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THE FRINGE OF A PROFESSION

WOMEN AS ARCHITECTS IN FINLAND
FROM THE 1890s TO THE 1950s

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PREFACE

This study largely originates from interest in the problems of gender and art history among students and researchers at the Department of Art History of the University of Helsinki in the early 1980s. In 1985 the Department of Art History received funding from the Academy of Finland for the first stage of a project entitled 'Woman, Art, History' which was organized under the supervision of Docent Riitta Nikula. Along with thirteen other researchers, I was fortunate to become a member of the challenging and inspiring community that formed around this project. My own research continued with funding from the Academy of Finland in the 'Woman, Art, History' and 'The Art History of the Unremarkable' projects from 1989 to 1992.

Professor Henrik Lilius, my superior at the Department of Art History, was also the official supervisor of this dissertation. I must express my thanks to him for his comments on my work, and his favourable attitude regarding my leaves of absence even when the work of the Department may have required otherwise. I am especially indebted to Docent Riitta Nikula. While directing the research projects, she was also a true friend, never forgetting the importance of encouragement. I also benefited from her expert advice on writing in various stages of this work. By its very existence, the monitoring group of the 'Woman, Art, History' project taught me the meaning of accountability in research. I wish to thank all members of this group for their kind support, particularly its chairperson Professor Päivi Setälä.

The manuscript was read and commented on by Assistant Professors Eeva Maija Viljo and Ville Lukkarinen, to whom my warmest thanks. I must also express my gratitude to Professor Emeritus Lars Pettersson, my first academic teacher, whose lectures introduced me to the world of art history and invited me to linger.

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In delving into the experiences of women architects, I have often had to rely on the aid of their surviving rela-

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This study could not have been finished without the assistance and expertise of a number of archives and libraries both in Finland and abroad. The Museum of Finnish Architecture was of primary importance, and I wish to thank its staff for their aid, especially Pentti Helenius, head of the museum's library, and curators Erkki Vanhakoski and Elina Standertskjöld. Alvar Aalto Architects Ltd. and the drawing office of Artek Oy showed kind interest in my work. Valuable assistance was also provided by the American Institute of Architects.

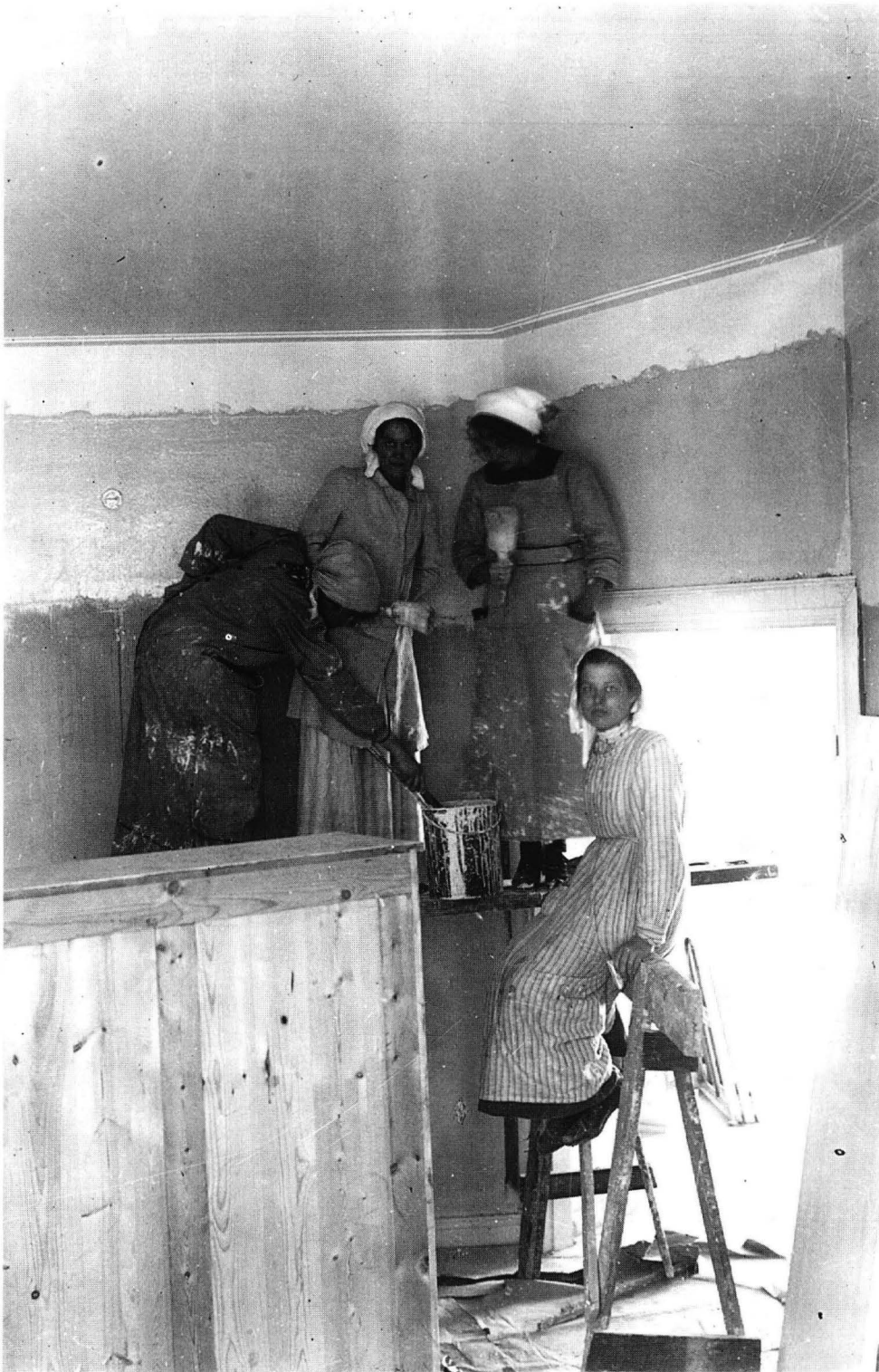
This research was made possible by grants from the Research Council for the Humanities of the Academy of Finland. I also received a grant from the Finnish Concordia Association to partly cover the costs of translation. The Finnish Antiquarian Society kindly accepted my manuscript for publication in its esteemed series.

Through various stages of my work I have received direct assistance from the following persons, whom I wish to thank. In Estonia, the art-historian Liivi Künnapu and drama critic Koidula Soosalu aided my studies in local archives. My friend Camilla Ahlström-Taavitsainen, M.A., was of great assistance to me in Noormarkku, and Leena Sälejoki-Hiekkänen, M.A., an old friend of many years standing, helped in preparing the tables published in this book.

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Renja Suominen-Kokkonen
Helsinki

On the feast day of St Thecla of Iconium,
the first woman martyr
24 September 1992



1. Architecture students training in 1913. From the left: Sylvi Nyysönen, Salme Setälä, Elsi Borg, and Elli Ruuth. SRM.

1. INTRODUCTION

1.1. Women as Architects

'As long as we live in houses designed, built and furnished solely by men, housewives and others responsible for the home must use impractically designed kitchens and laundries, long basement corridors, sheds and outbuildings. By designing and building dwellings, women as architects and in other areas of the building trade could operate independently and even make a good income. Technical education should be made more popular among women than at present.'

Mandi Hannula, woman member of the Finnish Parliament, 1930.¹

As late as the 1930s, women architects were uncommon in Finland. They were not, however, an entirely new phenomenon, and were more numerous than in many other countries. Finnish women had studied architecture since the 1880s, a time of social 'awakening' for women in many areas of society. One of the main concerns of the early women's movement was education. Co-educational secondary schools founded in the 1880s lifted many of the former restrictions on girls completing the matriculation examination. The curricula of these schools, however, stressed languages, with correspondingly less emphasis on science or practical subjects.² Despite progress, basic education had not widely encouraged women to enter new occupations or fields.

The emancipatory aims of the women's movement centred on educating the daughters of the middle class and increasing the overall influence of women in society. This encouraged some women to choose occupations and professions that completely differed from earlier tradition. When the Polytechnic Institute of Helsinki was organized in 1879, its first women students were admitted on a supernumerary basis.³ They were, however, mainly interested in the modelling and design classes taught by the sculptor Carl Eneas Sjöstrand.

The first Finnish woman to follow lectures and classes in architecture was Alma Jörgensen, who later worked for the Board of Public Works and Buildings.⁴ Signe Hornborg, who studied between 1887 and 1890, was in turn the first to actually participate in the architectural curriculum. She was followed by a number of other pioneering women, who still studied on a special supernumerary basis. By the end of the century, six women had graduated as architects, and in the early 1900s this small group began to grow.

Typical of these early women architects were not only their uncommon choices of occupations but also their careers, often as independent professionals. They had trained for a full-time profession, and some managed to follow this course even after marriage. Although these women were an interesting phenomenon in the architecture of their time, there has been little research concerning them.

By the turn of the century, architecture and the building industry in general had undergone significant changes.

New educational schemes now permitted individuals other than actual architects to design buildings. In these years, civil engineers and master-builders had been responsible for a much larger volume of building design and construction than architects. This reflected on the professional image of architects,⁵ who tried to distinguish themselves from competing groups. Distinctions followed educational differences and their resulting social status. For many years, women architects were few in number, but their gender clearly set them apart from all other groups in building design and planning.⁶

This study is partly concerned with quantitative aspects of women as architects: their numbers in relation to men and other women in technical training; women graduates vs. those who interrupted their studies; the increase of women students in relation to the overall increase of students of architecture; and the entry of women into educational institutions as groups. All these aspects were of importance for later professional work.

However, a purely quantitative review would be misleadingly free of problems, and miss the core issues of women working as architects. Accordingly, I am not concerned with just filling in the blanks of art history, i.e. those areas where women have been ignored. I shall also try to address the relationships between femininity and the architect's profession. The participation of individuals and groups in social life is often viewed solely in terms of what can be achieved, its concrete manifestations, the 'opening of doors', and the notion of access into a field. These considerations easily obscure equally important qualitative factors; entry alone does not solve the problems of discrimination.

In technical education in general, and at its higher level in particular, there were specific areas with a higher probability of women entrants. This raises the question of the nature and possible causes of this form of segregation. Historically, and even today, technology and technical fields are readily seen as an exclusively male area, where a gender-based division of labour and tasks is evident at all levels.⁷ In the early Finnish context, this form of segregation meant that in applying for technical education at the Polytechnic Institute in Helsinki, most women enrolled at the departments of architecture or chemistry.

Attitudes and reactions to women in training and professional work largely revolve around the concept of reception. How did women see their own position in the training system, and did their views remain the same when they entered working life? The lifting of restrictions did not necessarily open up opportunities for achievements. Social organizations and institutions are hierarchically ordered systems, and the social praxis of professionals closely follows their own idea of the importance of their work. The information and knowledge implied in a professional identity refer back to the profession's structures, organization, and members.⁸

In discussing the effects of the hierarchical praxis of organizations and institutions, we must especially bear in

mind a fundamental effect of educational systems, which Pierre Bourdieu calls the 'manipulation of aims'.⁹ Schools provide information on things and techniques, but they also distribute degrees and rights, and consequently lay down aims. A uniform and hierarchically ordered system of education ensures a balance between aims and opportunities. We must ask if education gives students a collective sense of solidarity. Bourdieu uses his concept of 'classes' in describing the ways social distinctions are generated. The question of distinction inevitably expands and becomes more complex when the perspective of gender is introduced. The conditions by which an individual is recognized as qualified, and socially accepted, may follow subtler divisions along the lines of gender than of class. Legitimized education did not yet give women a place in the central areas of art. Socialization into a group will partly require the initiate to learn to avoid 'other' groups, depending on their background, views, race, religion, or gender. The processes of creating social distinctions are learned in subtle ways; differences are not necessarily displayed overtly, but distinctions and their related problems will indicate relations of power even within seemingly uniform organizations. The learning process includes the creation of normative frames of reference, containing elements of the professional ethic and its ideals, i.e. the methods, results, and techniques regarded as ideal. These normative references are associated with social values and cultural norms. In his study on Kuhn's paradigm theory and the arts, Simo Säätelä underlines the importance of 'silent knowledge' in the praxis of research. According to Kuhn, this non-propositional knowledge is neither subconscious nor irrational. It can be learned, utilized and disseminated, but it cannot be expressed in language.¹⁰ The architect's profession, like many others, implies an ideological structure of masculinity and femininity, defining the everyday work of male and female architects into private and public areas.¹¹ This ideology reinforced models in which women, despite their 'man's role' and competence, were continually forced to articulate their own roles in different ways than their male colleagues, and direct them into other areas. The present study will attempt to investigate these problems.

