

UTILISATION AND FURNISHING PATTERNS OF VERNACULAR HOUSING OF RĂȘINARI VILLAGE, SIBIU COUNTY, ROMANIA

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Abstract

The paper presents research in the village of Rășinari, situated in the south region of Transilvania in Sibiu County, and investigated and evaluated a series of rural landmarks that could provide the necessary data to draw conclusions regarding the forms of specific vernacular architecture. The research was conducted at several levels (having a holistic approach): a) investigations concerning the urban and community structure (general data - geography, economy, utilities, population, surface and utilisation pattern of the built area, wooden species, architecture); b) detailed research regarding the household (indoor and outdoor, traditional wooden furniture, household annexes, construction details).

The organic connection between the living space and its utilisation patterns, led to the creation of a harmonious vernacular indoor composition and layout. The shaping process of the interior was based on the reflection of the functional needs of everyday life. As these needs diversified, housing has undergone a number of changes on a functional and architectural level. This development was also driven by climatic and geographical conditions but also the technological development of wood processing.

Three households were selected for detailed presentation the results of the investigation being structured in tables which contain drawings and photos.

Key words: vernacular furniture; interior space; Rășinari village; on-site investigation.

INTRODUCTION

The vernacular house embodies a complex set of elements of everyday life - occupation, needs, activities and the family structure of its inhabitants. The traditional Romanian wooden house is not a result of imagination, but a direct reflection of the needs of the specific lifestyle of several generations. The housing unit is regarded as an element of the whole household, not as an independent building. It can provide functional and architectural unity to the household (Pănoiu 1977). The organic composition of the household is subject to an evolution dictated by the changing needs of contemporary society (E.g. A barn is no longer used for its initial purpose but has now become a secondary housing unit for the young generation of the household). The natural environment is one of the shaping factors of traditional wooden architecture, through the orientation towards south of the main façade (the porch being oriented towards south), the general shape of the construction follows the lines of the landscape, taking over the organic curves of the land on which it is set, becoming one with the natural context by establishing a new visual and spatial harmony (Mitrache 2008). "Who does not know a country house, with its well thought plan, with its fireplace placed so that all the rooms are heated, with its entrance hall, porch, who does not know the Romanian house without chimney and shutters?" (Cantacuzino 1977).

The idea and the necessity of the research emerged as a response to the lack of historical record concerning rural architecture of Rășinari village. The aim was to capture this information before it is lost.

OBJECTIVES AND METHOD

The analysis is focused on research regarding traditional wooden architecture of Rășinari village, Sibiu County. A series of field trips were realised for documentation, drawing and measuring on site. A number of aspects were taken into consideration: the household structure, the general volume and its subcomponents (walls, porch and roof), the interior space and wooden furniture of the house, the presence of timber as primary building and furnishing material.

The purpose of the research was to investigate and evaluate a series of rural landmarks that can provide the necessary data to draw conclusions regarding the forms of specific contemporary vernacular architecture. The research was conducted at several levels (having a holistic approach): a) investigations concerning the urban and community structure (general data - geography, economy, utilities, population, surface and utilisation pattern of the built area, wooden species, household - architecture, structure and building materials, interior space composition and furnishing patterns).

After a general research regarding vernacular housing types, three households were selected, the results of the on-site investigation being presented in summary tables below.

