

# Wood Architecture & Pattern Books

Rauland & Ramme, Norway  
16<sup>th</sup> – 23<sup>th</sup> May 2008

## **Background:**

From the 16<sup>th</sup> – 23<sup>th</sup> of August 2008 the European School of Urbanism and Architecture (ESUA) held a workshop on Construction in Wood and Pattern Books in Norway. The workshop was divided in two parts, the first in Rauland the Telemark Region, and the second one in Ramme near Oslo.

## **The Rauland and Ramme Test Course:**

The workshop consists of two modules:

*Rauland module:*

The module was divided into two parts:

1. Traditional architecture and building techniques;
2. Contemporary architecture and modern building techniques;

*Goals of the workshop in Rauland:*

To give the students an insight into wooden architecture and the complex process of constructing these types of building.

The Rauland module was organized by Ottar Romtveit, Arne Sødal and Claus Zapffe.

*Ramme module:*

After the Rauland module, the test course continued with a workshop in Ramme on Pattern Books.

*Goals of the workshop in Ramme:*

To give the students an introduction to the methodology of making Pattern Books, reading and observing and comparing different patterns.

The tutors for this module were Joanna Alimanestianu and Michael Mehaffy.

## **Original application**

*Based on the curriculum and training methodology hypothesis (WP 2), the WP partners will focus on the problems and possibilities in real-life situations by studying ongoing development and building projects in the city of Stavanger, Norway.*

*The partners will visit and make interviews in selected projects ranging from single buildings to urban areas, all included in the ongoing "Norwegian Wood" programme (neither funded by the ESUA project nor the Leonardo programme), which aims at building and exhibiting demonstration projects using new wood technologies. "Norwegian Wood" is an important element of Stavanger's "European Cultural Capital 2008" programme. We will also use our participation at the event for dissemination of preliminary project results to industry and academia.*

*Based on these experiences, the partners will participate in a three day test course located to the Telemark University College in Rauland, on traditional and new wood technologies.*

*The short course will include both workshop training and classroom teaching, and be open for participants from building industry, practicing architects, urban designers and students from the INTBAU / Prince's Foundation network. The short course will be held in collaboration with two of the Affiliated Organisations, the NGO Stiftelsen Byens Fornylse and the local construction company Rauland Aktivitets Service.*

*All participants in the test course will be invited to take part in the evaluation and critique of the event, and make proposals for a revised teaching methodology and curriculum.*

## **Programme:**

August 16: Arrival of participants from abroad. Romanian students will be picked up at Torp Airport. Accommodation one night in Arne Sodal's summer house close to the Torp airport.

August 17: Travel to Rauland by car (three hours). Accommodation at Rauland Academy (three nights). Introduction to the program. Norwegian students will travel directly to Rauland.

August 18 -19: Course in building techniques in wood, at Ottar Romtveit's workshop in Rauland. Mr. Romtveit also teaches traditional building crafts at the Rauland University College.

August 20: Departure from Rauland in the morning. Visit to factory making wooden building materials based on new technology. In the evening arrival at Ramme Farm, 40 kilometers from Oslo. Accommodation 3-4 nights.

August 21 - 22: Pattern Book exercise at Ramme farm. Tour of local traditional architecture to make comparison with the Romanian vernacular architecture studied for the pattern book exercise..

August 23: Morning: Final presentation and discussion. The Romanian students will depart for Torp airport after lunch. Other participants may attend the Ramme Music Festival the same evening.

August 24: Departure of the last participants from Ramme.

## **Participants**

### *Tutors*

Arne Sodal, Claus Zapffe (design and construction in wood).

Ottar Romtveit (crafts).

Michael Mehaffy, Joanna Alimanestianu (pattern books).

FU- Folkeuniversitetet representative: Audun Engh.

### *Students*

Marko Brasovan (Ro)

Bogdan Isopescu (Ro)

Clara Piscoi (Ro)

Sergiu Sabau (Ro)

Alexandra Spiridon (Ro)

Paul Valeanu (Ro)

## Workshop results

During the workshop the students produced a number of pattern book files, both studies of existing buildings and urban situation









## TOWN MAIN STREET

Urban Type Defining Characteristics

**Description:** Grown from the typology of the valley settlement, the main street is the most representative street of the settlement. It is surrounded by relatively high building densities. Predominantly Mixed Use. Where residential and commercial mixes in equal amounts.

