rastatt in the past 300 years.

It was built in the baroque style with a big castle in the fashion of Versailles. Until 1890 Rastatt was surrounded by a fortress. It was built as a protection against the French who live just on the other side at the Rhine.

The city of Rastatt was inside the fortress and so no new buildings could be built outside. When the fortress was not needed any more as the Alsace became German it was pulled down. Now modern town planning could start and new houses were built outside the walls of the former fortress. The owner was a farmer and he was the owner of a brickwork which made him wealthy. He used his own bricks when building his house.

This house was built in 1904 by August Schmitt.

The descendants of the family still live in this house which has been renovated since, but still looks very much like the original house.

August Schmitt lived here with his three sons and his three daughters Maria, Lina, Anna. When the house was built it had a big garden with fruit trees and vegetables for the family. There was only one pub opposite the house and a lot of space around the house. Today is surrounded by buildings. The house had 2 flats each with a kitchen, a toilet (the soakaway was outside), and 3 rooms which would be used as living-room and bedroom. Higher ceilings than a farmhouse. Taller windows in the flats of first and second floor to let in the light. Representative decoration in the main flats. Smaller rooms in the attic with dormer windows. The basement was very often built with sand stones of the region – not in this house. As the owner produced his own bricks he used them for the basement and the walls. The walls consisted of 2 layers of bricks with stones to fill the space in between. The basement was of stamped clay, there was no heating and the air was humid and cool – an ideal place to store vegetables, fruit and wine etc. Built of wood and tiles with no insulation. It was used as store room. The floors and ceilings were also a wooden construction with straw to fill in the space. This was an insulation against cold but didn't help against the sounds of the people living above and below.



Maria, Lina, Anna. They are sitting in the garden in front of the house.



Rastatt in the past 300 years it was built in the baroque style with a big castle in the fashion of Versailles.

What is different from the farm house

- ◇ Higher ceilings than a farmhouse
- ◇ Taller windows in the flats of first and second floor to let in the light
- ◇ Representative decoration in the main flats
- ◇ Smaller rooms in the attic with dormer windows



AUSTRIA Neue Mittelschule Pregarten



Farmhouse Gstöttenbauer

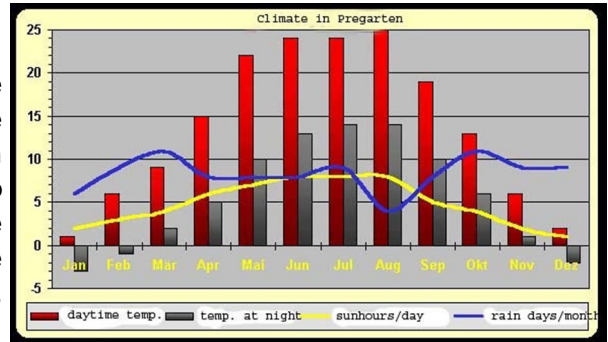


Location:

Wartberg, Steinpichl 13
 Wartberg is located in Upper Austria, 20 km north of Linz.
 The sea-level is about 477 metres.
 Wartberg has 4125 inhabitants.

Climate:

Our winters are cold and we have snow from December to March. The summers are quite warm, about 28°C.



"The house is made of granite stones and clay"

The Gstöttenbauers have been living there since 1750. It is a 3-generation-house.

In the past they worked hard on the fields. They had cattle, pigs, sheep, chicken and dogs.

Winters were very cold.

The house is made of granite stones and clay.



The big granite stones in the walls weren't painted with chalk, because it was rare. This way to build farmhouses is very typical for our region.

In every room there was a stove heated with wood. The stable for the cattle and for the horses was and is still in the southern part of the house. You can see the importance of the animals for the owners, they got the best and warmest



After the Second World War, Austria was occupied by Russian, American, French and British Armies. In our region the Russians took over the house for their major base and people had to suffer from repression. For example Russian commanders forced the family to set free the animals so that they could put their horses in the stable.



Nowadays the family sets a high value on protecting the environment. For example: Natural insulation, solar plants, photovoltaics, composting and heating with wood chips.



Raiffeisenbank Pregarten

Location:

Pregarten, Marktplatz 27
Pregarten is located in Upper Austria, 20 km north of Linz.

Now it has got about 5.144 inhabitants.