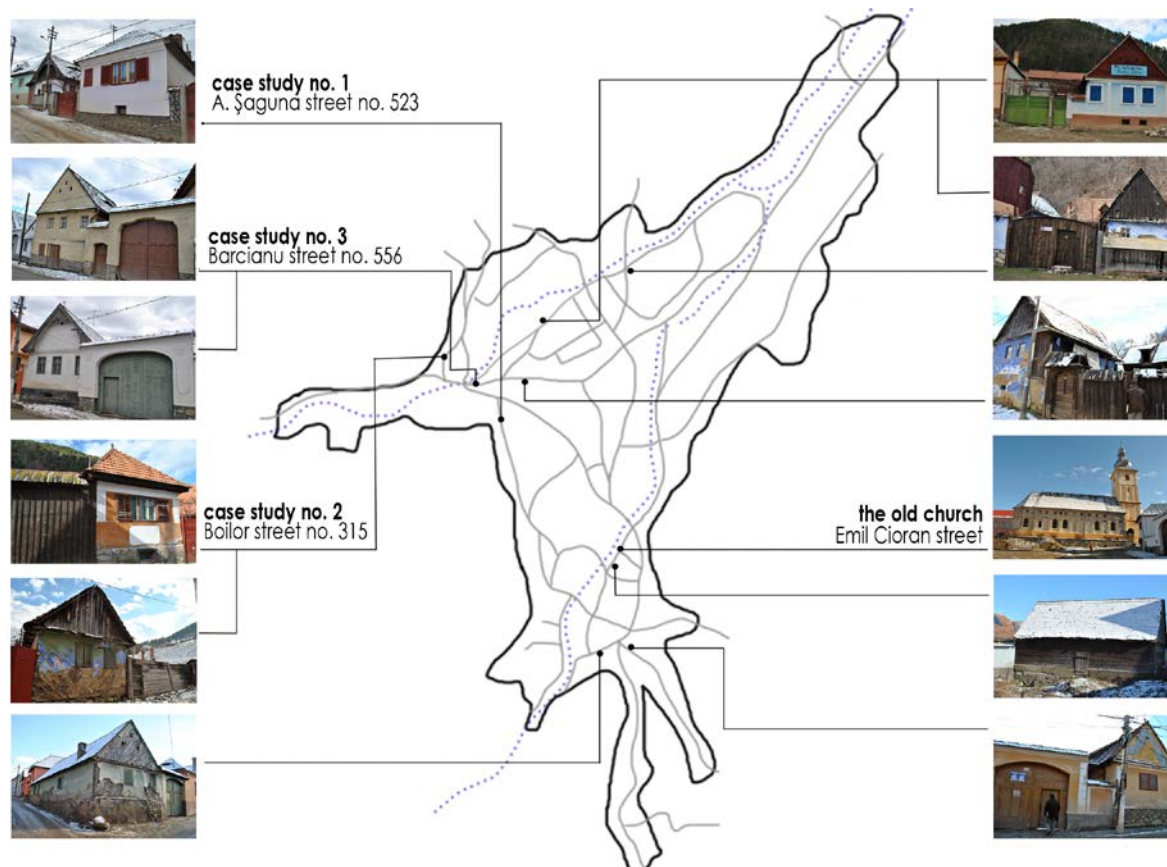


Fig. 1.

General plan of Rășinari village showing the location of the three case studies

ANALYSIS OF LOCAL VERNACULAR ARCHITECTURE AND FURNITURE OF RĂȘINARI VILLAGE

Rășinari village is situated south of the town of Sibiu (8km distance), at 573m altitude surrounded by the Cibin Mountains, with a population of 5500 people at present. The wood species that can be found in the research are: fir (*Abies alba*), beech (*Fagus sylvatica*), ash (*Fraxinus excelsior*), European aspen (*Populus tremula*), Sessile oak (*Quercus petraea*), European oak (*Quercus robur*), lime (*Tilia cordata*), elm (*Ulmus glabra*), maple (*Acer platanoides*) (Filipovici1965). The local economy is based on agriculture (very poor soil - corn, wheat, oats, barley, potatoes, beans are cultivated on long and narrow plots 96% of these being private properties); horticulture (vegetable and fruit gardens); livestock (mainly cattle and sheep); forestry (in the 19th century 11 sawmills were still functioning).

The household: architecture, structure, materials, utilisation patterns

Regarding the structure of the traditional local house oak is the most frequent choice (*Quercus robur* or *Quercus pedunculiflora*) in the manufacture of the cill beams and posts (Bartha, Cionca 2014). Over time, fir (*Abies Alba*) replaced oak, due to the decreased geographical spread of the species. This type of round fir log structure is very common in the studied areas and has a number of forms: round horizontal beams – log construction, post-and-truss construction, and mixed structures. The wall structure of vernacular housing is typically made of logs (fir, oak) with dimensions ranging

between 120-150mm for the width and 200-300mm for the height. These horizontal elements have special joints at the corner intersections, dovetail or lap joints being used (Bartha 2014).

