**Wivi Lönn Villas in Electromedia: A Pilot Study in Videographic Art Education**

**Introduction**

Wivi Lönn (1872-1962) is one of the first female architects in the whole world. In the USA as well as in Finland\(^1\) there were a few ladies who studied architecture and also received the title somewhat earlier, but Wivi herself had created an independent carrier, with around a hundred important projects. She won the first prize in the international competition with a male colleague, Armas Lindgren\(^2\). The project was the Opera of Estonia.

Wivi Lönn has been notified as an important national figure. The Finnish TV has made a program about her work. She has also received some proclamation on the internet, from the cities running architectural education throughout Finland (Helsinki, Tampere and Oulu). This was the background when Wivi Lönn was selected as the subject of study for a course in digital art education and digital culture at Jyväskylä University, Jyväskylä, Finland. Evidently, it was because the Institute was and still is operating in an old beer factory designed by the very own, Wivi Lönn and surrounded by her famously designed nine villas and one of the city’s early library.

The project is described from the following viewpoints:

1. Wivi Lönn,
2. Älylä and Seminar Hill garden suburb.

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\(^1\) Helamaa, E., *Arkkitehtuurikoulutus Suomessa, 175 vuotta*, Rakennustieto (Helsinki, 2000), 24

\(^2\) ibid. 36
3. Inhabitants of the villas,
4. Personal style,
5. Spirit of place and time,
6. Documentation.

The work was organized to be a collaborative pilot study between the Art Education Institute and the so-called ALMONDe-group (Azmin, Laapotti, Majurinen, Oksala [Novel Design]). Aida Azmin acted as a post-doctoral researcher in Jyväskylä in 2011. She is a specialist in vernacular housing design and accepted the theme for her work. Professor Jaakko Laapotti acted as an advisor in housing architecture, Joel Majurinen in ICT, whilst, Tarkko Oksala was the supervisor of the research contents in general.

Pauline von Bonsdorff was the formal leader of the project. She has been engaged in addition to art education with large ICT-projects. Also interviewed were other specialists and a majority of inhabitants of the target villas of Wivi Lönn.

**Wivi Lönn as an Architect**

The architecture of Wivi Lönn has been studied especially concerning her early years in Tampere. Also, many articles and small case academic seminar works are available since 1950s. A large knowledge base concerning the life and work of Wivi Lönn was

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3 Azmin, A., *A Discourse of Housing, Based on Cultural Meanings in Malesia* (Edinburgh, 2007)


5 Tyrkkö, M., *Naisarkkitehti, Tampereen rakentaja* (Woman Architect, a Builder of Tampere), Tammerkoski-lehti, 4 (Tampere, 1952)
gathers in the project. The life work was documented in three phases as follows: [1] the early years in Tampere; [2] at the peak of her carrier in Jyväskylä, and [3] the later years in Helsinki. The value of Jyväskylä period and Älylä/ Seminar Hill, as well as Lönn’s actions from there was emphasized. It has also been acknowledged that in Jyväskylä city, some books especially documenting the history of Wivi Lönn atelier has been published.

Wivi Lönn became a personal friend and the eminent colleague of many famous Finnish architects starting from Armas Lindgren, Eliel Saarinen, Lars Sonck and many others of international reputations. Wivi Lönn may have (expectantly) achieved similar status retrospectively. Then, Wivi Lönn started her carrier with designing several schools in Tampere and mainly winning the competitions. The first important work was the new building for her own school originally made in 1899. She also won the competition for the Central Fire Brigade Station.

Wivi Lönn moved from Tampere to Jyväskylä where she got a promising position with the support of academic teachers and a female “magnate” with reference to Hanna Parviainen. From the atelier in Jyväskylä, she designed most of her buildings.

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6 Almonde, *Emancipation and the Birth of Professional Female Architecture in Finland*, Unpublished data-base (Helsinki, 2011)


8 Jäppinen, J., *Talo etelärinteellä* (Jyväskylä, 1996)


11 Ibid., Figures, 73, 75, 78
all over the country, including some extensive professional trips around Europe during the second period.