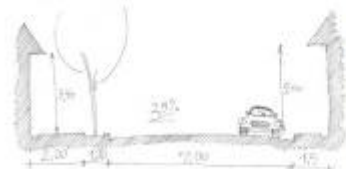
**Issues:** The sidewalks have been surrendered to the automobile because of the intense auto traffic. The reduced sidewalks are again reduced by being occupied by temporary commercial stalls.

**Position:** Considered as the main streetscape. The backbone of the town. Generally passes in the bottom of the valley, through the center of the commune.

**Relationships to contours/Topography:** It follows the natural topography.

**Views:** The street curves strongly, allowing changing views. The castle is visible almost at all times.

**Connection to other urban types:** Bonding it with the Residential Area, Town Center, Tourist and Farmers Market. Residential Roads lead into it.



STREET SECTION

**Parking:** Long-term parking discouraged, short-term parking necessary. Bus stops must be taken into consideration.

**Materials:** Terrace with edges, and paved sidewalks. Furniture: Street lamps, garbage bins, benches.

**Planting:** Use plant arrangements and shrubs to balance the artificiality of the buildings, pavement and terrace.

**Billboards:** First make sure it fits the building. Keep the color palette into sync with the accepted settlement color pattern.

**Lighting:** Use lanterns appropriate for the character of the street.

**Conclusion:** Although taking a part of the auto traffic, this street has to have a pedestrian life also. Sidewalks have to be treated as equally to the automobile. The town furniture and vegetation will help create a pedestrian friendly and representative street for the commune.



BRAN PLAN



MAIN STREET PERSPECTIVE



BRAN MAIN STREET EXISTING SITUATION



BRAN MAIN STREET EXISTING SITUATION

A PATTERN BOOK FOR BRAN, ROMANIA

## RESIDENTIAL STREET

Urban Type Defining Characteristics

**Description:** The most common street available in the settlement. Mostly residential it can also have a small commercial presence for the use of the neighborhood. Less public feel, compared to the Main Street.

**Issues:** Here we can find infrastructure problems. Sidewalks are missing. Automobiles are impracticable.

**Position:** Radiating from the Town Center, usually connected to the Main Street or to other Residential Streets.

**Relationships to contours/Topography:** Keep a slight curve to the street to make the street feel as a space and not a canal. Irregular front alignments. The street is made up of sidewalks on both sides. The automobile is big enough for two cars.

**Views:** Interesting spaces created into the irregular street alignment will be the focus of the different points on the street.

**Connection to other urban types:** Residential street will lead into the open Main Street. While on the other side will be connected to the country lane or mountain path.



STREET SECTION

**Parking:** Personal permanent parking on the private lot.

**Materials:** Gravel is predominant. If it's possible these can be improved to terrace areas.

**Furniture:**

**Planting:** Vegetation on the street will be provided by the plants growing in the green area between the street and houses.

**Billboards:** Mostly a residential area, billboards won't be used.

**Lighting:** Street lights should work well with the texture, colors and typology of the houses and street.

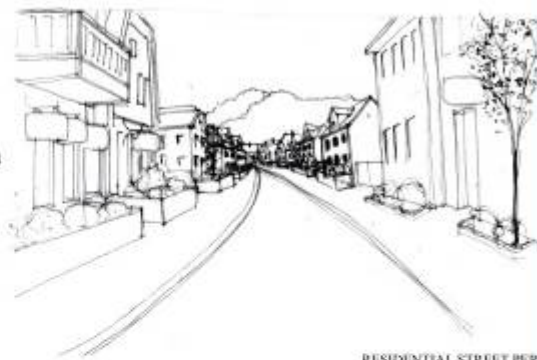
**Conclusion:** Quieter, less commercial functions compared to the main street. Attention must be placed even on the public space. Mowing that sidewalks, automobile and the settlement furnishings be kept at a reasonable standard.



BRAN PLAN



BRAN PLAN



RESIDENTIAL STREET PERSPECTIVE



BRAN RESIDENTIAL STREET



BRAN RESIDENTIAL STREET

A PATTERN BOOK FOR BRAN, ROMANIA



VILLA WITH TOWER AND VERANDA



General description

The tower and veranda villa is a countryside house, situated in a residential area. It is a composition of a massive, rectangular brick volume and a light, usually centred wooden framework tower. Usually it has a 2.5-m setback from the street. The simple, white painted volume creates a contrast with the slightly decorated wooden structure. This type of house contains some intermediary spaces in relationship with the exterior, like: veranda, porches or balconies.