The main structural and compositional components of the traditional housing unit are the following: the *foundation* - foundation pits are 60-80cm deep, usually made of the best mountain stone, filled with mortar binder. This rectangular structure is raised 0.5 to 1m from ground level and coincides with the height of the porch; *grounds or cill beams* - are usually made from hardwoods like oak (*Quercus robur*) and are arranged along the axes of the foundation walls-; *beams* - are arranged similar to the ground's longitudinal axis position, and are made of oak (*Quercus robur*), fir (*Abies alba*), and "can be carved into two sides and leaning against one another with sides unpeeled" (Păcală 1915). The ends can be jointed in various ways: E.g. dovetail, with the ends projecting to form a cantilever to form an approx. 25cm wide eave); *yoke* (upper beams arranged on the top of the transversal walls, usually a house can have 3-4 yokes based on the number of rooms and these can be of oak or fir, rarely beech); *beams* (usually made of fir with round or rectangular section, or more rarely oak with rectangular section, beech rarely); *header beam* (fir or oak); *secondary beams* (smaller but more robust beams that are arranged between the yokes made of oak trunks); *rafter* (usually notched at the bottom for support on the eaves and on the upper side to rest on the ridge and are made of fir); *collars* (horizontal elements connecting the rafters and are made usually of fir) to the *ridge purlin* (it is the top beam of the roof where the rafters meet and are made of fir or oak); *gable* (the triangular closing of the attic is covered with a number of wooden boards, rarely it can have a small opening and it is protected from rainwater by a small guttering made of fir); *clapboard* (oak, willow, poplar and conifers) (Lăzărescu 2010, Zwerger 2000).

The house is built overlooking the courtyard, facing east or south. It is raised from the ground by approx. 2-3m and the access to the porch is via wooden steps. Such a transit area offered by the space of the porch has emerged as a necessity in order to extend the activities of the inhabitants and obtain at the same time supplementary storage space. In time, the porch has acquired a meaning not only on a functional and aesthetic level, but also on a social one (becoming a place for family gathering). It is composed of the following elements: - rail boards; - columns (simple or carved); - etched boards (attached to the top of the pillars; - solid masonry (as a support for the wooden structure of the porch) - upper porch (a higher area of the porch which provides access upstairs into the attic) - cellar (access to basement) - henhouse. The courtyard itself is facing south, the main volume of the housing unit being continued with a series of annexes on the longitudinal spatial axis. Each of these annexes has the following roles: to store hay, animals or tools.

The extension of the house contains the following annexes: the summer kitchen area (approx. 2x2m). It is placed on the opposite side of the house, perpendicular to the porch axis. The interior space is simple, the bread oven being placed in the center of the room; the shed, which is isolated from the rest of the building unit and has a solid structure, composed of horizontal wooden logs. Access is only possible through the courtyard. Hay is stacked in the gable of the roof structure and can be approached through a dormer, above the gate. On the ground floor, animal, tool and food storage spaces are found.

Gates and fences in the research area are of modest size their components being the following: wooden pillar (carvings start ½m from ground level); the upper threshold; straps (cut in the shape of butterfly wings, placed in the grooves between the lintel and stapler portions and are fixed with the help of wooden nails).

The household: interior space composition, furnishing patterns

The interior space of the vernacular house is organised according to four compositional principles or centres: heating and cooking area, sleeping area, sitting area (long benches), storage areas (in chests, cabinets, cupboards). Characteristic and most common vernacular wooden furniture items are: beds, tables (low, high), cabinet-table, chairs, benches, chests (Capesius 1974). These objects were initially assembled using simple joints (tongue and groove joints, halved and lapped joints, notched and edge to edge joints) without using adhesives. With the diversification of specialised wood processing tools planer-moulders, saws, chisels) complex assembly methods replaced the simple ones (tenon, step, angle joints, also joints employing pegs).