Sexual differences are central to a discussion of how women identified with the architect's role, and how the experience of femininity was accommodated to the professional ego. In describing identification, we must keep in mind that since it is not always coterminous with identity, problems will easily arise from simplified views of the category of 'woman' (and equally of 'man') Sexual difference has been described as based on binary oppositions, in which the relationship between male and female is comprehended in hierarchical terms.¹²

Psychoanalytical feminist theories maintain that sexuality and sexual identity reside at a 'deep' level, inextricable from corporality, although they cannot be directly equated with the biology of the human body.¹³ Women were clearly defined as 'non-men' in male-dominated areas,

and they were not the 'same' as other women. Everything has been assumed to be the same in each category (male/female), and accordingly, the differences within each category are suppressed. It is therefore essential to underline not only differences between the sexes but also the way these differences serve to reproduce further differences within gender groups. In the cultural formation and shaping of gender, a difference is sustained between the biological (sex) and the social (gender).¹⁴ The American historian Joan W. Scott maintains that the study of women's lived experiences and identity requires a discussion of the use of gender as an analytical category.¹⁵ The activities of women architects in a masculine institutional field constitute one area of the problems considered. Another distinct area outlined in my study covers the experiences of individual women in systems that often discriminated against them and declared them incompetent. The male domination of societies, a gender-based asymmetry, has become a universal fact of social life. However, this 'otherness' of women can mean different things in different places. A study of problems associated with sexual differences (such as the dichotomies of public and private in the social roles of men and women) permits a closer view of the factors that universally made women the 'second sex'.¹⁶

Women had to build a world of their own according to a dominating masculine model. Hence, in this process, they could not have the same opportunities for expressing themselves as men did. Womanhood has been understood as an ascribed social status: 'woman was seen as "naturally" what she is'. In groups, men are identified in their separate roles, and are ranked through the hierarchy of achievements.¹⁷ In social anthropology, Edwin Ardener's studies have focused on the social differentiation of men and women. He has developed a theory of 'mute groups', whereby a society can be dominated by a model solely created by its leading group. Subordinate groups may thus be forced to suppress the articulation of their own alternative models. In such a situation, they will structure their world according to the models of the dominating group, and make their own models correspond as much as possible to them. These groups, however, may have great difficulties in articulating themselves through the idioms of the dominating group, and they may remain silent especially in matters that have close bearing on them.

Although Ardener claims that there are many mute groups of this kind in society, women are nevertheless 'a prominent example of muting: one that has clear political, biological, and social symbols'. According to him, it has been difficult to accept the way in which women produce social models, since 'women will not necessarily provide a model for society as a unit that will contain both men and themselves'.¹⁸

Studies on the psychosexual and social bases of gender differences mentioned above provided important background information for my discussion on Finnish women in architecture, and on the interstice between a pro-

fessional role and the fact of being a woman, where women could not unequivocally belong to either state.

1.2. Problems of Architectural Research

The study of architecture and its history as a discipline present a dichotomy of perspectives. There are broadly speaking two main approaches: an emphasis on the scientific and technological study of the economic and technical conditions for building; and the perspective of the human sciences, either with emphasis on social or psychological phenomena, or through defining architecture as art. These approaches are usually followed by scholars with similarly differing educational backgrounds, which means that their epistemology will necessarily differ.¹⁹

This situation, often appearing as contradictory, is brought about by architecture itself, which requires both artistic and technological praxis. In Finland, the history of architecture has mostly been studied in the sphere of art history. This discipline has maintained a further dichotomy between the visual arts and architecture, even though we could expect an 'interdisciplinary' approach to be natural in this area.²⁰

Marvin Trachtenberg has observed that over the past few decades, architectural history as a humanistic discipline has approached a wide range of themes and interests, largely because of the extent and scope of the field itself. This has led to a situation where various categories have begun to overlap, intermingle, and coalesce into broadly similar methods. I would disagree with Trachtenberg in his views of how research relates to architects as authors of architecture. Trachtenberg maintains that the history of architecture has always been interested in the processes whereby architects achieve and develop their skills, in the social and economic conditions of their activity, and in other questions directly related to architecture as a profession.²¹ Studies of architecture as a history of these processes are in fact very rare, and almost all of them have appeared only in the past two decades. Following the division of studied materials, the history of architecture has relied on two fundamental perspectives. First of all, works of architecture have been approached as 'objects', with a building as a unity defined by the boundaries of its physical existence. This perspective assumes that the unity of the building is an immediate and homogeneous coherency. On the other hand, the professional activities of architects have not been viewed as a cultural system also responsible for creating meanings, but, as pointed out by Demetri Porphyrios, as a process where the architect is the 'creator of the object'. Accordingly, the 'object' is seen as the projection of the architect's expression, and research has concentrated on finding the hidden intentions of this 'author'.²² Training and its historical development, the structure of the profession, and its social status have remained

secondary themes of interest.²³

By focusing on the 'objects' of art, research has reinforced their possible semantic values in its search for forgotten influences. It has readily formalized the internal logic of 'objects' as principles, as they in turn can once more be focused to the 'architect/author'.²⁴ In this perspective, the 'author' (artist or architect) has been approached through simplified concepts, although we are dealing with a complex process of interaction between the 'author' and the 'text', both of which are simultaneously moulded by social production and social reception.

In *What is an Author?* Michel Foucault treats the concept of 'author' in a different way.²⁵ First of all, he questions the idea of a work/work of art, and asks whether everything produced by an 'author'/artist is part of his or her work. There is no theory of works in this sense, and the question must remain open. Foucault especially stresses problems concerning the name of the 'author'/artist. He argues that this name is in many ways functional, and, unlike proper names, it operates as a means of classification characterizing situations of discourse in society and containing extra-textual information on the person to whom the name refers.

'The proper name and the author's name are situated between the two poles of description and designation: they must have a ... specific link...[The] links between the proper name and the individual named, and between the author's name and what it names, are not isomorphic and do not function in the same way.'²⁶

The most interesting aspect of this approach is that it reveals the difficulty of accurately deducing what or who the 'author' in fact is. The personality of the 'author' is constructed from characterizations taken to be relevant in a definite historical-theoretical discourse.²⁷ Foucault questions the concept of author as a determinate and fixed source of works of art and their meanings, i.e. as a uniform, monolithic entity. 'The author does not precede the works; he is a certain functional principle by which, in our culture, one limits, excludes, and chooses'.²⁸

In recent years, certain areas of architectural study have tried to distance themselves from 'architectural history' with its emphasis on the aesthetic, and have begun to focus on the 'history of building' with its broader view of the underlying socio-economic basis.²⁹ This view maintains that the social institutions behind the production of art exert a wide influence. These are not only schools, institutes of learning, systems of administration and legislation, or the codes of professions, but also the authorities and bodies responsible for the reception and evaluation of art.

Since all art can be regarded as collectively produced, the importance of an artist's individuality and the conditions under which his or her works are created can also be seen as dependent on the structures and institutions of artistic practice. The study of architecture opens interesting perspectives on the collective background of

works: how the 'object' itself is influenced by technology and the conditions necessary for building. A named artist (architect) does not influence this process to the degree suggested by our idea of an artist-genius; a great number of others are involved at many different levels.³⁰ In his studies on the mechanisms underlying the social production of art, Pierre Bourdieu has outlined a theory of the 'field of art' as an area where individuals and institutions compete over the same goals and rewards. It is dominated by those who possess the greatest amount of 'special capital' and whose interests require conservative strategies aimed against those who have only a small amount of this capital at their disposal. The latter are usually newcomers, who in turn try to implement revolutionary strategies.³¹ In this study, I shall attempt to follow Bourdieu's model with an emphasis on gender rather than class.

Bourdieu's definition of 'creative work' leads to problems, especially in the study of architecture.³² Architecture is not only artistic creativity but also bound to legislation and the direct needs of society much more than other arts. Architects have not been professionally 'free' or autonomous in the same sense as artists, and we must therefore take into account the specific history and development of this profession. In studying women architects and their careers and experiences, it is also necessary to review the broader framework of professionalization.³³

By the 1970s, sociological studies of professions had largely rejected the idea of their development as a kind of natural history, which implied the concept of a 'fully developed' profession. In the 1960s this functionalist paradigm began to make way for a neo-Weberian 'critical study of professions', rejecting the concept of an ideal type of profession and redefining 'profession' as an occupational monopoly created almost solely by the group concerned. One of the cornerstones of the new paradigm was the theory of social exclusion, which maintained that the right to practise in a profession and to receive its social rewards was readily restricted to those who had undergone specialist training, passed the required examinations, and obtained the necessary degrees.³⁴

Recent studies on the emergence of modern professions have focused on a broader range of problems relating to society itself. In Finland, the sociologist Esa Kontinen has outlined the forms of macrostructures in the bonds between society and the modernization of professions. Kontinen has rejected an earlier approach whereby British and American developments were directly projected onto the European context, which was more closely dependent on the state and its bureaucratic apparatus.³⁵ With reference to the above studies on the field of professions as a whole, this study focuses on training, competition, and organization in the development of the architectural profession, outlining a situation in which women found their place in a traditionally male area. There have been few Finnish studies in architecture along these lines, although many researchers have recent-

ly touched upon themes related to these problems. Eeva Maija Viljo's and Pekka Korvenmaa's studies have pointed to the various links between architects and society.³⁶ In his study on Gustaf Nyström, Ville Lukkarinen discussed important models implicit in the teaching of architecture.³⁷ Ritva Wäre's analyses of architectural writings have outlined the profession's own contributions to definitions of Finnish architecture.³⁸ These studies, however, have mainly focused on aspects other than the architectural profession *per se*, and I have utilized them only in certain respects.

1.3. Art History and the Invisibility of Women

Art history necessarily touches upon two divergent areas of values - the aesthetic and the historical.³⁹ Aesthetic codes and conventions imply ideological views of art, but do not mirror reality; they are 'more like a broken mirror, refracting and distorting this representation.'⁴⁰ All products of culture contain and express meanings that were not envisioned or intended by their makers. From this follows that art ('text') contains and conjoins numerous, possibly contradictory, voices, and we must also investigate the silences of a text.⁴¹ The historical past is the researcher's construct, and in studying women we must bear in mind that the discipline of history should not base its questions on its sources alone.⁴²

In proceeding from the decentralization of art, and in 'levelling' the themes of study to include other subjects than 'great achievements' alone, the range of works classed as art and of authors that can be regarded as artists will necessarily expand. In her article *Is Art History?* from 1977 Svetlana Alpers emphasized that these approaches provide alternatives to the dominating model developed by earlier generations of art historians.⁴³ Alpers did not limit her discussion to expanding the definitions of art and artists, but also took up the question of beliefs inherent in art history. 'As scholars, art historians all too often see themselves as being in pursuit of knowledge without recognizing how they themselves are the makers of that knowledge.' In a later connection, Alpers stresses that 'the study of art is an empirical, historical, and inevitably an ideological, rather than a theoretical, pursuit.'⁴⁴