Base

It is made of natural stone or concrete with stucco, no shiny finish, simulated stone, mosaic or ceramics.

Roof

The roof is pitched and made out of ceramic tiles. The structure is made of wood.

Eaves

The eaves are very expressive. The rafters can be seen and are slightly decorated.

Windows

The windows are rectangular and vertical. The framework is made out of painted or natural wood. The glass is divided in several pieces.

Decorative

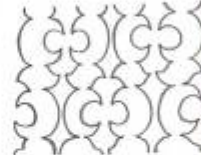
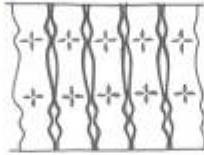
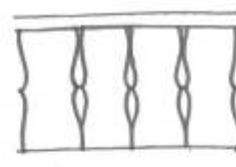
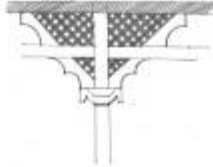
The wooden structure is carved in traditional, abstract or floral pattern. The decoration is used on columns, eaves, parapets and loggias.

Entrance

The entrance is usually through the porch and the veranda. The veranda can be open, otherwise it can be used as a vestibule.

Material and colours

The structural walls of the villa are made out of brick. The verandas and the porches are made out of wood. The wood can be painted in green, or naturally used. The masonry is covered with plaster and white paint.



ORNAMENTS



BRAN VILLA EXAMPLE



WINDOW, VERANDA, LOGGIA, EAVE DETAILS

A PATTERN BOOK FOR BRAN, ROMANIA



## **Student feedback**

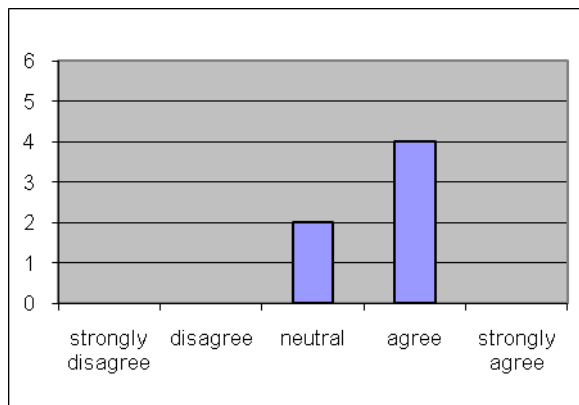
Feedback from the workshop and the ESUA project were harvested in four different ways.

Students were given an ESUA feedback form with 19 multiple-choice questions and 6 more open questions requiring more general answers and suggestions. The feedback form was based on the forms used for feedback at previous ESUA workshops, with several of the questions being similar, so that at the end of the project period the different stages of feedback can be compared. The content and results of these forms for the Rauland and Ramme workshop is given below

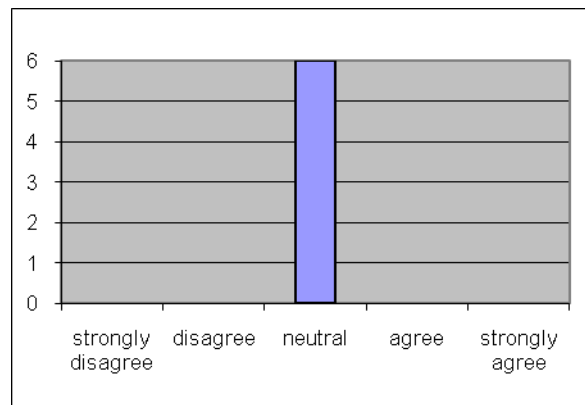
Six students have delivered the students feedback form. A group of students are as of July 2008 working on an independent student feedback report, which will be attached to this report in a future version.