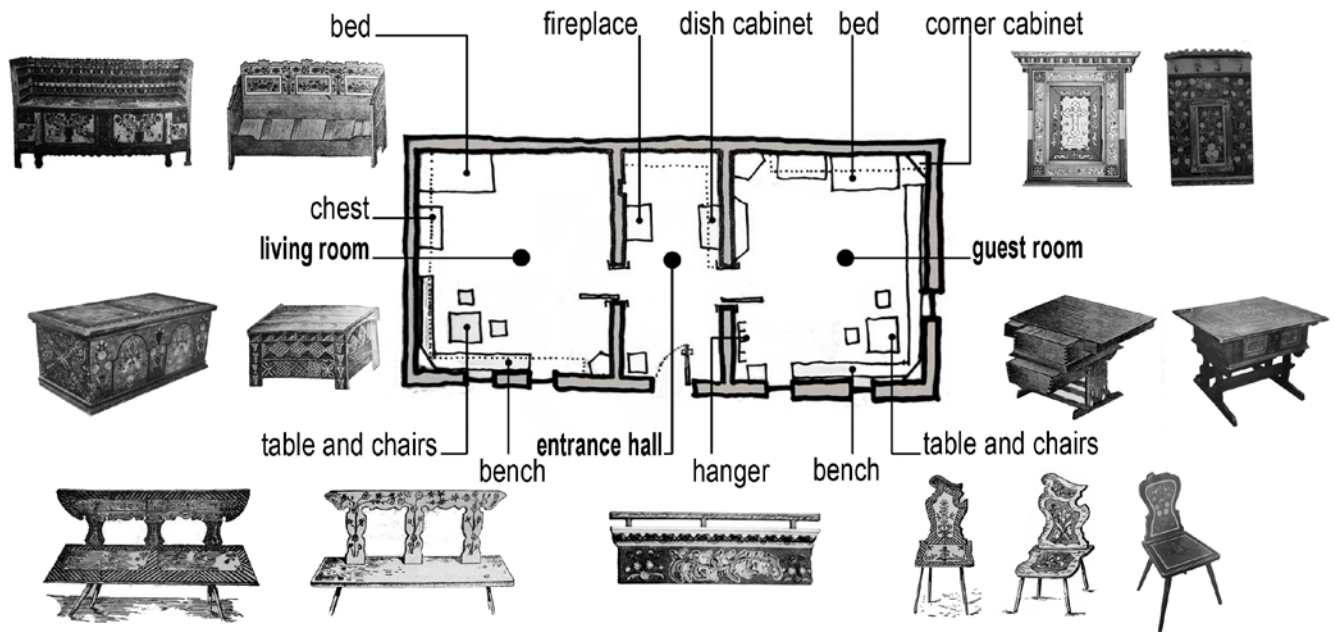


Fig. 2.

Interior space and traditional wooden furniture items of Rășinari village house

The interior of the house (depending on the manner and frequency of its use by the tenant) can be divided in two major areas: the guest room which is oriented usually to the street; the living room (everyday room) oriented towards east and directly related to the porch; the entrance hall (the stove or oven is placed here along with the cooking utensils). Regarding the interior, a series of aesthetic and qualitative differences can be observed between the two main rooms of the house (living room – multifunctional space and guest room). The living area was furnished as follows: two wooden beds (set against the walls), a wardrobe, a stove, a low table (if any); in the guest room, a high table, chairs, benches, beds, chests, pegs and textile ornaments. In the case of the analysed area the specific furniture items are the following: beds, low tables (round with three legs) high tables, cupboard table, carved chairs, low round chairs (with simple joints), dish shelves, wooden cases and chests. These objects were realized in the first phase, by simple, fixed assembly methods, the most common joints being the notch, lapped and butt joints (Cismaru 2003).

The next phase meant using specialised tools and led to the emergence of more complex joints like the tenon joints, finger joints, dovetail joints, or joints which employed wooden pegs. After assembly the furniture could be ornamented using different methods such as: carved or painted ornaments. The patterns include geometric (shaded squares, diamonds, rosettes); vegetal (leaves, flowers, pine, oak), zoomorphic motifs. The most commonly used ornamentation technique was incision, this being gradually replaced by painting after the 16th century. The furniture is mainly composed of items arranged along the walls, the centre of the room remaining open. As regards the visual interior characteristics, the beds are an extremely important focal point, by offering a support for the exposure of decorative fabrics.

At first, the vernacular house was furnished with simple objects, built only of thick oak boards lacking any ornaments. The first forms of ornamentation were composed of lines and rectangular compositions, gradually these geometric compositions being replaced by organic forms: carved floral ornaments (on chest, beds, chairs and benches) or painted floral motifs symbolising beauty (rose), night (poppy), innocence (lily). These flowers can form a composition utilising a range of colors (polychrome decoration of oriental influence) or combinations thereof: dark blue, red, dark green, red, light green, dark blue, dark green. Light tones were usually avoided. The analysis in terms of ornamentation regarding wooden furniture of Rășinari village highlighted a number of characteristics in terms of decorative vocabulary and the specific motifs utilised in the research area. It can be stated that the most common used decorative motifs are floral, intensely colored (red, dark blue, dark green, yellow) with an organic composition.

Vernacular interior wooden furniture is composed of fixed and mobile elements. The fireplace as a fixed furnishing item has an important role in the spatial and compositional layout of the house. It fulfills multiple roles on different levels, both at a: functional level (it is placed in the center of the

interior space, it is a heat source and a food preparation area);-and also at- a symbolic level (family gathering place). The fireplace may be of several types: oven (placed in the everyday room or the porch); stove (kitchen); blind stove (placed in the guest room, it is only a heat source).