In the third stage of her life, Wivi Lönn acted mainly in Helsinki designing public properties and finally a hotel for the Society of Young Christian Women. She made a deal with the developer to live there in a penthouse until the end of her life.\(^\text{12}\) This was a good covenant, because at the time, she had already reached the age of 90 years. Wivi received numerous honours during her life. Among them, is the title of an honorary professor in 1950. The personal history of Wivi Lönn was studied and documented to form a seed for a larger study considering the birth of Finnish Female Architecture around 1900-1950\(^\text{13}\).

**Älylä and Seminar Hill as Garden Suburb**

Wivi Lönn had once said that she was happy in Jyväskylä, “where I designed nearly the whole of the garden suburb.” Jyväskylä was built according to the town plan, which was partly a work of Carl Ludwig Engel, the director of Building Government and the designer of Helsinki Centre\(^\text{14}\). A remarkable enlargement to the Town plan was made under the influence of the “City Beautiful” movement\(^\text{15}\). This marvellous and large town plan was unfortunately only accurately realized in mainly three blocks, the majority of which were, as told, designed by Lönn. Some of the carpenter style


\(^{13}\) Almonde, *Emancipation and the Birth of Professional Female Architecture in Finland*, Unpublished data-base (Helsinki, 2011)

\(^{14}\) Valjakka, S., *Jyväskylän kaupungin rakennukset (1873 -1880)* (Jyväskylä, 1971)

\(^{15}\) Saarinen, E., *The City*, (MIT, 1943)
buildings fulfilled today’s protected milieu and fit well with the spirit of the place as created by Lönn

Äylä and Seminar Hill, designed by Lönn consist of nine independent villas which also possess some garden buildings as well. The tenth villa was demolished and another one was rebuilt. The beer factory and library enrich the area with two additional houses. Thus, the original Lönn buildings in the area include about 15 interesting targets, which are visually interconnected. (In the area there is one Lönn villa more, but its outlook has been completely changed in the 50ies.)

In the study, the villas were analysed in subclasses. Two of the first, around circa 1910, were influenced by the German’s Jugend style. The next two had a slight touch of French or Belgian Art Nouveau. The atelier of Vivi Lönn and the villas of Oksala and Karpio reflected Mackintosh’s style and were the core of Lönn’s own expressions. The latest two buildings are according to the general architectural atmosphere, with more classical details. The continental influence was evident since Lönn has travelled a lot to Germany, and France. Later it was discovered that Lönn had actually visited Scotland before she started to keep travel diary.

The history of Äylä and Seminar Hill in general and the role of each of the nine villa buildings were recorded under the modules “Past, Present and Future” in the

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16 Jäppinen, J., Jyväskylän julkisivukuvat (Jyväskylä, 1991), 40-
17 Jäppinen, J., Jyväskylän julkisivukuvat (Jyväskylä, 1991), 41
18 Ibid., 40
hypermedia platform. Also, the formation of courtyards and streets was studied with videography and panoramas were taken from the balconies of the villas.

Älylä and Seminar Hill inhabitants

The social explanation to the success of Wivi Lönn in Jyväskylä was based on the fact, that Jyväskylä has been the centre of women emancipation in Finland and under the circumstance, worldwide. Women in Finland obtained voting rights much earlier compared to women in other parts of the world. Minna Canth, a writer, had started a strong movement in the second half of 19th century at the Seminar of Jyväskylä. Later Hanna Parviainen as the “iron” lady of the town opened new positions for women in business. Under this new spirit many of the Seminar teachers were well prepared as clients to give their brief to Lönn, and they included Airila and Oksala and later Haavio moved in. Three of the buildings were originally designed for relatives of Lönn, i.e., one for Wivi herself and others for her two brothers. The rest of the buildings were built for eminent patriots of the town such as Karpio, Nousiainen, Pesonius and others.