The interpretations of researchers are inevitably problematic in any attempt to evaluate the objectivity of art history. The claims of the discipline have always contained a great degree of evaluation and judgement concerning the subjects of study. This has been part of a consensus implied in the praxis of the discipline.⁴⁵ Despite this, there is no ahistorical standard for assessing the claims put forth by the discipline or for measuring the relative significance of artists. Even 'aesthetic experience' is a cultural, and not a natural, category. It is

also dependent on knowledge, reflection, and interests.⁴⁶ We must recognize a difference between a work of art as such and how it has been described in the history of art. It is necessary to distinguish between the mechanisms producing meanings in the works of art themselves and those producing their interpretations. This makes it possible to discuss the extent to which historical, cultural and ideological views and beliefs concerning art and artists have influenced the identification of meaning in art.⁴⁷ 'Like representational art, art history, too, is a form of representation; for as such paintings represent the world, so the texts of the art historian represent art works. And just as there are different truthful ways of representing the world, so there is more than one correct way of representing an art work.'⁴⁸ Carrier goes on to ask: 'How is the truth of an art historian's claims to be fairly evaluated [and] where is the neutral point from which to evaluate competing claims?'⁴⁹

Feminist critiques of art history have often evolved out of re-evaluations of scientific knowledge from completely different perspectives, in areas such as psychoanalysis, semiotics, structuralism, and the sociology of science.⁵⁰ There are, however, clear differences between these evaluations and the 'problems' of feminist art history⁵¹, as the former contain the analytical categories of class and race, but omit gender. The differences of gender implied in concepts such as 'art' and 'artist' belong to the cultural myths and ideologies of art history, and other disciplines. 'They contribute to the wider context of social definitions of masculinity and femininity and thus participate at the ideological level in reproducing the hierarchy between the sexes.'⁵²

Feminist critiques of 'normal' art history have revolved around problems such as the ideal of the artist-genius, the individual nature of creativity, and the autonomy of the object. They have questioned the categorizations of the discipline: the inner hierarchy of art; assumedly problem-free perception; and the definition of 'good art' with its requirement of innovation, also implicit in evaluation. The American art-historian Linda Nochlin's article *Why Have There Been No Great Women Artists?*⁵³ was one of the first discussions of feminist themes and problems in art history. Nochlin placed the question of her rubric in the perspective of social and institutional power for studying the specific conditions for producing art. In her discussion on artistic activity in general, Nochlin saw 'great art' and artist-geniuses in relation to the social conditions of producing art. She does not question the historical and cultural bases of these definitions, although her article specifically refers to the discipline's 'unacknowledged value systems'.⁵⁴

The 'invisibility' of women in the history of art was conceptually approached for the first time in a work by Roszika Parker and Griselda Pollock from 1981.⁵⁵ These authors did not wish to rewrite women into the history of art, nor to graft them onto the body of the discipline. They observed that women have always participated in producing art, but our own culture ceased to recognize

this fact after the late 19th century. Parker and Pollock feel that there should be a greater focus on why the methods and categories of art history served to construct the history of the art of a particular ideology, 'an exclusive record of masculine achievements'. Their study reveals that even in cases where women were forgotten or described in negative terms, beliefs, preconceptions, and silences concerning women shaped the art-historical concepts of 'art' and 'artist' in crucial ways.

In Finland, works by women architects were mostly ignored by contemporary critics, and they are almost completely absent from histories of art.⁵⁶ This clearly reflects the inherent concepts and one-dimensionality of both criticism and later research. More important than these points is a discussion of the social and historical situations to which these women had to adapt. Also required is an evaluation of the views according to which their works were classed less artistic than those by men. Not far in the background of these views are the concepts maintained by society concerning women and femininity. Operating in the fields of technology and industrial production required ties with both political and economic power. For women, their legal position alone placed them outside these fields.

Griselda Pollock and Lisa Tickner have analysed the ideological aspects of art history as a discipline with reference to the historical nature of definitions of art, femininity, and masculinity.⁵⁷ Their analyses concentrate on women as producers of art and outline the problems of 'woman' as a category by investigating its historical basis and development. The main tasks of their critique are a theoretical outline and historical analysis of sexual difference. 'Difference is not essential, but understood as a social structure which positions male and female people asymmetrically in relation to language, to social and economic power, and to meaning.'⁵⁸

Pollock and Tickner view art as a series of representational practices, and the study of art history as producing and actively upholding meanings relating to sexual differences, among other subjects. Pollock points out that the study of women as producers of art requires a rejection of traditional evaluating criticism.⁵⁹ Tickner, on the other hand, is acutely aware of the problems of writing, language, and 'images' in analyses of art works. 'Images and words' are not identical; observing and verbalizing art are culturally determined acts.⁶⁰ The ideology of art history creates myths of artist-geniuses, and the practices of art history and art itself have created, and continue to create, relations of gender and power.⁶¹

Pollock also addresses the question of how women can speak or express themselves in a culture defining the feminine as a 'silenced other'.⁶² Pollock's and Tickner's writings seek answers to this question through the formation of the feminine subject. Women are socially constructed as females, which is recognized in language, but the process of construction also 'fastens and builds upon anatomical realities.' 'One is both born and constructed as a woman'.⁶³

1.4. Starting Points of this Study

This study is concerned with expanding the definitions of art and artists as subjects of research. The invisibility of women in art history, e.g. as producers of architecture, has led to the omission of whole areas and their specific praxes from research. This study will attempt to outline some of these areas. A broader review brings to light new 'authentic' subjects, forcing the researcher to examine and define his or her own place, and not only his or her interpretations.

The ontological plausibility of historical research has always revolved around the question of whether the historian provides a correct image of people. Hypotheses are not constructed from sources alone, for facts are never pure, universal or genderless. They, too, are based on hypotheses.⁶⁴ Gender has always been inherent in the writing of art history, its discourses, and claims. Even an art-historical evaluation or interpretation requires a definite viewpoint, which is inextricable from the subject concerned. Observations, experience and the ways they are recorded use the medium of language, and thus cannot be separated from each other. In observations and experiences of art, the main ontological problems centre on the difficulties of verbalization.

Phenomena are interpreted with concepts, which in themselves are opaque and cannot be unequivocally reduced to the situations interpreted through them. In scientific discourse, concepts are used in the manner of metaphor, with scientific metaphors defining similarities. But even metaphors are not neutral; those of masculinity and femininity are readily used in both the sciences and the arts.⁶⁵ Research is generally seen as proceeding from a definition of problems and hypotheses. But even problems are a result of study; prior knowledge is required in defining, recognizing, and comprehending them.⁶⁶ Studying women in art history from untraditional perspectives brings to light problems inherent in scientific knowledge and in seeking and creating new knowledge. By focusing on the work of women as designers, this study will attempt to outline the 'other of the discipline'⁶⁷, a different picture of Finnish architecture and its background, as both art and an area of social responsibility.

In studying 'women' in architecture I approach them as a category, in which they are both born and culturally constructed as women.⁶⁸ But women also differ from each other, beginning with differences generated on the planes of time and place. Differences also emerge at a purely personal level in the development of the individual, thus pointing to the stratified formation of the subject. Psychoanalytical theory maintains that in order to sustain a separate identity an individual will try to define himself or herself as a 'non-other', implying here a separation of identity and identification. The latter means a correspondence with the 'other', and at the same a threat to the formation of one's own subject.⁶⁹

Feminist philosophers who have approached sexual difference and the place of women in psychoanalysis - es-

pecially Luce Irigaray - claim that the cultural system of our society allows only one sex and that 'only masculine sexuality is recognized as a source of signification'. Woman, in turn, has become defined 'as the necessary other, the sign for the "feminine"'. Women have thus been viewed horizontally and quantitatively, as if all women were the 'same'. By stressing the importance of the female body (though not solely as a biological phenomenon), Irigaray underlines the mother-daughter relationship. 'The revolt of women, mothers and daughters united as women, works for the end of the kingdom of father'. The aim here is to view the relationships between women 'vertically' and qualitatively, and to discuss the variety of 'sameness'.⁷⁰

It is in the sphere of these problems that I intend to review the architect women selected for this study. They were both within the world of architecture and outside it, as non-males in a male-defined culture. They can be viewed as a kind of group, although their designs as such do not express any gender-bound visual ideology. This is because they had something in common in a definite historical, cultural and social situation, which generated and structured a concept of sexual difference. I shall also discuss the aims of these women in an area that clearly set them apart from the standard social alternatives open to women, and how this field, where they could be 'potential men', reacted to them. These levels may have generated the tensions which drove women into a zone of conflicting identification.⁷¹

This study reviews women architects from the perspectives of education, practical work and its experiences of femininity, and the place of women in the field of architecture. The system of technical training and teaching is viewed in relation to the ideological framework of contemporary aesthetics and the functioning of institutions. This has direct links with the emergence and formation of professional praxis and its hierarchies. By reconstructing the process of design work by women it is possible to outline their different roles. In this connection, I shall also focus on the structure of knowledge and the architectural discourse in which these women found their place.

My review of architectural training is chronologically limited to what has been called its development stage: from the founding of the Polytechnic Institute in Helsinki (where the first women began their studies) to the first decade of the Helsinki University of Technology. In this period, from 1879 to 1917, there were only two professors of architecture in the whole country: Frans Anatolius Sjöström and his successor, Carl Gustaf Nyström. Almost all of Finland's best-known architects of the early 20th century graduated under Nyström. As training is generally regarded as an initiation stage during which professional roles and identities are shaped,⁷² the above chronological limits are relevant to the women of this study: they were all Nyström's pupils. The history of architectural training for Finnish women is compared especially with the United States. Developments



2. *Women architects and architecture students at a masquerade on the eve of Salme Setälä's marriage, 1919. SRM*

in Scandinavia did not correspond to the 'frontier' roles of Finland and the United States. In both these countries, women entered technical training at an early stage and women graduates in these fields worked in a variety of tasks.

The review of practical design work by women discusses the different aspects of this work, the manifestations of their professional competence, and purely individual differences. In my selection of women architects and their works I have tried to take into account both typical and intersecting features. In art-historical studies, Wivi Lönn has been discussed more than many other women. Here, I shall focus on Lönn's skills in designing spaces, and the influence of her gender on the reception of her works. Contemporary criticism of Armas Lindgren's and Wivi Lönn's joint competition entries reveals the limited perspectives of architecture and its discourse at the time.

Salme Setälä's career as an architect in government service contained features typical of both men and women. It also points to conflicts between her experience of femininity and her work as an architect. Setälä's literary works give the analyses added dimensions, as a personal account of her experiences and as an independent

area of her artistic output.

The marriage of the architects Aino Marsio-Aalto and Alvar Aalto and views of their collaboration contain many mythical elements. Aino Marsio-Aalto's marriage placed her work as a designer in a context different to that of other women in her field. In this study, a review of her independent achievements at the Artek firm and the ways they emerged in the Villa Mairea project, jointly designed by the couple, outlines the scope of her professional competence and designing skills.

The final section contains an analysis of the ways in which women found their place as artists in the field of architecture, and the relationship of their femininity with the role models of the profession. This includes reviews of women's professional organization and their participation in architectural competitions. These are seen as areas of social interaction defining the ways in which women found their place.

This study is concerned not only with individual methods, but also with perspectives and specific questions. My aim in this dialogue with selected women of the past is to seek ways in which the study of 'women' may unravel this particular story of art.



3. Architecture students at the Polytechnic Institute, early 1890s. Seated in the front are Ines Holming and Bertha Enwald; Signe Lagerborg is at the far right. SRM.

2. ARCHITECTS IN FINLAND

Changes in time and place are relevant considerations in the study of professions. The whole concept of a 'profession' and its development are never universal phenomena unrelated to specific historical conditions.¹ The exclusion of women has been characteristic of the history of occupations and their processes of professionalization. Where women have been able to enter occupations, they have usually proceeded along certain routes, beginning with professions or 'semi-professions' regarded as suitable for them.²

Professional histories outlining the place of women require a definition of the elements constituting a profession. The ways in which women entered occupations and professions differed from the experiences of men. In order to understand these processes, it is necessary to present a broader overview of the profession of architecture in Finland and its relationship with society.