In former days it was called “Das Rittmannsberger Bräuhaus” (a house where you got the right to brew beer). The right to brew beer was a right connected to the building. Later it was a pub. And the 1st floor was rented by the city of Pregarten. The wedding hall for example was in this building. The 2nd floor is still rented by a dentist.

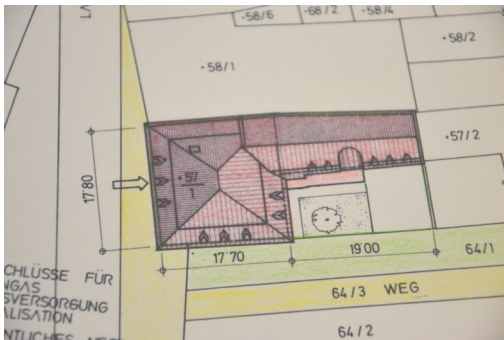
The house is located at the city square in Pregarten (Upper Austria).

The families who had lived there, changed very often.

The owners of the house always had a good life, because of the pub and the beer brewery.

The house was heated with wood and coal ovens. In every room there was an oven. The light came in through big windows. When it got dark people lit candles and oil lamps.

“In former days it was called “Das Rittmannsberger Bräuhaus” ”



In former days there was a building next to the Raiffeisenbank. It was a parish house, which belonged to the church. The church was at the main square of Pregarten, but in 1900 a new church and a new parish house were built and so the old parish house was torn down.



The fundament of the house was built in 1100, you can read it on that stone



GREECE

30 Geniko Lykeio Larissas

Traditional Architecture in Greek Islands

Island Greece is a completely different country than the mainland. The climate is almost the opposite than in mainland and the needs completely different. Therefore there is a special architecture limited by the sun and the sea, different enough from island to island but with common principles. Cyclades is a very typical example of this type of housing



Building Materials

- Stone which is used because of its property to keep the house warm during the winter and cool during the summer
- Wood coming from local robust flora
- Dirt and seaweeds are used in the ceilings to ensure insulation and weatherproofing

Building Techniques

- Dome shaped roofs are used to give additional room height which facilitates illumination and ventilation. An alternative style encountered in Cyclades is flat roofs. Internal layout: The majority of the houses have two rooms. The bigger ones are a combination of two or more smaller houses that are connected with internal corridors and arches.
- In the yard, essential extension of the building, there are storage rooms and the bathroom.
- Small openings (windows) in the houses that are used for protection from sun and wind.
- In the case of flat roofs a cistern is added in the roof that is used for the collection of rain water. This is an essential addition to the building since natural water sources are scarce in these islands.
- At first Cycladic houses had their external walls unpainted so that they wouldn't stand out from their natural rocky surroundings. In doing so the inhabitants of the islands were protected from raiders. Later on the houses started to be painted white with crushed limestone being the basis of the paint used. Limestone was used due to its natural disinfectant properties. Additionally the white color that was picked offered increased reflection of the solar radiation thus lowering the temperature of inside the house.

- The traditional buildings in Cyclades are harmonized perfectly to the natural environment. The strongly built houses follow the line of the steep rocks. Their back is turned toward the sea, using wells as storage tanks, being protected from the wind and rain. Each island has its own architectural features: underground buildings, towers, stone rustic huts buildings, neoclassic noble men's houses as well as traditional Cycladic houses

- Houses built on the islands are in total harmony with their environment as far as architecture, building materials and building techniques are considered. Traditionally they are white, austere buildings that form cubist sets, like modern day sculptures



- That's how the Cycladians were building & decorating their houses, with natural materials & without many facilities. Despite the difficulties of the territory & the weather, the builders were trying to build houses that served the inhabitants' needs, protected them from the wind, the sunlight, the cold & at the same time to be connected with the landscape in a perfect harmony. Thus, through this simplicity a beautiful scene was created.



Traditional Architecture of Greek mainland

•Greece is a country with a very specific geophysical landscape and a very different climate from place to place. So the traditional architecture in several parts in Greece is very peculiar. Pelion is a characteristic case of this architecture remaining until today. Like many regions of Greece, Pelion is characterized by its own distinctive traditional architecture, which impresses anyone seeing the villages. By the end of the Ottoman occupation, a growing number of houses and mansions were built using elements of the era's urban architecture while maintaining fortifications, a combination that made the unique Pelion building tradition and is used till the present day.