Älylä in general was socially renowned. The Karpio family also had villas designed by Lars Sonck and later by Alvar Aalto within the area. Alvar and Aino Aalto started their carriers in the Wivi Lönn’s designed Karpio Villa in the ‘20s. A lot of cultural history can be found inside the buildings as well as in the gardens. Architects (Salervo), artists (Heiska, Lehtinen) and art teachers (Bremer, Valjakka) also had

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20 Halila, A., Jyväskylän seminaarin historia (WSOY, 1963)
several residences nearby the area and they were designed in Jugend or Northern Late-Classicism architecture.

The garden ideology inspired Wivi Lönn and one of her few town plans is a garden suburb near Säynätsalo, a region, which was originally meant for the workers of the factory. Alvar Aalto, once an inhabitant of Älylä, followed some ideas of Wivi Lönn and one of them was to collaborate with the “smallest” municipal area of Finland (Säynätsalo). Aalto created the famous Municipal Hall for Säynätsalo and also the so-called “Experiment House” nearby.

Älylä and Seminar Hill is a protected milieu. The atelier of Lönn as a key point, is now owned by a benefactor, Kauko Sorjonen, who had also contributed to the restoration of the atelier, the beer factory and the manor of Kuokkala within the Jyväskylä area. The Kuokkala manor is one of the most wonderful buildings of Lönn, designed during the early Tampere period (1906). Many of Älylä’s and Seminar Hill’s inhabitants, especially those representing the original descendants of the initial owners, were interviewed in the study and a lot of social information was included in the module “behaviour” in hyper-media as shall be explained later.

**Personal Style**

Wivi Lönn, born in 1872 was learning building construction first at the Technical School in Tampere. She acquired into the course exceptionally without being matriculated. She also achieved special recommendations to study architecture in Helsinki. This happened a bit after the first architecture course in the whole country that bred students such as the famous figure, Eliel Saarinen (born 1873). Lönn graduated from the Polytechnic Institute as an architect during the pinnacle of Finnish
National Romanticism. The architectural style of the era fostered total artwork such as the renowned case of the Finnish Pavillion, in Paris World Fair, 1900.

Lönn’s design concept was meticulously intimate to the National Romanticism when she was working on the Fire Brigade building in Tampere. Besides that, her style was also inspired by the European’s *Jugend* styles in Vienna (Secession), Brussels (Horta) including Scottish architectural style (Mackintosh). These influences concerned, however, nuances that Wivi Lönn should also be included in the list of famous Finnish architects, who really have their own style, like Saarinen and Sonck, as well as Lindgren.

Lindgren was the most international, among the Finnish architects discussed. Among other duties, he has lectured “History of Architecture” and later, started producing his own writings, for example a book about ornaments. This rare book was found during the preparation of our study from one of the villas in Älylä. This finding triggered the idea of the significance of studying the various ornamentations discovered in Lönn’s designs.

Wivi Lönn perceived buildings as integral totalities, but she also enhanced them with very sophisticated ornaments. Typically, she would use a certain ornament(s) dedicated to a certain work. The repertoire included themes, with cross-cultural interpretations (compare Azmin), such as follows:

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22 Lindgren, A., *Sisustus- ja koristetyylit*, Otava (Helsinki, 1934)

23 Azmin, A., *A Discourse of Housing, Based on Cultural Meanings in Malesia* (Edinburgh, 2007)
1. Chain of Circles – Time
2. Matrix of Squares – Location
3. Hierarchy of Squares – Trinity (Body, Soul, Spirit)
4. Lullian Figure (Wheel) – Thinking
5. Scale Transform and Jewellery – Female Trade Mark
6. Concentration of Solar Rays – Enlightenment And Power