Below are the results from 19 multiple-choice questions given to the students in form of a questionnaire:

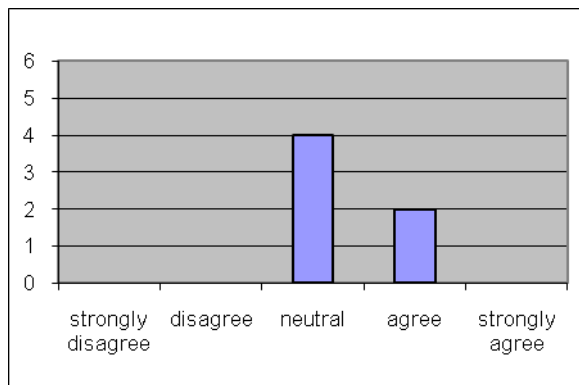
*Question 1 - "The teachers were good at explaining things to us"*



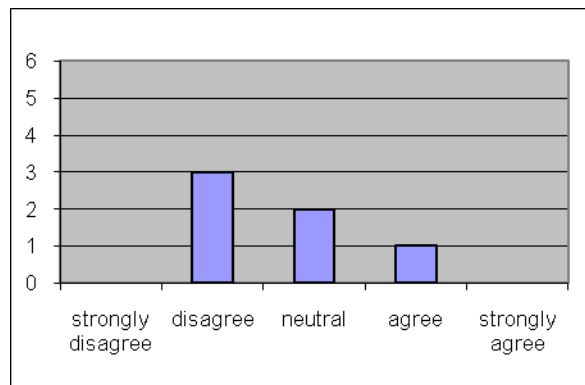
*Question 2 - "The teachers have motivated me to do a good job"*



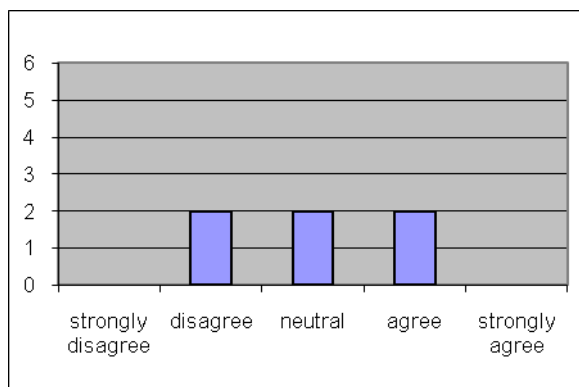
*Question 3 - "This workshop felt important for my future profession"*



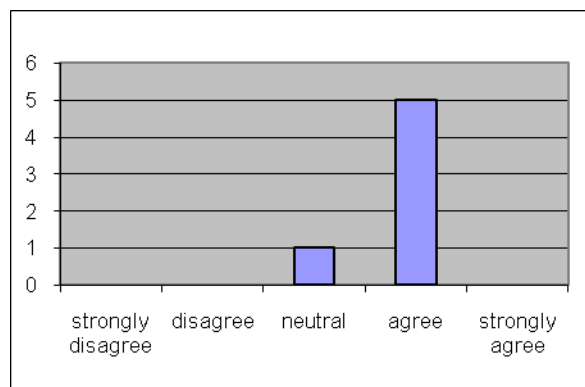
*Question 4 - "For the most part I was aware of my progress in relation to the goals of the workshop"*



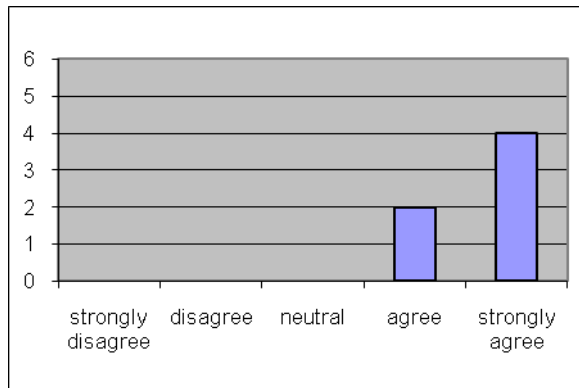
*Question 5 - "For the most part it was made clear to me what was expected of me during the workshop"*



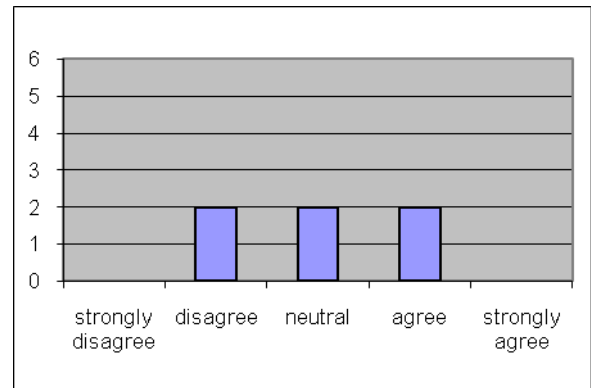
*Question 6 - "We were allowed enough time to understand the things we had to learn"*