- Building Materials

- Stone is mined from the local quarries and is primarily used in building the foundations and the ground floor.
- Wood is a basic building material coming from the forests of Pelion and is used in the construction of the upper floors.

-Building Techniques

- There are two distinguished periods with different building techniques in the Pelion architecture
- First period:** Most of the houses built in this period are two or three floor high and feature a thick stone structure as they were built with stone slabs mined from the Pelion quarries. The upper floor usually stands out in relation to the floor below and has many windows. Their stone roofs, their wood carved doors and windows and their decorated ceilings characterize them. In addition some towers were also built for the wealthiest inhabitants that were three or four floor buildings with a squared overview built with stone while the floors have a mixture of stone and wood. The fortified construction, the large and solid stone structures, the double walls, the battlements, the elevated entrance with a special hatch above for scalding, the few and small symmetrical windows and the balconies in the last floor, supported by wooded struts are a few of their characteristics.



- **Second period:** Houses built during this period feature a stone base forming a right and vertical angle and two or three floors, while construction is very reminiscent of the early towers. The houses have special designed areas for various uses, reinforced with wooden frames at intervals while the upper floors are constructed by a lightweight material called "Tsatma". The ground floor of these houses, known as "katoi" had few small windows and thick stonewalls that kept a low and steady temperature and was used as a storage space. Above, the first floor or "mesopatoma" (mid floor) had a low ceiling and fireplaces and was used for winter stay. The third and last floor, of lightweight construction was used for summer stay, it featured the main entrance and many big windows that had colorful skylights on top. At this floor is the "doxato" a large space that occupies the façade and communicates with the rest of the rooms, and the "kalon onta" or "mousafir onta" which is the main reception area. The top floor usually extends from the lower floors creating the "sachnisia". The roof was covered with Pelion slates protruding to protect the building from various weather conditions.

ITALY I.I.S Primo Levi, Badia Polesine

Country house



STREET VITTORIO VENETO
BADIA POLESINE (RO), ITALY

This type of house is usually located in the countryside, isolated from the town. It was built in 1870. In 1900 Wartberg had 1700 inhabitants.

Inside you can find these main rooms: a kitchen, a dining room, a living room, two or three bedrooms and one or two bathrooms. The ceiling might be covered with wooden beams placed crosswise along the entire wall. Next to the property, there is a stable, commonly called barn. The tools are placed here and are used in the fields. It is 5/6 meters height. It can be open or closed; sometimes there is the presence of an attic room to store the hay and you can also find a small barn where there are farmyard animals commonly found in our area; they are hosted and used to work in the fields. There is a garden called “corte” located behind the house.



It is usually a two-storey, rectangular building. Next to the property, there is a stable, commonly called barn. It is 5/6 meters high. There is a garden called “corte” located behind the house.



The windows are arranged symmetrically to the central door of the build-

Typical food



CITY HOUSE

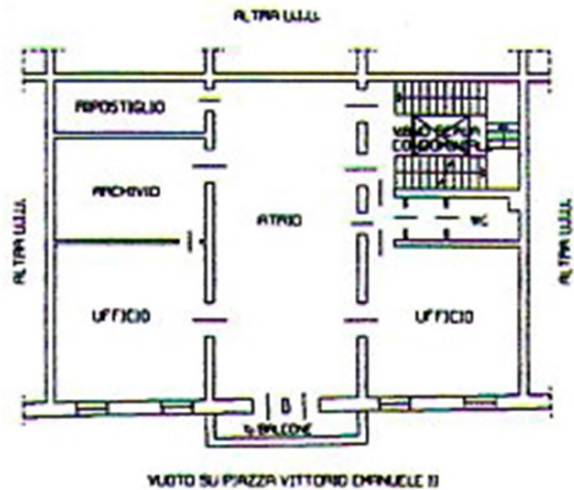
BUILDING LOCATED AT N° 142
STREET SAN GIOVANNI



The building dates back to the early nineteenth century. It is located in Badia Polesine. The ground floor is used for commercial activities and the upper floors are for residential use.

DESCRIPTION:

- ground floor porch;
- first floor or main floor;
- mezzanine;
- attic.



The floors are separated by an outside string course on which lays the lower part of the openings which consists in a parapet colonnade. The windows on the main floor have framing stone culminating in a tympanum; those on the upper floors have a simpler decoration.