Major parts of the themes can also be found in the building or its interior scale, which are done by other Finnish masters, such as Eliel Saarinen\textsuperscript{24}. They also belong to the repertoire of the international colleagues, which include Mackintosh or even Frank Lloyd Wright\textsuperscript{25, 26, 27, 28}. The most personal ornament in Lönn’s style is the solar figure (compare, Azmin, \textsuperscript{29}), used in her atelier and as the main theme in the Villas of Oksala and Karpio\textsuperscript{30}. The atelier is like an experiment house for all ornamental themes, but other Villas have a certain key ornament, which makes the recognition of the target

\textsuperscript{24} Christ-Janer, A., \textit{Eliel Saarinen}, trans. K. Ruohutula (Otava, 1951)

\textsuperscript{25} McKean, J., Baxter, C., \textit{Charles Rennie Mackintosh, Architect, Artist, Icon} (Edinburgh, 2003)

\textsuperscript{26} Nute, K., \textit{Frank Lloyd Wright and Japan} (VNR, 1993), 15, 18, 88, 132

\textsuperscript{27} Zimmerman, S., Dunham, J., Wright, E. Ll., \textit{Details of Frank Lloyd Wright} (USA, 1994)

\textsuperscript{28} Fahr-Becker, G., \textit{Jugendtyyli} (Köneman, 2005)

\textsuperscript{29} Azmin, A., \textit{A Discourse of Housing, Based on Cultural Meanings in Malesia} (Edinburgh, 2007)

mainly so easy. Later, functionalism was known as non-ornamental phase in general. Alvar Aalto, who had the office with Aino Aalto in Villa Karpio, has used the solar theme in an innovative way in Säynätsalo’s Municipal Hall at the main roof details\textsuperscript{31}.

The essence and aesthetic outlooks were documented via the electro-media to their places and also the significance of the villa in the evolution lattice of the family of the villas. The variation of ornamental themes in daily context was studied using videography. The location of ornaments was mostly connected with windows, which are the mirrors of the soul of the building. This gave us reason to also study windows via the videography.

\textbf{The Spirit of Place and Time}

The villas of Älylä were all mainly timber works on stone foundation. Many of them were built on slopes, having partially habitable cellar. All have symmetric slope or Mansard theme in their roof designs allowing some living functions at the attic. Wivi Lönn was a master builder and an architect. Thus, she was able to design sustainable and breathing buildings of highest quality (compare Azmin\textsuperscript{32}). This all partially created the spirit of place and time at the Seminar Hill and Älylä, which was an area of single-family wooden villas with moderate variations in their respective outlooks. Some of the villas were designed to be plastered over timber while, in others wooden panels enveloped the buildings as the external skins.


\textsuperscript{32} Azmin, A., \textit{A Discourse of Housing, Based on Cultural Meanings in Malesia} (Edinburgh, 2007)
In certain villas, the interior architectures were also studied in detail. The interiors of the atelier and the villas of Karpio and Oksala had been renovated, but mainly kept the original form and these targets have a lot of original furniture and paintings. All this was carefully documented under various paragraphs of the documentation system. Also, the spirits of original time was retraced by using as many original photos as available. Many paintings of the Lönn-building were gathered, especially from the Villa Oksala and Wivi Lönn’s own house, now owned by Mr Sorjonen. They were carefully documented by the Oksala’s neighbour, Mr Jonas Heiska\textsuperscript{33}, who was the first professional artist (painter) in the whole counties of Central Finland. This gave rise to the idea of making the multi-media in which the milieu of Äylälä, the town and surroundings until Säynätsalo were made visible during the time of Wivi Lönn. The method was realised by using several of Heiska’s paintings and locating them on a hierarchical set of maps\textsuperscript{34}.

**Documentation**

All the nine focus villas were documented in general terms. Three of the villas were selected as main targets including the atelier and villas of Karpio and Oksala. The multitude of the material, which was much richer than in the traditional documentation of architecture, gave rise to form a novel solution.