2.1. Crises and Breakthroughs in Finnish Architecture

The 19th century was a time of major changes in Finnish society. Swedish rule ended in 1809, creating the need for Finland's own state administration, which gave the civil service and the government bureaucracy a leading role in society. The state also played an active part in the development of professions and their official control. On the whole, the history of professions in Finland is marked by the strong influence of centralized government administration. In their aims and strategies, professional groups depended on the good will of the bureaucracy for many years.³

The new *Bildungsbürgertum*, which was independent of the aristocracy, did not immediately achieve an independent status. The traditional ruling classes, i.e. the nobility,⁴ had a negative attitude regarding the education of the common people, and a dichotomous view of professions. They supported occupations important for themselves, but clearly opposed the development of areas and fields which they saw as competitive. The landed nobility, however, had never had absolute power in Finland, and accordingly, education and training became the main forms of social exclusion.⁵

There were no institutes of art or technology in Finland during the years of Swedish rule. Although individual educational contacts with Sweden survived throughout the 19th century, Finland's new political status made it necessary to review the future of education from a completely new perspective. The traditional Russian institutes, the Academy of Art and the Polytechnic Institute

and School in St Petersburg⁶ were not actively developed after the beginning of the 19th century, and they never achieved wide popularity among Finns.⁷

The liberalization of the economy, which began in 1855, and the reorganization of political life from the 1860s onwards led to important changes in the training of builders and architects. Finland's first technical schools were established in 1847 in Helsinki, Turku, and Vaasa. The visit of Czar Alexander II to Finland in 1856 soon led to measures promoting the development of Finnish towns and industries. One of the main reforms was a code of building regulations for towns, which was laid down in 1856 and remained in force for over 70 years. This code played a major role in the formation of the urban milieu.⁸ There were also improvements in technical training, and an act passed in 1858 led the Helsinki technical school to develop along a course different from its counterparts in Turku and Vaasa.⁹

These aims conflicted with conservative views and the traditional structure of society. Even in the late 19th century, technical training did not develop at any rapid pace.¹⁰ Industrial progress, especially from the 1870s onwards, led to the founding of new engineering works and the building of railways, which required large numbers of trained technicians. The old guild system was abolished in stages in 1859 and 1868, and freedom of trade and occupations was passed in 1879. These reforms had an immediate effect on the building industry; the bricklayers' and carpenters' guilds were the first to be abolished.¹¹

The lifting of restrictions on the mobility of labour has been regarded as important for the freedom of citizens to choose their own trades and occupations.¹² But even after these reforms, not all Finns were officially free to choose their own occupations. Socio-historical studies have outlined the emergence of the working class, but there has been no general review of the position of women in this course of development.¹³

In architecture, there was a wide gap between the profession as legitimized by the training system and the sphere of craftsmen operating in the field.¹⁴ Even the technical schools were not able to prevent an educational void in this area. In the midst of an unprecedented building boom, anyone could now set himself up as a building entrepreneur. There were no legal restrictions, and the economic benefits appealed to many whose skills were often highly questionable.

Even before the middle of the 19th century, state building administration had begun to encounter problems, e.g. in the supervision of church building projects.¹⁵ Together with the founding of the technical schools, this led to sixteen new positions for 'province architects' and their assistants, established by an act passed in 1848.¹⁶ Province architects were officials responsible for government construction projects and building supervision the 'counties' or provinces of Finland. Jarkko Sinisalo has pointed out how these new posts led to a need to increase the number of training positions in building administration,

which had been introduced while Carl Ludvig Engel was head of the Superintendent's Bureau, responsible for public works and building projects. In Sinisalo's opinion, these measures and the founding of technical schools expressed a desire to raise the level of technical training.¹⁷

The lumber industry, carpentry, metalworking and the brick industry, all central to building, began to develop in the 1870s, partly because of the introduction of steam power. Around this time, Finnish towns experienced a 'reorganization of function', to quote Henrik Lilius's term. Some towns remained traditional agrarian trading locations, while others began to specialize, e.g. as ports or industrial towns.¹⁸ In the 1870s Finland was still a predominantly agrarian country, and industrialization was mostly based on lumber. Modern industrialization began with the economic boom of the 1890s.¹⁹

Social and political developments, including the changed roles of the Finnish and Swedish languages in public life, played an important role in the history of professions, especially since a professional career usually meant holding public office. This involved a progression from 'status professions' to 'occupational professions', i.e. from the traditional to the modern.²⁰ In Finland, this process was characterized by strict bureaucratic control. The attitudes of the bureaucracy were especially important for progress in technology, and the education and training of women.

Briefly put, the above processes brought an end to the traditional leading role of a class of nobles in high office, which had dominated political life in the early 19th century. This mainly occurred in the period of liberalization after the Crimean War when Czar Alexander II succeeded to the throne (1855). New political parties arose from the language disputes between the Swedish-speaking liberals and pro-Finnish circles represented by a loosely organized grouping known as the 'Fennomans'.²¹

The Fennomans were not enthusiastic about industrialization. They were oriented towards farmer traditions, the ownership of land, and cultural and economic self-sufficiency. One of their main goals was to strengthen the 'Finnish national spirit', which was furthered, in the spirit of popular enlightenment, by establishing Finnish-language secondary schools. In 1874, the Fennomans founded the Society for Popular Education (Fi. *Kansanvalistusseura*), and in 1879 the Friends of Finnish Handicraft Society (Fi. *Suomen Käsityön Ystävien Yhdistys*) in the field of applied art. The Fennomans subscribed to an egalitarian ethic, stressing the importance of education, even for girls. Their platform, however, underlined that education should help women to raise their children, support their husbands, and uphold the morals of the family. In their view, the education of girls should not lead to vocational training.²²

The liberals represented trade and industry, and the Swedish-speaking cultural community. Their demands for equality were not as vociferous as those of the Fen-

nomans; they supported formal equality under the law, but did not question the class system as such.²³ The liberals were active in founding the Finnish Society for Industrial Art (Fi. *Suomen Taideteollisuusyhdistys*) in 1875.²⁴ A leading figure in industrial art and crafts was the liberal professor Carl Gustaf Estlander, whose early pamphlets were instrumental in bringing about the Ateneum in Helsinki, a building serving the fine arts and industrial art and design.²⁵

Estlander's role in developing industry and industrial art has been discussed with reference to his idea of 'national existence' (Sw. *nationlig tillvaro*). This implied that a national identity meant more than language or folk poetry. 'We have become irreversibly drawn into the torrent of modern industrial progress, and this being the case, it seems more dignified, and more in keeping with our seeking a place among the nations, to proceed with purpose rather than to be dragged along.'²⁶

Estlander was a leading cultural figure in Finland. As Professor of Literature and Aesthetics at the Imperial Alexander University in Helsinki, he was one of the undisputed authorities in the world of art.²⁷ He was also significant in architecture as a member of many committees responsible for developing technical training schemes on different levels. Typical of the arts in the late 1870s was Estlander's evaluation, or prediction, of the imminent emergence of Finland's leading artistic geniuses or heroes:

'In the 1850s there was nothing, or even worse than nothing (Ekman)... but now we have two significant artists, Edelfelt and Takanen. I believe not only in the blossoming of interest, but also in the emergence of artistic talent, and so everything is ready for the coming of the conquering hero.'²⁸

In the late 19th century increased building activity introduced a new array of tasks and projects that changed the whole image of Finnish architecture. For architects, churches had traditionally been the main projects, to which they devoted their whole professional talent. Now, the changed needs of the state and the towns presented new architectural problems, both structurally and in the area of style. New projects included town halls, schools, hospitals, laboratories, railway buildings, commercial emporiums, and market halls. In these projects the main issue was no longer their appearance or ornament; the essential task was to solve the technical problems of heating, ventilation, electrification, and plumbing.

In his lectures, Carl Gustaf Nyström, Professor of Architecture at the Polytechnic Institute of Helsinki, stressed the need of late-19th-century architecture to solve new practical problems. 'Those who, in agreement with most art historians, felt that the exterior, the forms of decoration, of all these buildings was the essential point, revealed their complete ignorance of what architecture is all about.'²⁹

2.2. The Professionalization of Architects

Finland's own corps of architects has a very short history. Before the 19th century, most designers of significant works came from Sweden. Even after the political situation changed in the early 1800s, many years were to pass before any Finnish architects as such appeared on the scene.

Sweden's formally trained architects were graduates of the Royal Academy of Arts in Stockholm, who had often undertaken study tours in Europe. They were mainly employed by the court and the nobility. Other sectors of building and bourgeois architecture were dominated by craftsmen operating under the guild system. This image of architecture did not change until the mid-19th century and the emergence of economic liberalism, when the building industry's old guild system was replaced by an open market of services. The teaching of architecture at the Royal Academy began to focus on more practical issues, and basic-level training was finally taken over by the new University of Technology, also in Stockholm.³⁰

In the early years of the Autonomous Grand Duchy of Finland, architects mainly worked on commissions from the state. Private commissions included manor houses for the nobility, and architects soon began to be employed in the increasing urban construction projects. The number of architects remained quite small, and in these early years there was no architectural profession as such. However, technical training had become a subject of serious interest, and in 1835 an imperial decree was laid down for establishing a 'technological institute' in Helsinki. A budget and statutes were drawn up for the institute, but its founding was postponed.³¹ It was only later, when architectural training became formally organized, that the Finnish architectural profession gradually became to emerge.

The process of occupations developing into professions is now seen in a different perspective than before. It involves a complex chain of events, greatly influenced by factors of culture and language. In this context, specific definitions are mostly constructs aiding study, and not immutable facts applying to all times and places.³²

The term profession usually means a non-craftsmanlike, full-time occupation based on systematic specialist training. Entry into a profession requires a formal degree, giving its holder a professional title. Professions tend to imply both monopolies on services and the eradication of control by laymen. Based as they are on competence, ethics, and the assumed importance of their work for the rest of society, professions demand material rewards and high social status.³³

Given this definition, we must bear in mind that the forms of professionalism are dictated by several factors and interests: clientele, the state, and the professionals themselves. Definitions of professionalism have mostly been developed in Anglo-American studies, but they may be used in describing those Finnish conditions with struc-

tural features common to the profession even outside Britain and the United States. Such common features are: specialization based on theoretical knowledge, a large degree of autonomy in practical work, and specialist associations or other bodies as the core of professional organization.³⁴

In bureaucratically governed Finland in the 19th century the development of occupations into professions was mainly based on education and training. The creation of a degree system aimed at demonstrating qualifications on a public level, and at using degrees as a form of social exclusion. In Finland, education and training became important factors at a very early stage. The significance of qualifications based on formal training grew, while the idea of innate traits was rejected.³⁵

Formal systems of training are among the main factors shaping professional roles and identities. The training system passes on traditions while familiarizing students with the aesthetic norms of its time, and guarantees socialization into a profession. Professional norms are important in passing on different aspects of specialist knowledge. A significant feature of the architectural profession is that most of its specialist knowledge comes through practical training and not study as such. There is no 'path' outside the norms, nor any architecture that does not express some concept of the field as a whole and its aims.³⁶

The formation of professional roles is also influenced by the rules laid down by the social organizations of a profession. Organizations and institutions of this kind are always hierarchical, and ultimately responsible for shaping the prevailing professional culture.³⁷

One of the characteristics of a professional ideology is a monopoly of knowledge, based on a high level of training and a long initiation stage of socialization into the profession. The learning process often follows the classical master-apprentice pattern. Professional identification is very strong, since one trains not only for a job but for a life-long calling.³⁸

In the 19th century, the technological professions soon began to address the question of who should be trained - a small elite or the 'people'. This debate mainly revolved around the social benefits of technological training.³⁹ Professional status was based solely on the individual's political and social position as a member of the middle class. The official status of technical training rose very slowly in Finland, and, for example, the high level of training of a Russian civil engineer did not ensure a corresponding position in society.⁴⁰ There may, however, be differences between engineers and architects, as their specific tasks affected society in different ways.