The roof has a very articulated structure and has a covering layer of clay roof tiles



ROMANIA Secondary School no.1 Independența



Rural house

The Relief, plains mostly, makes a beautiful scenery of smoothed over heights that measures up to 310 m in the North and up to 5-10 m in the South. The sea-level is about 477 metres.

Climate:

The climate is entirely temperate continental, summers are hot and dry and winters are cold, with frequent phenomena of blizzard. As a result of climatic influences of Eastern Europe, aridity, average annual rainfall have low values between 400 and 450 mm / year.

Independența lies on the bank of the Siret river at a distance of 25 km from the city of Galati.

The Siret, Prut and Danube meadows make a specific local climate, wetter and cooler in summer and cold and less humid



It is a new town, built after the War of Independence - 1877- 1879, Romanians have gained independence after the war with the Turks. (That is the reason of its name).



The walls were raised on poles stuck in the ground which were united by horizontal slats which made the upper part look like a "fork" in which the ceiling joists were fixed. The walls were placed in a skeleton, from the bottom up, and covered in wattle with clay mixed with straw or chaff. The walls are then tiled with a thick layer of clay (earth) with sand. Over seams, the walls are white-washed.

This house was built in 1900. The first owner was a pharmacy assistant clerk. He had seven children. He owned also 18 hectares of agricultural land.

The house was built from clay and wooden twigs, the roof was in 4 waters, covered with metal sheets, **4 rooms, 1 hall (entree), a kitchen and annex estates:** a corn barn, cattle stable, grain storage and a hen house. Each room was 2,50m high, with 1 or 2 windows 80 cm wide and 1m high. The toilet was outside the house. For heating and cooking they used fire wood stoves.



The decoration is made of wood sawed - the fretsaw is also colored and placed under eaves, on top of the house, hasty elements. These ornaments come in different shapes: geometrical, floral or zoomorphic.

The roof of four waters around the area were less high than in the mountains, because the rains are rare. The most usual material for cover the roof is thatched mainly due to the proximity of the Siret valley, which is a very good heat insulation material. Metal sheets came early but only in wealthier villages of peasants. Although in terms of thermal coating it is most effective, because of the advantage that it can withstand a longer period of time, the metal sheets gradually replaced the thatch.

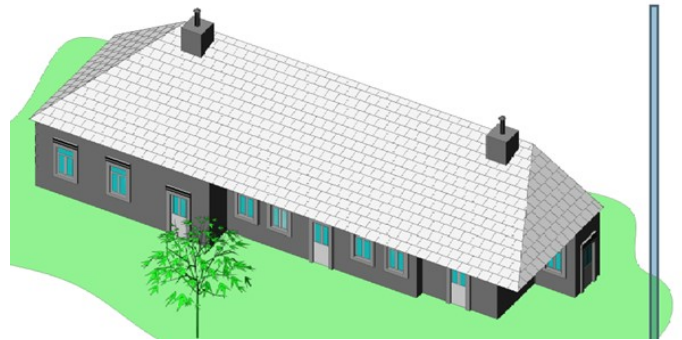


Urban House

As far as cities are concerned they are relatively new to the Romanian settlements. Romanian civilization is one of the rural kind. Today, about 50% of the population lives in villages. Romanian cities began to appear as early as XIVth century, resembling rather the fairs, not to mention the urbanism in the Western sense.



This house was built in 1909. The first owner of the house was farmer. He owned 20 ha of agricultural land from a location situated at a distance of 20 km from the city of Galati. He was growing cereals which he sold, but also using them for raising animals.

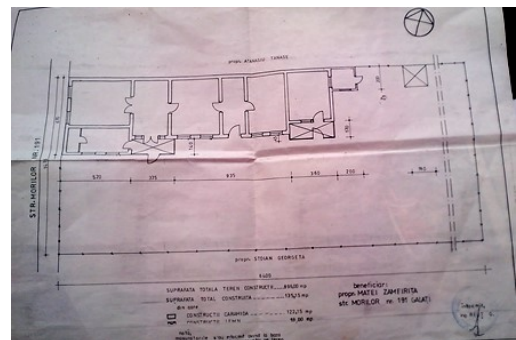


He had 8 children. The descendants of the family still live in this house which has been renovated since, but still looks very much like the original house.