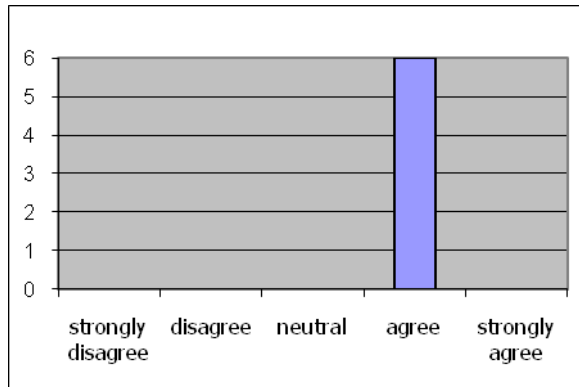
Question 7 – "The teacher listened to what we students had to say"



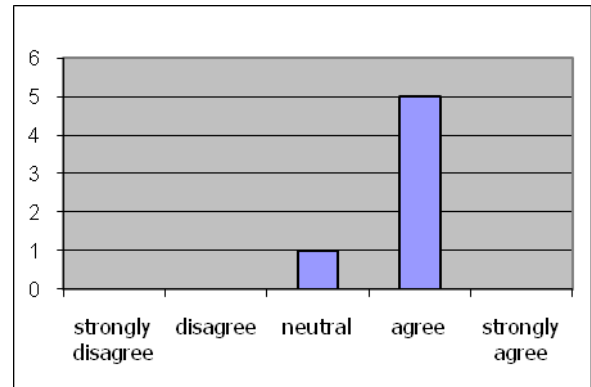
Question 8 – "I have devoted the necessary time to assigned tasks"



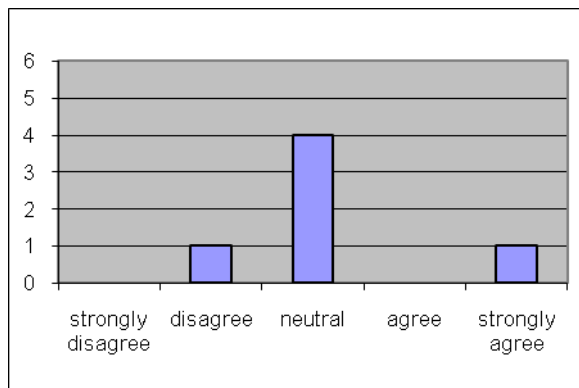
Question 9 – "The atmosphere in the class has been good"



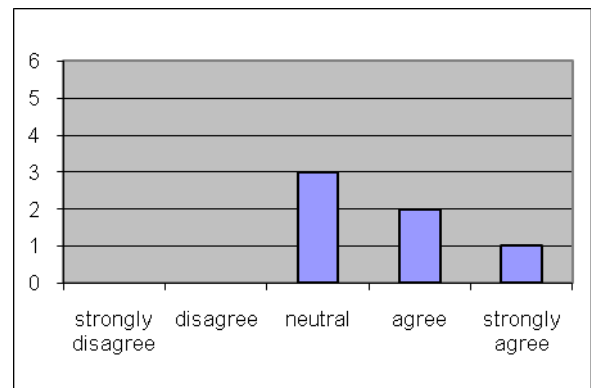
Question 10 – "The physical environment in the classroom / workshop venue has been satisfactory"



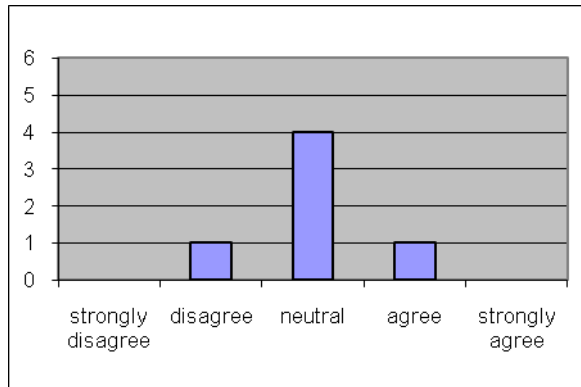
Question 11 – "The workshop has been relevant to my university studies"