Capital began to provide wider freedom of action in the late 19th century, and the old ideal of the technical expert was soon paralleled by a new image. Architects and civil engineers had not previously belonged to leading groups in industry. The technical profession had emerged in the agrarian society of the 19th century, where industry had only a minor role, and the educated elite con-

sisted of academically trained civil servants. In this situation, the scholarly and scientific ambitions of technological experts were associated with the ideal of the academically trained civil servant, in turn promoted by the state's increasing need for technical experts. The status of these types of training followed the ideas of the Fenomans and the academic elite concerning the basic aims of education. They felt that general education was the main concern, and training for special purposes should be subordinate to it.⁴¹

Architects were able to work as civil servants, but the highest posts in this sector were that of the head of the Board of Public Works and Buildings (the successor of the above Superintendent's Bureau) or faculty positions at the Polytechnic Institute in Helsinki. In the beginning of the 20th century, the ideal of a modern technological profession began to include managerial tasks with their requirements of practical and economic expertise. In this situation, many architects became entrepreneurs, competing for both public and private commissions.⁴²

The unspecialized nature of late-19th-century architects, especially in relation to master-builders, mainly suggests that the profession was not yet regarded as completely specialized or apart from other groups. There were, however, differences in motivation and the objectives for which professionals claimed to strive.⁴³ Architects emphasized their artistic talent, seeing themselves as disinterested professionals trying to improve building in general. Accordingly, other groups, mainly master-builders, were branded as interested only in immediate economic gains.⁴⁴

The market economy did away with most of the former mechanisms of control, and the market influenced builders to an increasing degree. The building industry changed from serving its own immediate needs to building for a market. Official housing policies stressed the commodity nature of dwellings, and the built environment was mainly created by private investors and professional builders. Since generating profits or surplus value began to be the main objective, quality easily varied according to demand.⁴⁵ Heated competition made architects stress their competence in comparison with other groups, and the idea of a professional monopoly arose. Finland began to develop into what has been called a civic society in the late 19th century, which led to the founding of many civic organizations. Associations and movements, formally unattached to the state, created new forms of social praxis. They were not, however, completely independent, and in fact they enlarged the scope of the government apparatus.⁴⁶ Technical fields became organized in newer and more modern ways around professional bodies, but they, too, maintained contacts with the state, which ultimately defined their status.⁴⁷

In Finland large-scale organization was at first an upper-class phenomenon, as in the learned bodies of the 1860s. By the 1880s, organization achieved broader scope.⁴⁸ The Engineering Society in Finland (Sw. *Tekniska föreningen i Finland*), established in 1880,⁴⁹ originally

resembled an academic learned society. It was not professionally specialized, and while restricting the number of engineers and architects that were admitted, it also accepted recognized master-builders.⁵⁰ The Engineering Society was not a mass organization of professionals in technology, but a closed body of gentlemen belonging to the upper strata of society.

The culture of upper- and middle-class professionals was for long a male domain. It underlined meritocratic achievements and remained alien to democratic ideals.⁵¹ Areas more suited to women, such as nursing and elementary education, were mainly regarded as semi-professions. Where women were able to advance in established professions, such as medicine, they often specialized in limited areas of competence.⁵² Finnish legislation denied women equal rights to government or civil-service positions, which also prevented them from acquiring the same professional status as men.⁵³

Training in the technical professions in Finland had remained undeveloped for many years, and the new organizations had to strengthen the position of individual fields and raise their professional status. Professions began to develop into monopolies from the end of the 1880s,⁵⁴ as in the diversification of the Engineering Society in the 1890s.

The Engineering Society held only a few general meetings, which included representatives of so many fields that specific professional issues could not be discussed in any detail. As a result, the Society decided in the autumn of 1892 to establish three professional 'clubs' to permit a broader discussion of topical issues. One of these was the 'Professional Club for Architecture' (Sw. *Fack-klubb för Arkitektur*), also known as the Architects' Club, with Sebastian Gripenberg as its first chairman. Gripenberg had also been chairman of an earlier association known as the 'Free Society of Architects'.⁵⁵

The Architects' Club began to develop various strategies for maintaining its position. Since displaying professional competence in the field of architecture required not only formal training, but also methods differing from other areas of the arts, the new club began to concentrate on architectural competitions. A set of competition rules was drawn up, whereby the club appointed the architect members of juries, thus including the corporation in the evaluation of standards and results.⁵⁶ The profession was able to extend its influence on one of the main ways of publicizing the works of its members. Members were prohibited from taking part in competitions that did not follow the club's regulations.⁵⁷

By the end of the 19th century, architectural competitions had become a new form of communication between clients and architects. The profession regularly discussed competitions, which were generally regarded as a positive influence on architecture. Since their introduction, competitions had provided younger architects with commissions and generated public interest in the field.⁵⁸ The system, however, was also open to non-architects, who could even sometimes outclass professionals. The com-

petition system clearly revealed how the profession had begun to develop in a more independent direction.

Architectural competitions were usually declared open to all architects in Finland. This system, which had been developed over a long time, appeared to be democratic. Problems arose around the turn of the century when master-builders began to participate, and even win. There was, however, a tendency to exclude this large group of master-builders, whose training had made them a significant corps of designers in the building industry.⁵⁹

The title of architect was not protected by law in any of the European countries. In 1890 the Swedish Technological Association had proposed a monopoly on design and planning for architects. This was not, however, realized, as corresponding schemes did not exist elsewhere.⁶⁰ In Finland, the Architects' Club altered its competition rules to favour architects. This specifically applied to the so-called public nature of the competitions, which was literally interpreted as applying only to architects, and effectively barred others from what were still officially public competitions.⁶¹

This monopoly, which was based on training, could not directly affect the growing number of women architects, who had all the necessary formal qualifications. Although competition entries submitted under pseudonyms were supposed to compete on equal terms, architects had created an exclusive strategy based on formal training.⁶²

The increasing numbers of Finnish women matriculating from secondary schools broke down the gender-based educational monopoly, in turn opening up new fields to them.⁶³ This, however, did not affect positions in government service, and traditional thinking regarded the equality of women as a threat to the accepted values of society.

The image and ideals of the architectural profession implied success based on artistic talent. An artistic spirit became a dominating aspect, even though the field was becoming increasingly dependent on purely economic conditions. The works of architects were not only architecture but 'the art of building', which implied distinct aesthetic qualities.⁶⁴ In his lectures at the Polytechnic Institute and the later Helsinki University of Technology, Gustaf Nyström often stressed that architecture and architects should feel a commitment to art. For him, an architect was specifically an 'artist of building' (Sw. *byggnadskonstnär*), and not a practical builder (Sw. *praktisk arkitekt*). Architecture, in turn, 'does not become fine art only by creating works serving practical purposes...artistic qualities will emerge only when the basic construction of a building is given an architectural form; in other words, a form that explicitly expresses the objectives and also appeals to reason and a sense of beauty.'⁶⁵ There are, however, early examples from Finland outlining the conflicts caused by this emphasis.

Through private commissions, highly trained and artistically recognized architects such as Theodor Höijer were able to develop close ties with the Swedish-speaking economic elite.⁶⁶ Many of his colleagues followed this

course. In his studies on the architect Lars Sonck, Pekka Korvenmaa has observed how Finland's leading capitalists, and the architects in their employ, saw themselves as an enlightened avant-garde. Some architects were even active in establishing the Helsinki Stock Exchange.⁶⁷ This, however, concerned only a small part of the profession. Its active members formed a kind of elite, centred on the Architects' Club. This elite did not include women, especially in the early years.

In its first decades, the Architects' Club was a collegial body of gentlemen, strengthening group solidarity and presenting a sharpened image of the profession to outsiders. The club, however, did not include all Finnish architects, and even in the early 1910s it had no women members.⁶⁸ The majority of Finland's architects worked either in Helsinki or the other larger towns, and for many years buildings in the countryside were planned and designed by non-architects. In the early decades of the 20th century less than half of all housing projects, by now in large numbers, were designed by formally trained architects.⁶⁹

Relations between architects and clients had changed by the turn of the century, but the profession's code of ethics still maintained that architects were in a position of trust vis-à-vis their clients. The freedom and autonomy of the profession were ideologically important for many architects. Even while working for the state or the municipalities, many architects maintained private practices. This combination was generally accepted, and architects who devoted themselves solely to public service were even regarded as failures.⁷⁰

An interesting feature of this situation was the relationship of highly trained technical experts with industry and the state. The process of professionalization underwent an interim stage during which occupational and status professions coexisted. Professions, however, soon began to develop towards their present ideal of 'expert impartiality'; clearly more was required than 'cultivation' and refinement.⁷¹ The image of an impartial and independent professional changed when heavy industry and export fields began to employ increasing numbers of technically trained specialists. By the early years of the 20th century, a modern corps of engineers and technicians had become a key group in Finnish society. Technical training alone did not suffice; the new ideal included qualities of leadership and the polished image of a man of the world.⁷² The architectural profession and its assumedly independent status came to be influenced by specialization, standardization, and mass production.

The professional image included other conflicting factors that were based on training. One of the main contradictions involved the training of architects in monumental building projects, which were regarded as the highest level in the hierarchy of design and planning. This practice survived even when the housing shortage that began around the turn of the century would have required the efforts of the profession in socially oriented building projects. It was only much later, in the 1920s

and 1930s, that architects were able to influence housing production and policies, but by then this sector of the building industry had radically changed.⁷³

2.3. The Development of Formal Training in Architecture

2.3.1. History

Various training schemes developed in France have played an important role in the history of architectural education. They became both direct and indirect models for corresponding schemes elsewhere in Europe, and even in America. The French system developed along two lines, of which the older one was based on the academic tradition and may have originally been more important. The younger tradition followed technological progress, and gradually influenced the academic tradition and the training systems of other countries. These were the so-called Beaux-Arts and polytechnic traditions. The history of these systems followed political changes in France, and the names of institutes changed at a rapid, and often confusing, pace.

The academic tradition was based on the heritage of antiquity, in which the arts were akin to the sciences, and the ultimate goal was to approach the objective ideal of beauty. Accordingly, architecture was classed as one of the fine arts. The main principles of the classical doctrine of architecture began to emerge in the 15th century, after the posthumous appearance of Leon Battista Alberti's work *De re aedificatoria*. Alberti's largely mathematical definition of beauty was based on the principles of symmetry, regularity, and uniformity.⁷⁶ These principles became central to the academic teaching of

THE DEVELOPMENT OF BEAUX-ARTS INSTITUTIONS⁷⁴

- Academie Royale d'Architecture, founded in 1671 and discontinued in 1793

(All the academies were closed during the French Revolution from 1793 to 1795)

- L'Institut de France, founded in 1795, contained four academies, of which the Academie des Beaux-Arts (founded in 1803) was first known as Classe des Beaux-Arts. The academy had five departments, with six, later eight, architects at the department of architecture. Their chief tasks were to nominate candidates for professorships; draw up the programme for the Prix de Rome competition and serve as its judges; and to supervise the French Academy in Rome.

- Ecole des Beaux-Arts: (1819-1968)

During the French Revolution teaching continued after a pause of two years on the basis laid by the earlier academy of architecture:

1795-1799 Ecole Spéciale d'Architecture
 1799-1807 Ecole Spéciale de Peinture, Sculpture et Architecture
 1807-1814 Ecole Impériale des Beaux-Arts
 1819-1870 Ecole Royale des Beaux-Arts
 1870- Ecole Nationale Supérieure des Beaux-Arts

architecture, and classical 'idealism' influenced almost all areas of training and education in the field.