The house was built using bricks, the roof of three waters was covered with metal sheets. It had 4 rooms, 2 halls (entree), a kitchen and annex houses: a barn for corn, cattle stable, a chicken house. The toilet was outside the house.

Each room was about 3 m high, 1-2 windows 80 cm wide and 1m high.

For heating and cooking they used fire-wood stoves.



As you can see, town houses were customary to adorn its walls with decorations in relief or in plaster ever since the beginning of the XXth century. Thus a rich decoration in relief plaster and plaster moldings flourishes, along with the facades decorated with capitals of columns having worked in forms that recall the classical orders. They are also used for exterior colorful paintings that complement the lack of carved adornment in mountain areas.



"The house was built using bricks"



The house was built in 1909, you can read it on that ornament



SPAIN

IESO QUERCUS Terradillos

A typical rural house in the agricultural district of La Armuña/ Province of Salamanca



The district of 'La Armuña' is located in the north of Salamanca, in the border with the provinces of zamora and valladolid. its name comes from the arabic language and means 'orchard'. it is supposed that the arabs, who ruled this part of spain during more than 200 years, gave this name to the district because it is very good for agriculture. People work in agriculture and the most famous produce are lentils and chickpeas.



This is the popular costume in 'La Armuña' district

The typical **weather** in La Armuña is cold winters and hot summers. There is little vegetation in the district because the land is dedicated to agriculture: cereals and vegetables.



The houses in the area are made of stone or brick and normally they have two floors. in the low floor was the kitchen and the living room, and the bedrooms were in the upper floor. this house is 125 hundred years old.



In the back there was a wide door to allow the carts and animals to come inside the stables.

These are some of the tools and machinery used to work in the field:



El Encinar

Location:

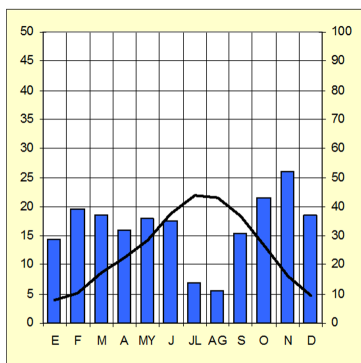
El Encinar is a neighbourhood located in the municipality of Terradillos. Terradillos' name appears for the first time in a document of 1224. But El Encinar was built in 1980. It was necessary to clear a part of the forest to build the houses.



EL ENCINAR means 'oak forest' in English. Our neighbourhood is surrounded by a beautiful forest of Holm Oaks.



El Encinar is divided in two areas: official buildings and private houses.



The climate is Mediterranean with continental influence.

"EL ENCINAR means 'oak forest' in English."

This is the typical house of El Encinar. It is made of red bricks and has four floors.



The average size of a flat in El Encinar is 80 m² and has 3 bedrooms, a bathroom, a kitchen and a living room. flats also have a balcony and a garage. The house represented by the model was built in 1980.

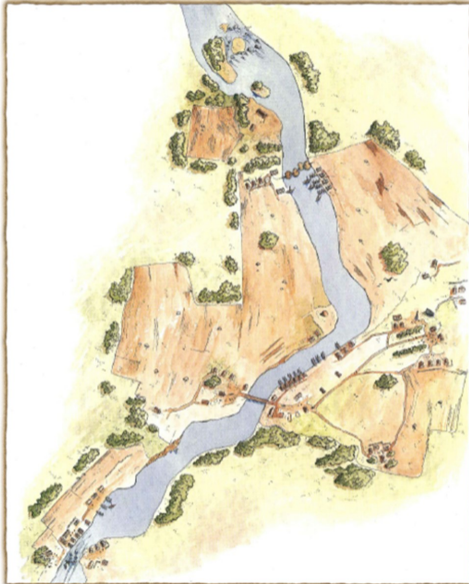


SWEDEN

Skiftingehus, Eskilstuna



Short History of housing in Eskilstuna



Back in **12th century** the monks of the order of St. John came to Eskilstuna. In that time all buildings were made of wood. The people lived near the river because you got fresh water and fish from it and it was the fastest and safest way of transportation.

In the beginning of **the 13th century** many of the churches in the countryside were being built out of stone. The problem was that they were very expensive to construct and one needed specialists that knew what they were doing. That's why specialists was brought from overseas. The monks of The Order of St. John were skilled in the art of construction, and they may have helped to build the Fors church.