The inspiration to document the housing materials in this suburban estate was established from Eliel Saarinen, who was a friend of Lönn and collaborator of Armas

\textsuperscript{33} Lahti, L., *Taidemaalari Jonas Heiska vaelluksellaan, Atena,* (Jyväskylä, 1995)

\textsuperscript{34} Lahti, L., Majurinen, J., Oksala, T., *The Jyväskylä of Wivi Lönn seen by painter Jonas Heiska, Multi-media* (Jyväskylä, 2011)
Lindgren, who was later a collaborator of Lönn. Eliel Saarinen\textsuperscript{35} (1948) was a pioneer in speaking about communication in art and applied a system where content analysis was made using a systemic approach as follows:

A. Past, present, future

B. Essence, aesthetics, significance and value

C. Structure, function, behaviour

These aspects, manifested in the thinking of Eliel Saarinen, have been highlighted and studied in greater detail in the modern cognitive theory discussing mnemonics\textsuperscript{36} \textsuperscript{37}.

The materials of each villa were organized according to the model. Three villas were studied according to the ready-made matrix {framework}, called the Mandala. After the implementation, every theme contained a lot of hierarchical hyper-media form of contents including maps, original drawings, photos and text.

Within the nine-framework of the Mandala, The Past was assembled with areal history focusing finally to the site. The Present demonstrated the outlook of the villa today. Future Module showed the status in town plan. Essence was exemplified by the watercolour drawings of Lönn or by the available paintings. Other modules

\textsuperscript{35} Saarinen, E., The Search for Form (New York, 1948)

\textsuperscript{36} Martikainen, V., Concepts and Mind as Dynamic Memory-Systems Structuring the Human Mental (Helsinki, 2004), 69

\textsuperscript{37} Majurinen, J., Oksala, T., Junaliikenteen informaatiokeskuksen toimintatapa, Ratahallintokeskus (Helsinki, 2009)
include Values, Structure, Behaviour and Functions (Figure 1). For Aesthetics (situated in the middle) module, a sub-mandala of another nine items was formed.

![Mandala Framework](image)

Figure 1: the Mandala framework of Eliel Saarinen systematic thought on art and visual communication

Significance and Value were represented as stylistic positions among the other villas. The Structure of the buildings was represented by the original section and detail drawings. Function was the second target and was displayed with plans and available photos. The point Behaviour contained accounts of family history mainly in the living room and in the gardens. The moment Behaviour has an option to be fulfilled with video clips taken from the milieu site by site and especially from the Wivi Lönn Street, which opened posthumously into the area. One video-clip in the centre of the main square focuses towards the statue of Wivi Lönn in the centre of the garden around the atelier.

As the main product of the three-month’s pilot project, we have achieved an electro-mediative data base of all Lönn buildings in Älylää. At the core, we had three full-
fledged Saarinen’s type (mental model or mandala) multi-media of three different Villas. Also, the milieu was documented with digital photo archives and a set of videography contributions. Some special products of digital age were also fabricated, for instance, the pilot “digital home museum” documenting the permanent art exhibition of the Sorjonen’s art collections in the former atelier of Lönn.

In addition to the conceptually modelled Villas of Lönn (Sorjonen), Karpio and Oksala the basic material for the mental modelling was gathered from three of the oldest villas in quite their original forms which are Wille Lönn, Pesonius (Kovala, (Herrala)), and Nousiainen (Haavio (Taalas)). Within the time constraints the work had to be restricted. The other three villas were documented only from the outside.

As some additional products, Lönn’s works were studied and photographed in Tampere during the authors’ organised Lönn Tours within the city, including some public buildings in Jyväskylä, Helsinki and Tallin. Besides those buildings, there still exist about 75 targets for further similar studies of her works in Finland.

**Conclusions**

We have shown how a target of architectural cultural heritage can be modelled noticing natural mental structures. The system of documentation chosen stems from the same time as the target building. Modern electromediative technology is a suitable tool in the case of complex mental modelling.
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