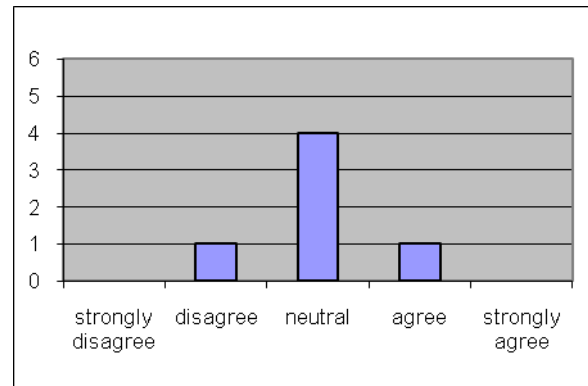
Question 12 – "The lectures have been interesting"



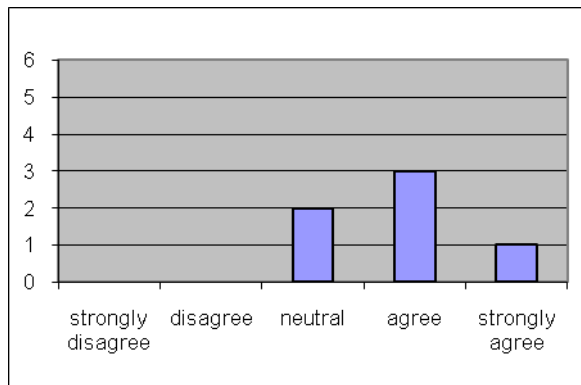
*Question 13 – "There has been a good mix between assignments / work and lectures / information from the teachers"*



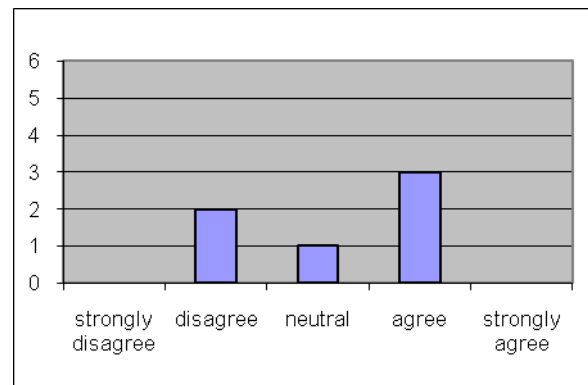
*Question 14 – "The workshop has corresponded well to information given in advance / my expectations"*



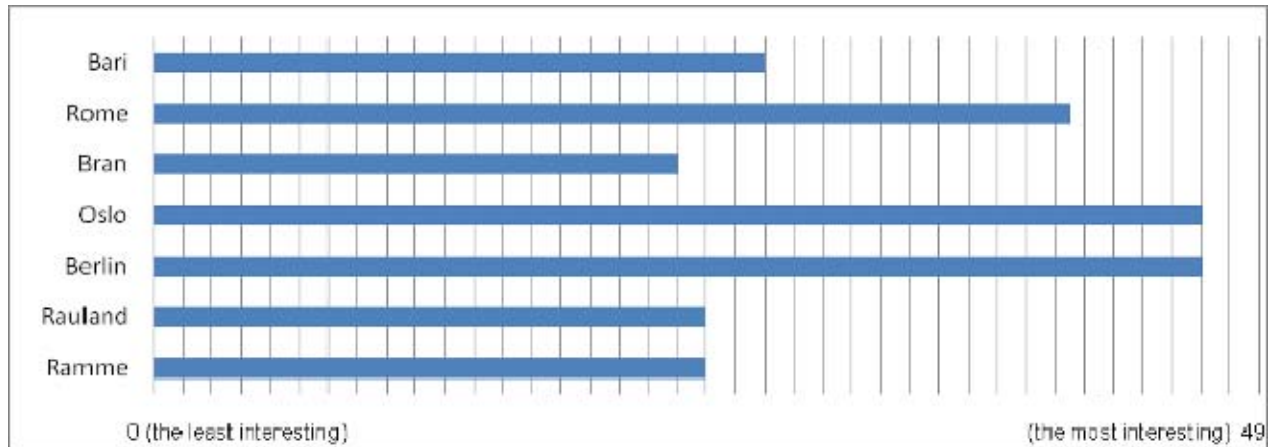
*Question 15 – "I would like to learn more about the topics touched upon in the workshop"*