One of the most representative furnishing items of the vernacular house, the bed defines the composition and main furnishing patterns of the interior space. This item can be of the following types: with legs planted on the ground; high bed; suspended bed; with tall extremities; with panels (urban influence). Regarding the diversity of wood joints and the type of assembly, the following typologies can be determined: tongue and groove joints (panels reinforced by wooden pegs); joints with wooden pegs (between lateral elements and legs); dovetail joints (Olărescu 2012).

The table also is an important item of the interior space and can be of the following types: low round table with three legs (top of the table made of oak and the legs of beech, utilising simple tenon joints); high table (with drawers underneath the top panel). The high rectangular table was used in the guest room, placed between the beds beside the window. The low round table was most frequently utilised in the entrance hall, the kitchen or the porch and it could be hung on a nail to occupy less space. The top panel was made of beech wood, and the legs of hardwood (oak or locust) being assembled by utilising simple tenon or tongue and groove joints. The main components of the high table are the following: top; large casket (for storing flatware, it is a fixed element, the top of the table slipping above it); small casket (for storing food); legs (Păcală 1915).

The next piece of furniture with a major role is the chair. One can distinguish two types of chairs: low round/rectangular chair (with three/four legs) for daily use, top made of beech, and the legs of oak with simple assembly methods; high chair (with backrest) placed in the guest room made of beech, oak, walnut, cherry, complex assembly methods. In the case of older furnishing items, the legs were carved, notched and in exceptional cases painted. The pattern of the decorative composition was simple, composed of straight lines, usually monochrome. Only at the end of the 18th century, due to Baroque influence, did asymmetrical backrest profiles with floral paintings appear.

The hanger was initially composed of a single plank of pine, oak or locust with a linear ornamentation. In time, a number of elements were added to the border, decorative wooden elements (boards, pegs), or painted floral elements.

The dish cabinet is rich in applied wooden decorations (triangular pieces of wood, interspersed with a series of small square boards) or painted floral motifs. The triangular corner cabinet can be divided into the lower area with drawers (for storing valuable items of the owner) and the top area ending in a hanger. This furnishing item also has a strong decorative role in the interior space, being placed in the guest room.

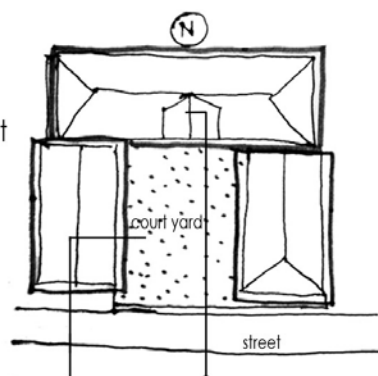
One can also distinguish in the interior furnishing of the rooms several types of chests: carved wooden chests with simple joints (tongue and groove joints, with sizes ranging from 800-1000 mm usual - height of 600-650mm and 450-500mm width, ratio between length and width of ½. The walls of the chests can be composed of two (15th-16th centuries) or three boards (after the 16th century) decorated with geometric (linear or curved) patterns; carved or painted chests with complex joints (appeared later), have more complex connections (finger, tenon, angle joints). The lid shows a bottom border, usually painted in a single color, with geometric decoration. The walls of older chests are made of two or three planks of oak and more recent ones also utilise coniferous species such as fir, spruce or beech. Wooden cabinets are also a frequent furnishing item having a number of particular elements: a door containing two asymmetrical parts (a wider and a narrower panel) and pivot hinges. The decoration is done by incision utilising geometric patterns. This furnishing item had a multiple role of storing flatware (in the kitchen) or clothes and textiles (in the rooms).

Case studies: presentation of the three selected households from Rășinari village

The summary tables below collect and reflect in a synthetic manner the results of the on-site investigation of three households chosen for presentation due to their relevance in offering insight into vernacular architecture and furniture of the village of Rășinari. The investigation focussed on two main aspects: exterior- household, construction types/details; interior- furniture, space utilisation patterns.