Teaching generally proceeded through a system of design competitions, which were used in the old academy scheme already in the early 18th century. In the 19th century, the participants of the final competition for the *Grand Prix* or the *Prix de Rome* were selected in a number of preliminary competitions, each focusing on different tasks. Two of these lasted 12 hours, and the third and decisive one took 24 hours.⁷⁷ Training and teaching thus involved the continual testing of students. Students were ranked, whereby it was not only important how good an individual was, but how he measured in relation to others. This scheme nevertheless prepared students for a kind of 'case system', a command of different building types and their design.⁷⁸

The school itself did not offer any teaching in design. This was obtained in the ateliers or studios of private architects (*patrons*), which were not offices or firms in the modern sense but intended only for teaching purposes. The studio system operated fairly well throughout the 19th century, and changes did not become necessary until the first decades of the 20th century when the numbers of students began to grow.⁷⁹ This scheme was not far removed from the master-apprentice system of the guilds. Basic-level teaching was not an important concern, as the students had to apply for admittance, and only a very small percentage passed the entrance examinations. It was very difficult to gain entrance to the school, but far easier to be expelled. One of the worst failings of this system was that students worked only to please the judges of the competitions. This situation is described as follows by Paul Cret:

'Competitions tended to place emphasis on what was most likely to please the judges. To put it in another way, they tended to encourage not the best possible work, but the work most likely to win.'⁸⁰

INSTITUTIONS FOLLOWING THE POLYTECHNIC AND INDUSTRIAL ARTS TRADITION⁷⁵

Engineering:

- Ecole d'Artillerie et du Génie at Mézières, founded 1748
- Ecole des Ponts-et-Chaussées founded in 1747 (present name from 1775)
- Ecole Centrale des Travaux Publics founded in 1794, renamed the Ecole Polytechnique in 1795.
- Ecole Centrale des Arts et Manufactures founded in 1829 (private)

Industrial and applied art:

- Ecole Gratuite de Dessin (1765), from 1877 Ecole des Arts Decoratifs.
- Ecoles de Dessin (1786), from 1803 Ecole des Arts et Métiers.
- Conservatoire des Arts et Métiers. The school was founded as a museum in 1794 and later provided teaching.

Private schools of architecture

- Ecole Centrale d'Architecture, founded in 1865, later known as Ecole Spéciale d'Architecture (founder Emile Trélat)

The academic teaching of architecture followed an authoritarian model, although work in the studios created a collegial atmosphere. Textbooks were not necessary; the teachers pointed out the principles and ideas of design in their own work.

The French Revolution interrupted the work of many schools, and some were even discontinued, such as the former training institutes for civil engineers. The Revolution required large numbers of trained engineers, mainly for building fortifications along the frontiers. This need was met by the *Ecole des Travaux Publics*, which was founded in 1794 to replace all the former schools for civil and military engineers. In 1795 the school was renamed the *Ecole Polytechnique*, and some of the old schools reopened.⁸¹

Contrary to its original aims, the *Ecole Polytechnique* did not become a school of architecture, although the curriculum included the principles of architecture as an additional subject in engineering. The school provided basic-level teaching for all engineers, and it developed into a mathematical-scientific university rather than a school of technology. Its reputation was based on its highly valued scientific publications and its teachers, many of whom were leading experts and scientists in their fields. Under Napoleon, the school's original military nature became even more emphasized, and students were required to dress in uniform.⁸²

Owing to the *Ecole Polytechnique*, France was the only country in the early 19th century where engineering had become a distinct area of professional expertise. The school's system of teaching was based on lectures that were repeated with the aid of a tutor known as a *répétiteur*. Discipline was harsh and openly militaristic. The *Ecole Polytechnique* did not directly train students for professions; studies had to be continued at specialist institutes. This opportunity, however, did not exist in architecture.⁸³

In other countries, the development of technical training lagged behind France. In the German-speaking part of Europe architectural training had been poorly managed throughout the 18th century. The *Bauakademie* in Berlin, the first school in these countries to concentrate on building techniques, was founded in 1799 in connection with the Berlin Academy of Art. Although it was modelled after the French polytechnic system, it did not originally offer higher-level training; nor did the *Gewerbeinstitut*, founded in Berlin in 1821. These schools did not concentrate on scientific or theoretical teaching, but were institutes for training master-builders.⁸⁴ In the background was the Humboldtian concept of general education, which regarded professional and rationalistic teaching as a threat to the ideal of *Bildung*.⁸⁵

Higher-level technical schools were gradually founded in Germany, and were organized as *Technische Hochschule* in the 1860s and '70s, but they, too, differed from the French polytechnic model. They were primarily intended to serve the needs of German industry, and not the education of civil servants.⁸⁶ Although the German

schools were at first basic-level institutes, they evolved into important universities of technology. By the beginning of the 20th century, Germany had nine universities of technology, fifty-three state-run institutes, and nine private vocational schools in the field of building.⁸⁷ The emergence of a significant secondary-level sector was characteristic of Germany, where academic and secondary-level graduates came into heated competition with each other.⁸⁸ In its variety and diversification, however, the German educational system became as much a model for other countries as the French schools had been.

By the 1870s, Sweden had developed three technological training systems, all closely resembling each other. On the highest level were the Technological Institute of Stockholm, established in 1827, and *Chalmers tekniska läroanstalt*, founded in Gothenburg in 1829 with private funds. On the lowest level were the state technical schools (*tekniska elementärskolor*). An intermediary level of teaching was represented by the Stockholm Crafts School (*Slöjdskolan*), which was established in 1845.⁸⁹ The oldest system of architectural training was the Royal Academy of Arts, and its higher and lower schools of building. Teaching at the Academy mostly followed the model of corresponding academies on the Continent, but until the 1830s Stockholm lagged behind its foreign counterparts. The standard of architectural education improved and began to match the French Beaux-Arts tradition after reforms in the 1840s, and through the work of Professors Axel Nyström and Fredrik Wilhelm Scholander.⁹⁰

Under Scholander, the school's department for practical building (*Praktiska skolan*) employed one of its most significant faculty members, Emil Edvard von Rothstein, who introduced highly detailed methods for teaching building techniques. In spite of this, the upper-level school kept to large monumental training projects in the Beaux-Arts spirit, and mostly disregarded the practical issues of building. In the 1870s this led to sharp criticism concerning failings in technical training.⁹¹

Technical education in Sweden was reorganized in the 1870s, with reforms at both higher and lower levels of teaching. One of the aims was to replace the Technological Institute with a university of technology, to which the Academy's school of building was to be joined. The Royal Academy did not oppose this scheme, as it also ensured the artistic training of architects who had completed their basic studies. Professor Scholander, however, personally opposed this transition towards what he called 'practical architecture'. The statutes of the Royal University of Technology were laid down in 1877, and its first Professor of Architecture was Albert Th. Gellerstedt, who had studied under Scholander.⁹²

Under Scholander, the building school of the Royal Academy in Stockholm played a significant role in training Finnish architects. The Finn Frans Anatolius Sjöström, one of Scholander's closest pupils, was later instrumental in organizing architectural training in Fin-

land, which came to include French Beaux-Arts elements, although the main emphasis was on technical subjects from the very beginning.

2.3.2. From the Polytechnic School to the University of Technology

In Finland technological training did not reach university level for many years. The Imperial Alexander University of Helsinki maintained its unquestioned academic status, partly because of the Fennomans and their strong opposition to technological education. The statesman Johan Wilhelm Snellman, a leading figure of the Fennoman group, felt that national independence was to arise from a 'national consciousness' and not from the benefits of industrial progress.⁹³

In 1872 the Technical School of Helsinki was officially reorganized as the Polytechnic School, which marked the beginning of a new type of architectural training. Wilhelm Ludvig Bähr had taught architecture at the old school for only six years beginning in 1863, and the number of classes was relatively small. Bähr lectured in German, which may have been one of the reasons why he had only four students.⁹⁴

After Bähr's death, it was difficult to find a new teacher for his post, and the advice of foreign experts was sought. Professor Scholander of Stockholm recommended the architect Frans Anatolius Sjöström, who had recently graduated from the Royal Academy. After completing a state-funded study tour lasting almost three years, Sjöström began work in the spring term of 1872.⁹⁵ Sjöström changed the methods of teaching, but did not interfere with its formal scheme. He stressed the importance of drawing lessons, especially for students of architecture, and he employed the architect Theodor Höijer to give classes in freehand drawing. Sjöström's own studies under Scholander had focused on the classical tradition of architecture, with its emphasis on antiquity and the High Renaissance of Italy. Scholander himself regarded Sjöström as one of his most gifted pupils, although he was not able to round off his studies with a tour of Italy as prescribed in the programme of the Academy.⁹⁶ Sjöström's own lectures in the formal theory of architecture and ornament mainly dealt with the Greek and Roman styles. He did not teach the general theory of style and composition, which were not included in the curriculum until 1879 when the school was reorganized. The history of architecture was not taught at this stage.⁹⁷ In 1876 the faculty of the Polytechnic School drew up extensive plans for changing the curriculum, including additions to the faculty of architecture. At this time an important debate was in progress in Sweden concerning reforms in technological education, and Finnish experts had become familiar with the Swedish models for higher- and lower-level training.⁹⁸ Prior to approval, the faculty's proposal went to a committee of the Finnish Sen-

ate in 1877, and in this connection direct comparisons were made with the situation in Sweden. Carl Gustaf Estlander, as head of the committee, discussed various alternatives in his correspondence with Scholander and other experts. Estlander, however, disagreed with Scholander in stressing the importance of developing a Finnish architecture, and in his views on architectural training:

'But even if we do not support national architecture, the fact remains that architects, in both their training and practical work, are more bound to their own country than other artists. In my opinion, architects must have a solid grounding in mathematics and technology, achieved through good schooling, which is mostly acquired in this country.'⁹⁹

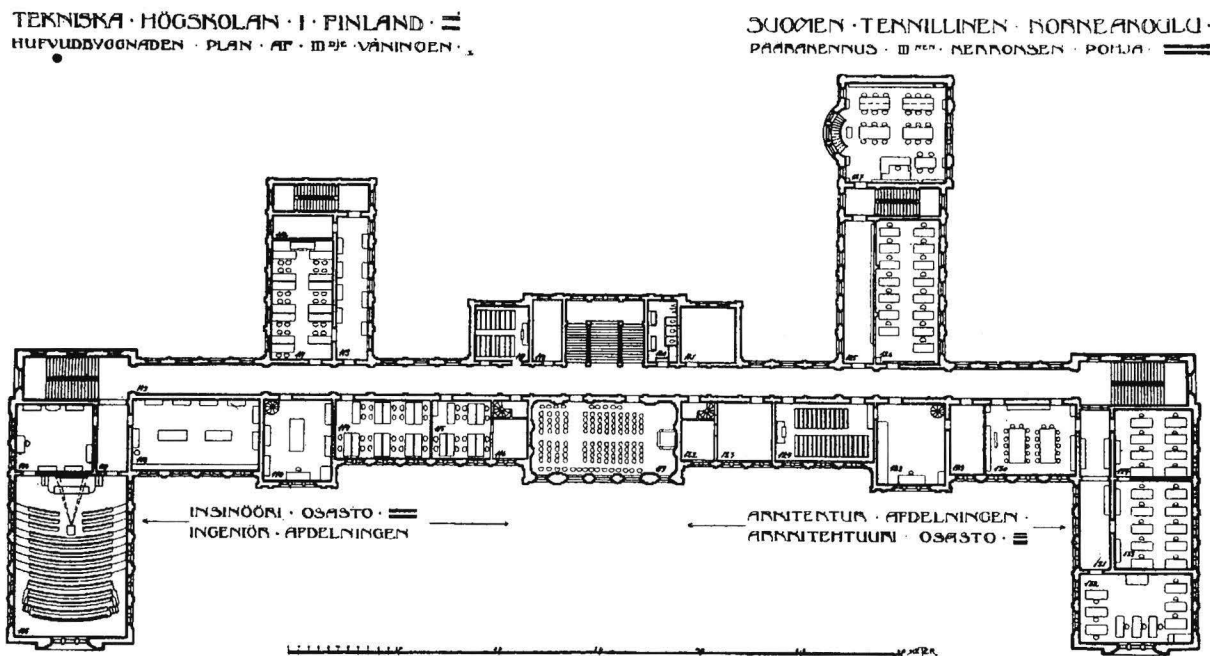
For Estlander, the only sensible alternative was to train architects in polytechnic institutes. He also had a clear idea of how the joint education of engineers and architects would offer the former everything that was practical, while introducing the latter to the ideals of beauty. He felt that the influences of style should be adopted from Paris. Estlander's plans also included the idea of a specifically Finnish architecture: '...the architectural theory of proportion, more than that of forms, can give architects even in Nordic climes an opportunity to create something of their own.'¹⁰⁰