The monks of The Order of St. John built the Ruddam in **the 15th century**.

They increased the amount of forges and mills, which also resulted in the increasing amount of homes for the workers.

Already during the 14th century Eskilstuna started to get a new kind of inhabitants, farmers "became" burgesses with more craft oriented chores.

In **the 18th century** a new city plan was formed for Eskilstuna. The plan was formed like a grid, where each quarter formed squares connected to each other. Along this plan the city continued to develop.



In **the 20th century** Eskilstuna doubled its size. A lot of the old buildings were demolished but, like many other cities, Eskilstuna has a district called the old town. The houses in the old town is largely unchanged since the end of the 19th century.

The old factory buildings have changed into arenas for sports and culture, offices and apartments. There are still many industries in Eskilstuna; Volvo Construction Equipment, Gense and ASSA to name a few.

Houses from Sweden

The houses we have chosen are built of wood. Wooden houses are very common in Sweden because we have a lot of wood. The most common colour of the houses is red. The fireplace was very important since our country is very cold during the winter. We have built two different houses; one very small soldier cottage and one bigger forge with combined living area.



The small house is a soldier cottage which was inhabited by a soldier and his family while they were waiting for the man to go out to war. The soldier cottage can also be called a “jack croft”.

In the soldier cottage there was a vestibule, a room with a fireplace and an oven, as well as a chamber. The vestibule was also used as a bedroom.

The soldier cottage was normally 4x8m but it became bigger during the 1880's. Over the door there was a painting with the soldier's number, company and regiment number. When the man went out to war, the wife was left with all the responsibility for the kids, the cottage and the small farm. But very often the soldier died in action and the family had to move when the new soldier family came.

To become a soldier you needed to be at least 20 years old and you needed to be healthy and strong. It was important to have a specific name within the company that could consist of up to 150 soldiers. Most often you were named by something relevant to the war, like “Helmet” (Hjälm), “Grenade” (Granat) or “Powder” (Krut).



a soldier's cottage

The bigger house is from a special area in Eskilstuna called the Rademacher Smithies. The picture shows one smithy out of 20 that was built in the middle of the 17th century. It was built out of wood. That was the cheapest material since there was plenty of wood in the neighborhood. The smithies in Eskilstuna made things like; scissors, needles, hinges and different tools. Today the smithy is a museum so you can see how people used to live. There are still today, after nearly 350 years, different craftsmen working here. Reinhold Rademacher who ran ironwork manufacturing in Livonia was tempted to come to Sweden by the king in order to develop Swedish forging skills.

The royal architect Jean de la Vallée designed a plan for the site including 120 smithies built in stone. In fact 20 wooden smithies were built



a smithy in Eskilstuna

in connection to living and storage areas. De la Vallée was a Dutchman who came to Sweden during the 17th century to start a business where they were able to create blacksmith goods. He settled in the town of Eskilstuna. Blacksmiths and soldiers from Germany came to work there and the city soon became bigger. The roofs of the smithies were low in order for the heat to stay as long as possible. The windows were small and the doors were small too in order to keep the heat inside. The blacksmith slept near the chimney so he would not freeze to death because it was so cold. The beds could be pulled out to become longer and wider during night time, and when he woke up, he put the bed back to normal, because the house was so small. During winter time you could also use bed heaters so you could get the bed warm before you went to sleep.

Brickstones made in Europe – The way housing influences our lives in a common Europe



Germany

August-Renner Realschule Rastatt



Austria

Neue Mittelschule Pregarten



Greece

30 Geniko Lykeio Larissas



Italy

I.I.S Primo Levi, Badia Polesine



Romania

Secondary School no.1, Independența, Galați



Spain

IESO QUERCUS Terradillos



Sweden

Skiftingehus, Eskilstuna

Our Project

We're on the web!
<http://brickstones.jimdo.com/>

The aim of our project is to show how the environment and social aspects have influenced the way houses have been built in different European Countries.

In the **first part** of the project 2 typical houses of the past (a rural house and a town house) will be analyzed and models will be built for our moving exhibition.

The second part deals with everyday housing with special reference to energy saving aspects. Extern experts will be involved and excursions to building sites will be included. There will be an energy week at each school.

In the last part we will develop together our EUROPIA – a place where all our European partners would feel at home and all their demands will be met. There will be an architectural competition among the partners.