Case study - 1 - House with high foundation, porch and cellar

- **owner:** Omotă Gheorghe (born 1958)
Omotă Dorina (born 1962)
- **address:** Șaguna Street no. 523
- 4 generations of inhabitants are staying in the house in the present (grandparents, parents, children - 2 girls and their young - 3)
- O. Gheorghe has worked in the industry of forestry, in the present he is working as an electrician; O. Dorina has worked at the Dumbrava Factory (carpet manufacturing) for 18 years, in the present she is the employee of a private firm
- **year of construction:** end of the 19th century
- **utilities:** electricity, water



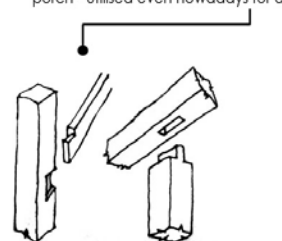
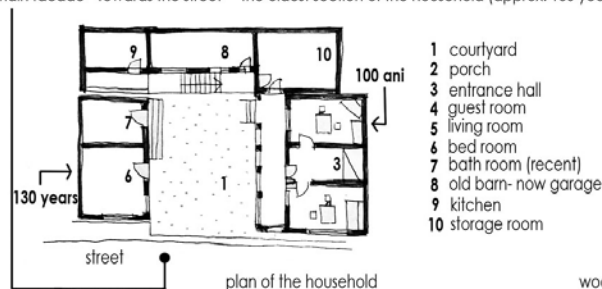
main facade - towards the street



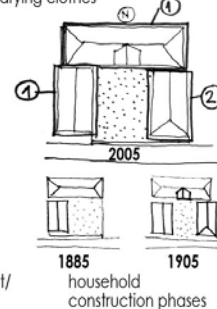
the oldest section of the household (approx. 130 years)



porch - utilised even nowadays for drying clothes



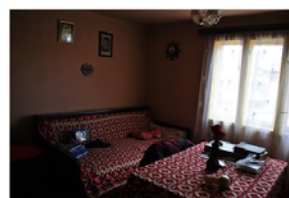
wooden joint between column and diagonal strut/
column and beam (porch) - step joints



guest room - first floor (former barn)



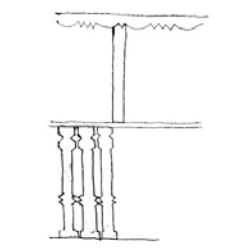
kitchen - built in 2005 at the ground floor of the barn



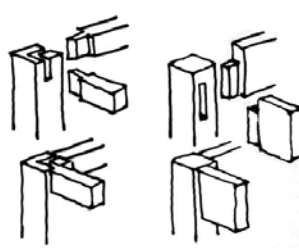
guest room (house)



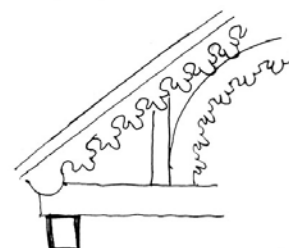
living room



detail of the wooden railing of the porch - specific wooden tracery



detail of leg system connections for tables and high chairs with backrest (parallel tenon joints)



detail - main facade - wooden tracery of the gable wall

Exterior

Household, house, barn, construction typologies & details

Interior

Furniture, space utilisation patterns

Fig. 3.

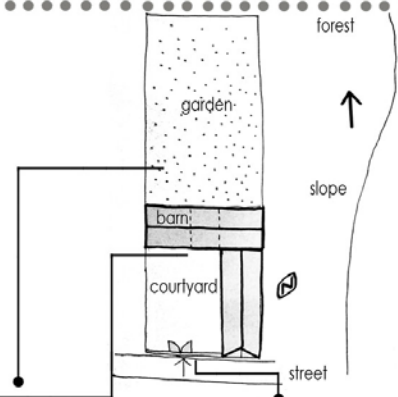
Summary table with results from the on-site investigation of household 1

Case study - 2 - House with low foundation and cellar

- **owner:** Blezv Iosif (born 1963)
- **address:** Boilor Street no. 315
- in the present the house is inhabited only by mr. Blezv, being a widow, two of his three children being settled in Germany.
- he has worked as a driver for the last 15 years and before that he was an employee of the post office in Sibiu