Estlander's plans were thwarted, as the Senate committee was introduced to the new curriculum of the University of Technology in Stockholm. Parts of the statutes of 1879 for the new Polytechnic Institute were a direct copy of the regulations of the University of Technology in Stockholm, and those who campaigned for a more flexible system of teaching remained a minority.¹⁰¹ As a result of reorganization, new faculty members were employed to teach architecture. Sjöström had always been averse to statics, estimates and calculations in construction theory, and he argued for an extra teacher in these diverse subjects on the grounds that a single teacher might pay insufficient attention to important areas. The new teaching post included the subjects of construction theory, draughtsmanship, and freehand and line drawing. A large number of foreigners applied for the new teaching positions, but Carl Gustaf Nyström, then only 23, was selected in 1879 as the permanent teacher of construction theory.¹⁰² Nyström had graduated in architecture in Finland, after which he continued his studies in Vienna in 1878-79, possibly upon the recommendation of his teacher Sjöström.¹⁰³ Reforms at the Polytechnic Institute also introduced the teaching of art history in the third-year course in architecture.¹⁰⁴

After Sjöström's death in 1885, Gustaf Nyström was appointed, as the only applicant, for the head teaching post. Nyström's own position remained vacant. It appears that he did not wish to have it filled immediately, but planned it for the young Onni Törnqvist. Nyström's and Törnqvist's correspondence shows that Nyström desired a greater emphasis on the teaching of statics. He also felt that the teacher of construction theory should be well versed in the mechanics of construction. His letters to



4. The main building of the Helsinki Polytechnic Institute after extensions completed in 1904. SRM



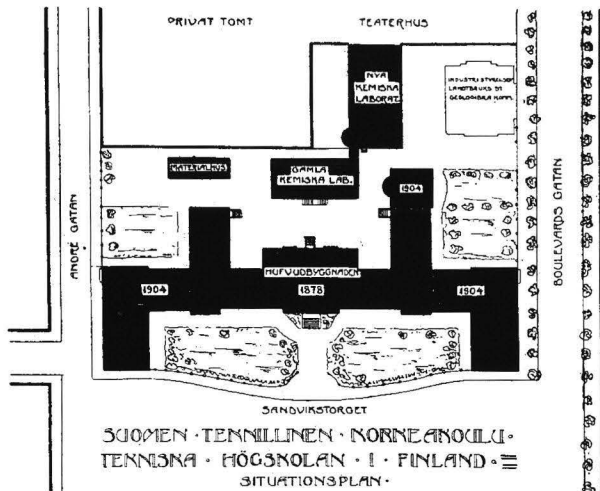
5. Plan of the third floor of the Helsinki Polytechnic. The Department of Architecture is on the right. Yearly report of the Helsinki University of Technology 1908-09.

Törnqvist, then studying in Munich, instruct the latter to attend lectures in subjects that were later included in the curriculum of the Polytechnic Institute, e.g. heating and ventilation.¹⁰⁵ In 1889 Törnqvist was given the teaching post on a temporary basis; his position was made permanent two years later.¹⁰⁶

Gustaf Nyström gradually shaped the teaching of architecture according to his own concepts. Construction theory was taught according to his plans, and Nyström had full confidence in Törnqvist's work. In his own lec-

tures, Nyström focused on general architectural theory and the theory of composition, which Sjöström had mainly neglected. Nyström's lectures in architecture were divided into three main areas: architectural theory, construction theory, and the theory of form. He felt that architectural composition required a knowledge of all three, and although artistic creativity was a matter apart, it was nevertheless guided by knowledge in these subjects.¹⁰⁷

Nyström's teaching mostly relied on the classical tradi-



6. The buildings of the Polytechnic on Hietalahti Square in Helsinki after 1904. Yearly report of the Helsinki University of Technology 1908-09.

tion. He did not have an academic education himself, but his teacher Sjöström had followed Scholander's Beaux-Arts-influenced concept of architecture.¹⁰⁸ Ville Lukkarinen has studied Nyström's relationship with the classical doctrine of architecture, analysing the development of his teaching from this perspective.¹⁰⁹ Nyström was without doubt a traditionalist, who - in Scholander's words - urged his students to 'keep an eye on those who are more advanced than you'.¹¹⁰ On the other hand, he emphasized the significance of new materials and constructions in the changing forms of expression in architecture:

'...there is hardly any architectural task that will re-emerge completely unchanged over time; either times themselves change, or the conditions of the project, or the artists involved - the result being that each period has its own art'. (Underlined by G.N.)¹¹¹

Nyström was not unequivocal in his relationship to French classicism. He admired the talent and skills of the Beaux-Arts architects, but he also criticized their tendency to copy works.¹¹² As late as the turn of the century, close links remained with the classical doctrine of architecture. Architecture did not rebel against these principles in the same way, or as early, as painting or other arts.¹¹³ Professor Claes Grundström, Scholander's successor at the Royal Academy in Stockholm, mainly lectured on classical antiquity and the Italian Renaissance as late as the early 1910s. Under Grundström, the teaching of architecture still included a competition with set prizes each academic year, although this system had been abandoned in sculpture and history painting.¹¹⁴

After a prolonged planning stage, the Polytechnic Institute was reorganized in 1908 as the Helsinki University of Technology. This, however, did not lead to any major changes at the Department of Architecture. The new teaching positions were necessary, as the number of students had increased; since 1903, over 50 students had enrolled in architecture alone.¹¹⁵ In addition to its two professorships, the Department of Architecture was given



7. Professor Carl Gustaf Nyström (1856-1917). National Board of Antiquities, Pictorial Archives.

a lectureship in ancient and medieval architecture. Z. Usko Nyström, who had been an assistant teacher for many years, was appointed to the new position.¹¹⁶

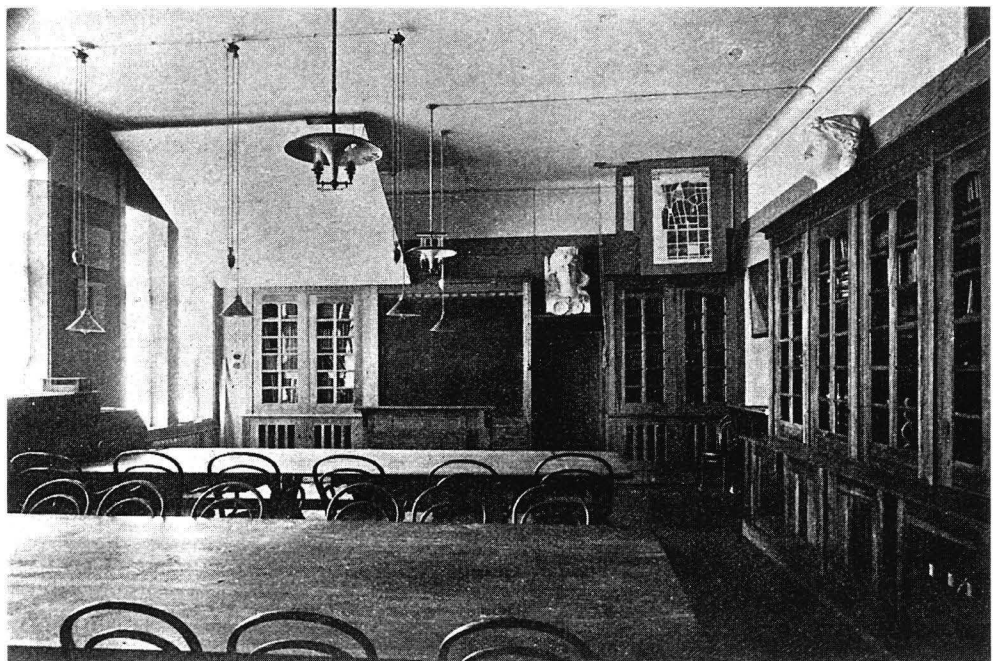
2.4. Technical Training for Women: the United States and the Nordic Countries

'...It follows necessarily that the objective of architectural education must be the breeding of gentlemen of cultivation, learning, and broad sympathies, who understand the dignity and significance of art both as beauty and as language...and who can inspire, organize and direct widely different classes of men.'
American Institute of Architects, Committee on Education, 1906.¹¹⁷

In the 19th century neither the United States nor Finland had long or developed traditions of professional training institutes. The history of these countries and the specific reasons for this situation naturally differ. The United States developed into a strong civic society at an early stage, and the position of professional groups became completely different than in countries such as Finland with centralized government administration. In the United States, professionals belonged to a new middle class associated with large-scale and heavy industry. It may be said that nowhere else were professional expertise and the *Fachmensch* image so characteristic of pro-



8. Architecture students of the second-year course at the Polytechnic Institute, early 1900s. Professor Gustaf Nyström is seated in the middle. SRM:



9. The library of the Department of Architecture at the Polytechnic Institute, 1905. Yearly report of the Helsinki University of Technology 1908-09.

professionals than in the United States at the turn of the century.¹¹⁸

The United States and Finland, however, share a number of analogies in the development of the architectural profession. In both countries, architecture was marked by a strong growth of the building industry, with a corresponding shortage of skilled labour and professionals. There was also competition over design projects between architects and less-trained builders in the 19th century. In both countries, the main clients of architects were from among the upper classes; or architects were commissioned by the state or government; and the main projects were often monuments. Although the Americans developed a more protectionistic strategy of professional exclusion regarding the title of architect, similar currents also emerged in Finland.¹¹⁹

The main similarity between these countries was the early acceptance of women in systems of formal education. Furthermore, in both countries women entered the field as fully-fledged professionals at the end of the 19th century in much larger numbers than anywhere else at the time.

For obvious reasons, architectural education in the United States had a short history. In the early 19th century it was mainly organized as an apprentice system in the offices and studios of architects. The formal training of civil engineers became organized around this time, but corresponding developments in architecture did not begin until the 1860s and the American Civil War. In 1862 the U.S. Congress passed the Merrill Land-Grant Act, promoting training and education for the needs of industry. The act provided government support for schools and institutes by offering them sites and lots free of charge. This immediately led to the founding of three schools of architecture: the Massachusetts Institute of Technology, the Polytechnic of the University of Illinois, and Cornell University.¹²⁰

The Merrill Land-Grant Act stipulated a number of conditions, including co-education, which, at least in theory, permitted women to enter these schools. In spite of this, women were not very eager to begin formal education in architecture, nor were they desired as students.¹²¹ Most women students at the universities enrolled in home-economics subjects. The first known American woman architect, Louise Blanchard Bethune, had trained in the 1870s at the atelier of a privately practising architect. In 1888 she became the first woman member of the American Institute of Architects.¹²²

In 1880 the first woman architect graduated from Cornell, and in 1890 Sophia Hayden, who had entered MIT in 1886, was the first woman to complete the full four-year course in architecture. By 1910, 50 American women had graduated in the field. Despite this, half of the existing schools of architecture refused to admit women, e.g. Harvard and Columbia University. State universities were usually more open to women students than private institutions of learning.¹²³

Professional opportunities for American women did not

necessarily correspond to the numbers of women graduating from the schools of architecture. Only a few were able to operate in large building projects as successfully as Louise Blanchard Bethune, who could turn down house-design projects. In her words, 'the dwelling is the most pottering and worst-paid work an architect ever does... Dwelling-house architecture, as a special branch for women, should be, at the present rate of remuneration, quite out of the question'.¹²⁴ Despite Bethune's warnings, dwelling architecture became the main area of work for women. The American Institute of Architects did not actively recruit women for many years. Between 1888 and 1915, the AIA had three women members, and only five more had been admitted by 1925.¹²⁵ Professional organizations in America usually maintained that members should be recruited from uniform social groups, preferably male and white. This ensured the creation of bodies where views could easily be aired and understood by all. 'Women could never become one of the boys'.¹²⁶

In the Nordic countries, architectural training had been arranged in art academies, and later in universities of technology. The Royal Danish Academy in Copenhagen did not admit women to study architecture until 1908, and the first Danish women graduated in this field in the late 1910s. Norway belonged to Sweden until 1905, and Norwegian engineers and architects had mostly trained in foreign institutions. Norway's first University of Technology was established at Trondheim in 1910. The first woman to graduate in architecture from the university was Kristen Wleügel Knuttson in 1912, who was officially a student of the Technical School of Trondheim. There was already one woman architect in Norway prior to Knuttson, Lilla Hansen, who studied privately until 1894 at an atelier and then went on to Brussels to complete her education.¹²⁷