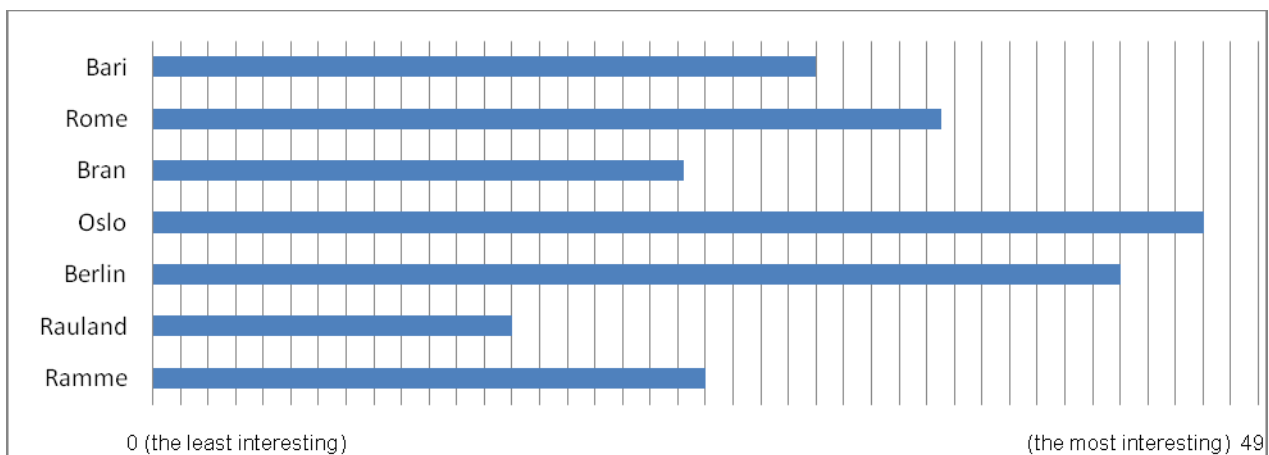
*Question 16 – "The content of the workshop could form the basis for a one-year course at my architecture school"*



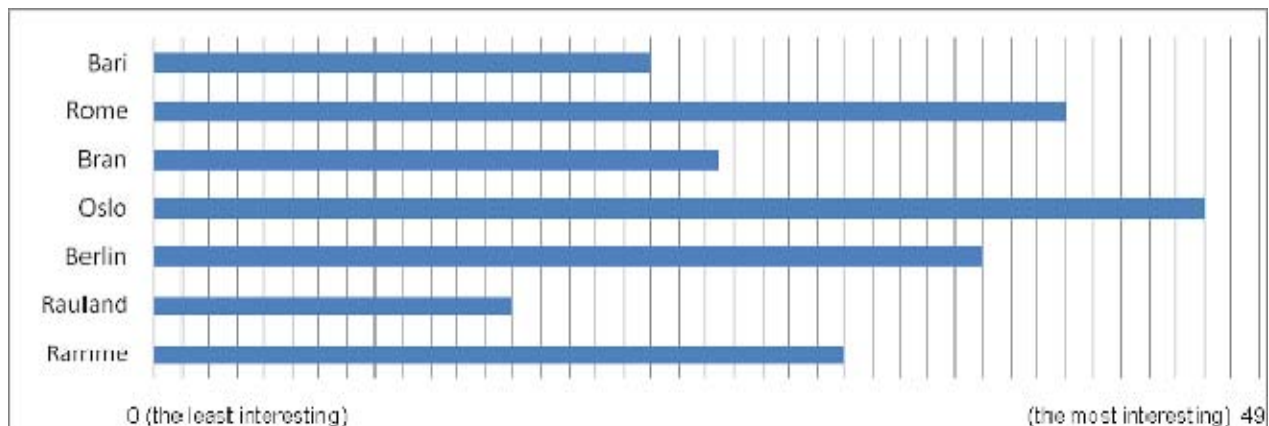
Question 17 – "Please rate the workshops according to **how interesting** you **personally** found them. Give each workshop a unique rating: 1 to the least interesting one, and 7 to the most interesting one "



Question 18 – "Please rate the workshops according to **how relevant to your current and future profession** you found them. Give each workshop a unique rating: 1 to the least interesting one, and 7 to the most interesting one "



Question 19 – "Please rate the workshops according to **how desirable to be the basis for a future full-scale architectural education** they are. Give each workshop a unique rating: 1 to the least interesting one, and 7 to the most interesting one "



In addition to the above 19 multiple-choice questions the students were given 6 more general questions to which they were encouraged to answer in their own words.