- **year of construction:** beginning of the 20th century

- **utilities:** electricity



main facade - towards the street



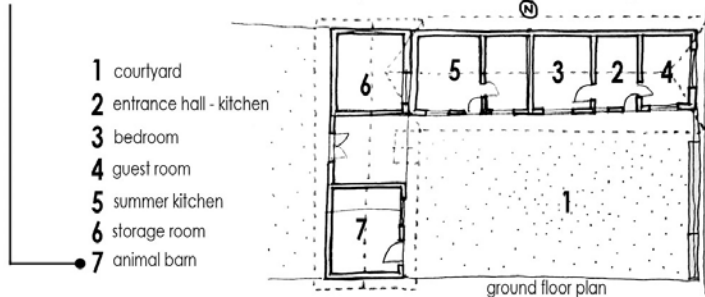
courtyard - view towards the barn



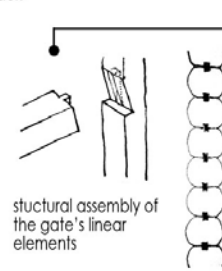
garden - in the back



100 year old spruce gate annex



ground floor plan



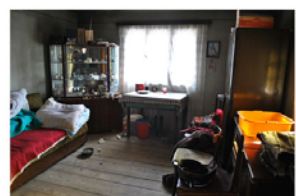
structural assembly of the gate's linear elements



house structure - mountain stone foundation plastered round fir logs



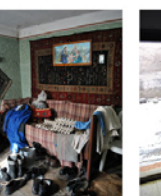
entrance hall (kitchen) - painted wooden hanger



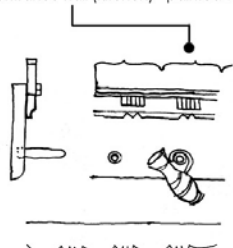
guest room



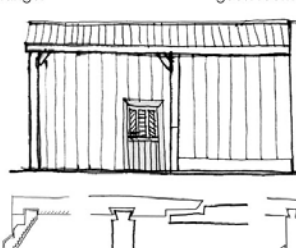
bedroom



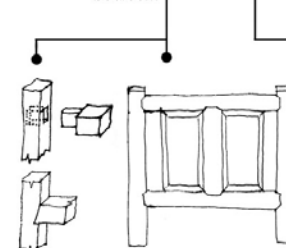
entrance - 100 year old wooden door



detail - painted wooden hanger



wooden joints - gate (halved and lapped joints)



assembly detail between the legs and the frame of the bed (notched joints)



detail - wooden door

Exterior

Household, house, barn, construction typologies & details

Interior

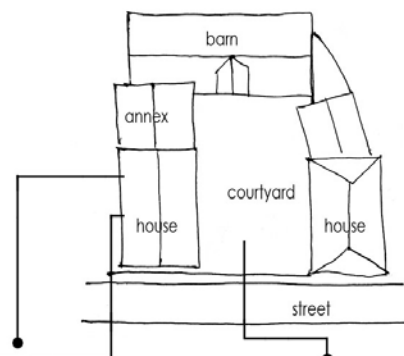
Furniture, space utilisation patterns

Fig. 4.

Summary table with results from the on-site investigation of household 2

Case study - 3 - House with high foundation and cellar

- **owner:** person from Sibiu
- **address:** Barcianu Street no. 556
- in the present the house is rented and functions as a grocery shop/food store
- the present owner has bought the house from the relatives of an old villager.
- the construction has been renovated and improved on a structural level, massive interventions were focused towards the wooden roof structure
- **year of construction:** beginning of the 20th century
- **utilities:** electricity and running water



main facade - towards the street



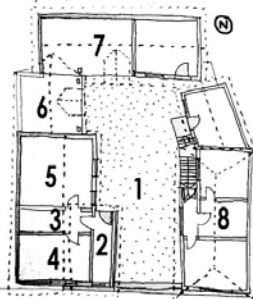
courtyard, view towards the barn



view of the porch - it was closed during the 1970's



- 1 courtyard
- 2 closed porch
- 3 entrance hall
- 4 guest room
- 5 bedroom
- 6 storage room (for wood)
- 7 barn
- 8 house (built in the 1940's)



ground floor



main facade - oriented towards Barcianu street



view of the storage area



wooden chair



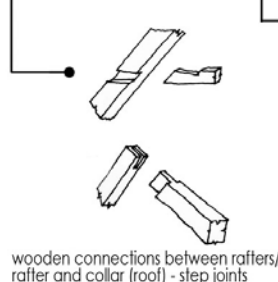
entrance



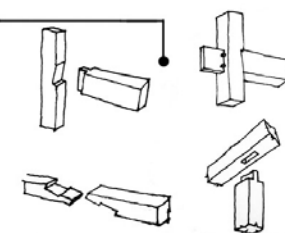
view of the courtyard



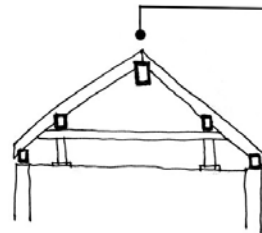
the barn, seen from the back of the plot



wooden connections between rafters/rafter and collar (roof) - step joints



wooden connection between column and beam (barn) - halved, lapped and tenon joints



purlin roof - ridge purlin, center purlin, inferior purlin, rafter, collar, queen post



detail - wooden porch

Exterior

Household, house, barn, construction typologies & details

Interior

Furniture, space utilisation patterns

Fig. 5.

Summary table with results from the on-site investigation of household 3

CONCLUSIONS AND DISCUSSIONS

The traditional household has seen many changes over time. The current form and structure have their origins in the early 19th century when the rural built environment suffered massive systematization on a national level. Before these restructuring interventions, households in the Carpathian areas were scattered in forests and pastures, away from one another. The displacement of these households according to the rational systematization plans was ungentle upon rural life, the local communities' inherent response consisting of well sought protection methods (construction of high fences as a reminiscence of the need for protection and isolation against these measures imposed by national and local authorities (Olărescu 2012, Bartha 2014).

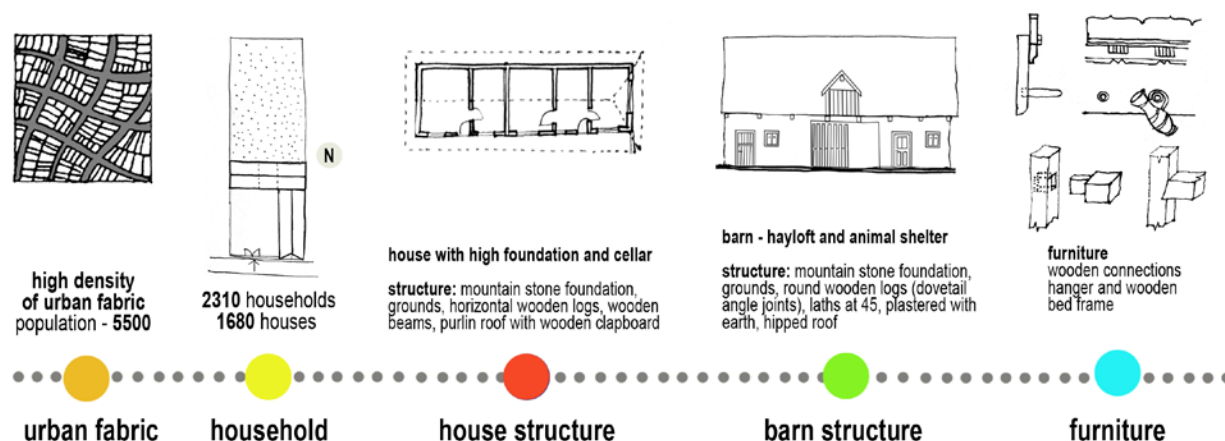


Fig. 6.

Summary table containing general data and conclusions regarding the specific local household and furniture of Rășinari village

In time the household was structured according to the classical scheme, the characteristic household organisation and functional pattern being built up as follows: the main house (in most cases with a porch oriented towards the courtyard and a guestroom facing towards the street), small house (for servants and/or elderly people, functioning as a separate volume placed on the other side of the plot parallel to the main house), the summer kitchen (as a complementary volume attached directly to the main house); a barn construction with haystack at the gable roof level, stable on the ground floor (including the swinery, henhouse); manure storage and the toilet in the garden. These functional models persisted and improved continuously, being adapted to new requirements regarding comfort.

In terms of the use of building materials (in the three cases studied, but also on a regional level), a diversification can be observed regarding the range of utilised construction materials after 1989, this process being presented in a built up manner as follows: until the 1930s the wall structure consisted of solid wooden logs plastered with earth or mortar and stone foundation (Fig. 6); between the 1950's - 70's brick started to be utilised as a construction material for walls, after the 1990's reinforced concrete in combination with other materials being the main choice.

As regards furniture in the 16th century, the range of utilised wood species was limited to the following: beech (*Fagus sylvatica*) and oak (*Quercus robur*). In the investigated households no furniture items dating from this period were found. After the diversification of wood processing tools the number of species has grown including spruce (*Picea abies*), fir (*Abies alba*), ash (*Fraxinus excelsior*), sycamore (*Acer pseudoplatanus*), linden/lime (*Tilia cordata*), elm (*Ulmus glabra*), plum (*Prunus domestica*), pear (*Pyrus communis*), cherry (*Prunus avium*), walnut (*Juglans regia*).

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