**Question 1** – “The best part of the course / workshop, that should be developed further:”

- Insights in the way materials are being used and developed. Visits to factories and exemplary projects
- The part regarding the wood specific crafts
- The visits to the sites relevant to the course
- The constant interaction between students and tutors -> conclusions
- Diversity of topics: academic and practical work while changing the setting
- The pattern book-the dissection of what are the authentic characteristics of a place
- Thinking how to handle damaged places
- Building techniques in wood

**Question 2** – “The parts of the course / workshop that should not be repeated – and why:”:

- A better structure to the programme
- Talking about Bran being in Norway
- Don't work on a project like Bran from Norway, it's not in the ESUA spirit
- It was a bit strange to work on the Bran project while we were in Norway. Being on the site is important for collecting more information and feeling the place
- Working on Bran while being in Norway
- The dissection of how one style of architecture is better than others

**Question 3** – “If the ESUA project were to design a one-year module in Norway (as part of a European five-year architectural education) based on this test course in Norway, what academic and practical content should the module focus on? ”

- Sensitive observation of context
- Hands-on approach on wooden traditional buildings
- Wooden architecture, wood related crafts (modern and traditional)
- Wood technology
- Small scale settlements
- Community building – how to build settlements with a sense of community
- “import or use local elements ?”
- Maybe it should focus on wood studies. Studying Norway's traditional architecture would be the main academic content while understanding the material both artistically and structurally
- Pattern books
- Learning about traditional, but also modern building techniques ->comparison, advantages, etc
- Wood architecture

**Question 4** – “Which elements would you propose to include in such a one-year module that were not touched during the test course? ”

- Tehnology (Wood) physics of materials, designing with wood
- A huge amount of practical work with wood
- If it's possible – hands-on approach to building
- Hands-on approach to designing wooden buildings
- Art seminars would be very nice. Experimenting by carving, playing with surfaces, combining materials etc
- Detailed local analysis for pattern books
- Designing with wood
- Hands on approach on wood
- Building in the natural environment, relating to the natural landscape

**Question 5** – “General comments on the test course”

- I feel happy about the choice of bringing us in Rauland and see the Norwegian landscape
- Great field trips
- Some visits parts of the visits didn't have a relevant input for the course (Raindeer center)
- The tasks of this course were not very clear. Sometimes it was very ambiguous and when it began to be clear it was too late. Maybe it should focus only on one task, two tasks were too much
- I thought it was interesting to work on different subjects and have different tasks (academic and practical) I think we didn't have enough time to get acquainted to either of them
- The Rauland part of the test course should have been much more complex, a lot more things could have been done and discussed on the matter of wooden architecture and the impact of new building techniques.
- The Ramme part of the workshop was very interesting, but I am not convinced that we should have discussed the Bran issues there.
- The atmosphere was very pleasant in the second part of the test course but not in the first because of the lack of activity.
- Fantastic places, great people.

**Question 6** – “General comments on the ESUA project”

- The experience of the last five workshops has determined the way I see my education, the profession, the craft, the human values that are connected with skills and life
- It is positive when teachers inform in advance on the content of the workshops
- Usually crafts can be learned by living tradition. ESUA proposes a kind of architect which will learn a bit artificially. Even so, this kind of architect would have the knowledge to adapt to a generalized world and its needs
- There were few lectures about buildings, building techniques, I felt always worked on a macro scale (besides the pattern book exercise)
- More practical work (working and experimenting with materials, textures), would balance the academic part, and the lectures
- Tradition is very important, but I think the way it evolved and the means of modern technology were not properly taken into consideration during the lectures and the practical exercises
- While doing a charrette or a pattern book (especially a pattern book), I think it would be very important for people involved to try to start searching for a result, to announce it to the local authorities, to negotiate, to understand the juridical means of implementing it and start doing so.
- I feel that the ESUA project is based on very good ideas and that it should be taken further
- For me the ESUA project was the most exceptional experience of my architectural education