Women began to be admitted to the schools of painting and sculpture at the Royal Academy of Sweden in 1864, but the school of architecture remained restricted to men. This was partly due to Fredrik Wilhelm Scholander who was a staunch opponent of women artists and women's emancipation in general.¹²⁸ Claes Grundström, Scholander's successor, continued these policies. Educational opportunities for Swedish women improved after the middle of the 19th century; the school of the Swedish Crafts Association (Sw. *Slöjdskolan*) began to admit women in 1858.¹²⁹

A reorganization of higher and lower technical education divided the Crafts Association's school into several training institutions. It was renamed the Technical School of Stockholm (*Tekniska skolan i Stockholm*), and came to include a higher school of industrial art, a school for builders, and a separate technical school for women (*Tekniska skolan för kvinnliga lärjungar*). The women's school mainly taught sewing, engraving, sculpture, photography, drawing, and visual arts. Although the curriculum included art subjects, teaching was technically oriented.¹³⁰ Of importance for Finland is the fact that

some 19 Finnish women studied at the school between 1880 and 1901.¹³¹

The builders' school (Sw. *Byggnadsyrkeskolan*) in Stockholm trained master-builders. The school's records do not mention any women students in the 19th century. Hilda Hongell of Finland, who later graduated as a master-builder in Helsinki, is known to have applied for admission in the 1890s, but was rejected because of her sex.¹³² The school admitted its first women students in 1904.¹³³

The Royal University of Technology, established in 1877, did not originally admit women students. In 1892 the first woman applicant for the degree course in mining engineering was rejected with reference to the university's statutes, which explicitly stated that 'training is provided for young men wishing to embark upon a career in technology'.¹³⁴ This case, however, led to women being admitted in later years as supernumerary students. The first woman to study architecture was Agnes Magnell, who began her studies as a supernumerary student in 1894, but did not complete her degree.¹³⁵

The Norwegian Anna Mohr, admitted as an extra student, was the first woman to graduate in architecture from the University of Technology in Stockholm. She completed the course in four years, graduating in 1919. It was only in 1921 that the first woman was admitted as a regular student at the Department of Architecture, and between 1915 and 1924 no more than six women studied at the department.¹³⁶

One of the reasons why technical training did not interest many women in Sweden was the nature of basic-level schooling. Theoretical education in mathematics and the sciences was provided by special secondary schools that remained closed to girls until 1928. However, discussion concerning special areas for women in technology and industry had arisen in Sweden already in the 19th century. Ellen Key, a Swedish women's emancipationist, had pointed out that architecture - especially the design of dwellings - was a natural vocation for women. At any rate, technical fields in Sweden remained divided according to gender much longer than in Finland. From the 1920s there was a tendency to train women in tasks less valued by men, such as drawing and copying plans.¹³⁷

2.4.1. Women Students in Finland

Nineteenth-century European bourgeois ideology stressed the importance of the family, as the community of the father, mother and children. Characteristic of this modern family ideology was a sharp division between male and female roles and their respective areas of activity. The home became the woman's place, where she cared for her family and children. In the European atmosphere of turmoil and revolution this way of thinking ensured security and continuity. In Finland, leading



10. 'Strange as it seems', Louise Blanchard Bethune was America's first woman architect. Martinsburg W.Va. Journal 1949, AIA, Archive of Women in Architecture.

intellectuals who supported women's education shared these ideas, e.g. Johan Vilhelm Snellman. It was generally felt that the education of women made them better equipped to raise their children.¹³⁸

The status of Finnish women changed in the late 19th century. In 1878 they were permitted to own land, and official freedom of trade and occupations made it possible for unmarried women to enter trades. In the 1860s certain civil-service positions became available, and a teacher-training seminar in Jyväskylä opened up higher education for women.¹³⁹

In the 19th century the educated middle classes of Finland largely subscribed to the ideological concepts of the family and maintained the importance of education.¹⁴⁰ Education became one of the main items on the agenda of the Finnish women's movement. This implied not only the education of a larger group of people, but education itself was given a clearly utilitarian role and was expected to open important sectors of society to women.

Academic education became available to women at a very slow pace. The Russian authorities were highly suspicious of higher education for women. In Russia, women were legally barred from campaigning for political rights. As a result, they fought for entry into the universities. The first Russian woman to graduate in medi-

cine completed her studies in Zurich in 1867, and her example started a migration of Russian women to study medicine in Switzerland. The authorities soon became aware that some of these women were in contact with anarchist movements there. Since Russia had witnessed recurrent revolutionary unrest, women students naturally came under suspicion. They were prevented from studying abroad, and in the 1870s even education in their own country was restricted.¹⁴¹

In the 1870s only two Finnish women were granted special dispensation to study at the Imperial Alexander University in Helsinki, but their number grew after 1885. In 1901 equal rights were officially granted in this respect.¹⁴² The risen prestige of academic learning and the lack of other educational alternatives were among the factors that steered Finnish women into academic fields, as opposed to strictly vocational training. In 1900 over a hundred women enrolled at the University of Helsinki, and by 1905 their number had doubled.¹⁴³

In the 1870s technical training in Finland had not reached an academic level. For prospective students, the Polytechnic Institute in Helsinki required a minimum age of 16 and the completion of a four-year secondary school course. They also had to sit for an entrance examination and demonstrate their command of the Swedish language. Supernumerary students only had to meet the age

requirement and pass the entrance examination in their chosen subjects. The statutes made no specific mention of education being restricted to men, although their wording in Swedish suggests this distinction.¹⁴⁴

These rules soon made the Polytechnic Institute realize that entrance requirements were too low for higher-level academic education, and changes were made in the autumn of 1886. The matriculation examination certificate or a senior high-school leaving certificate now granted automatic admission, whereas the lower-level courses with their extensive syllabuses in mathematics and physics required entrance examinations.¹⁴⁵

The statutes retained a liberal attitude regarding supernumerary students, making it possible to admit women who had not completed the matriculation examination. The first women students, however, were mainly interested in arts subjects. Between 1879 and 1881 five women enrolled in the sculpture classes taught by Carl Eneas Sjöstrand at the Polytechnic Institute. Four of them were later active as artists.¹⁴⁶

Between 1887 and 1894 six women enrolled to study architecture at the Polytechnic Institute. None of them had completed the matriculation examination, but all had graduated from secondary girls' schools, and for this reason they were not entitled to become regular students. Wivi Lönn and Albertina Östman, however, had studied

TABLE I

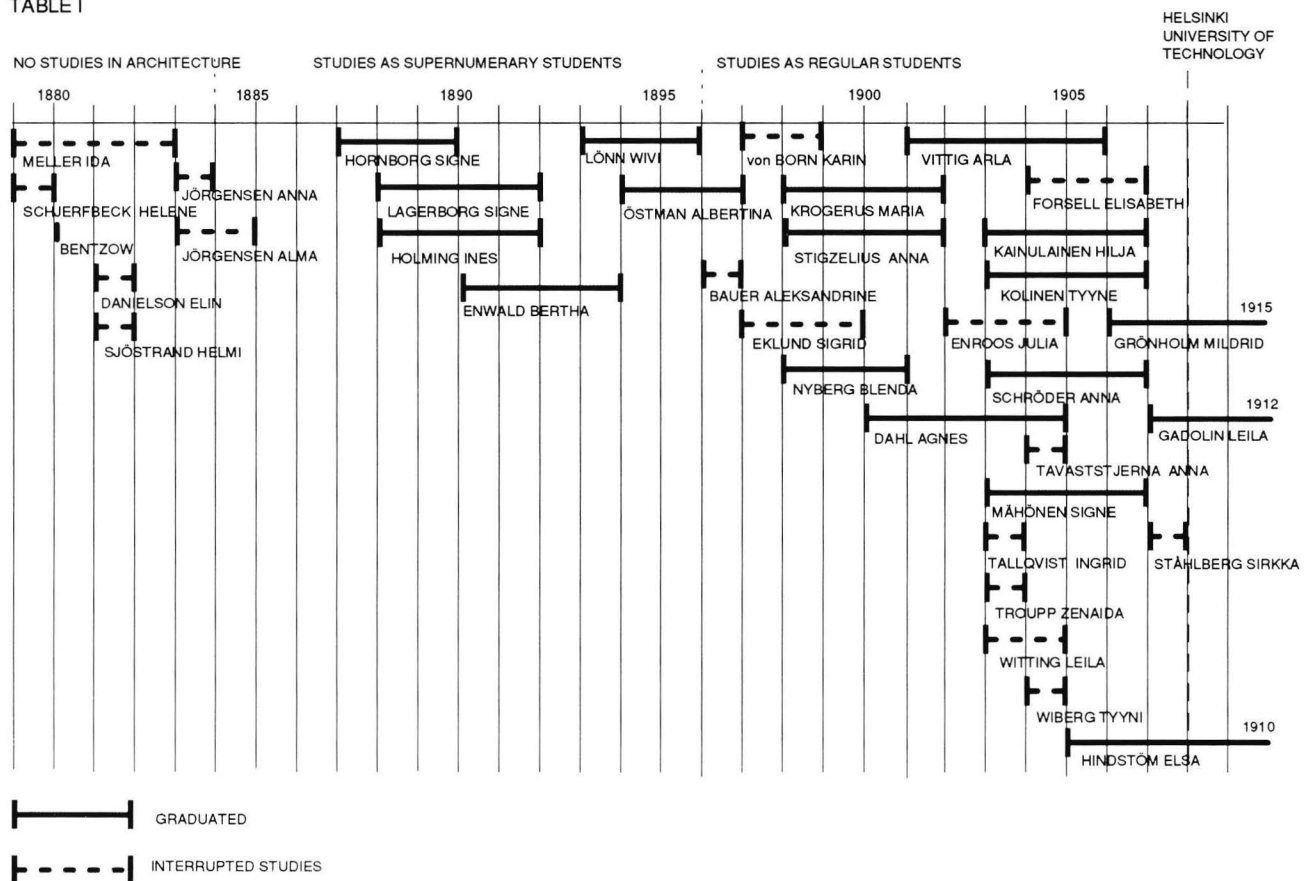


TABLE I: Women students at the Department of Architecture of the Polytechnic Institute of Helsinki 1879-1908¹⁴⁷

11. The second-year course of the Department of Architecture at the Polytechnic Institute in 1904. Women students in this course were Hilja Kainulainen (at the rear), Signe Mähönen, Anna Schröder, and Tyyne Kolinen. National Board of Antiquities, Pictorial Archives.



at industrial or trade schools¹⁴⁸, and were thus exempted from the first-year course in architecture. Both graduated in three years.¹⁴⁹ All the women who began their studies at this time graduated in due course. Signe Hornborg, who graduated in 1890, was probably the first woman architect in Europe to have a complete formal education in her field.

The seven women who began their studies between 1896 and 1900 were all granted the rights of regular students. Since they had also matriculated from secondary schools, they were 'in all respects equals with their male fellow-students'.¹⁵⁰ Three of these women, however, interrupted their studies, and the first woman to graduate in architecture as a regular student was Blenda Nyberg in 1901.

Sixteen women enrolled in architecture at the Polytechnic Institute between 1901 and 1908. Of special interest is the academic year 1903-04, when seven women began their studies at the same time, and half of the first-year course of students were women. At the time, the total number of women students at the Department of Architecture was ten, but of the sixteen who began their studies only eight graduated.

Between 1887 and 1908, 29 women studied at the Department of Architecture; eighteen graduated, and the remaining eleven interrupted their studies. The students were mostly from upper- or middle-class backgrounds. Until the early years of the 20th century, most students of architecture were Swedish-speakers. A Finnish-speaking majority did not come about until 1906-07, and from then onwards this ratio remained much the same.¹⁵¹ The Polytechnic Institute originally operated in the Swedish

language, but students with the secondary-school education stipulated in the 1879 statutes had not acquired sufficient language skills by the time they enrolled. Owing to this, and former legislation concerning the Swedish and Finnish languages, an act was passed in 1888 providing teaching in both languages according to the needs of students.¹⁵²

Women were also admitted to other departments of the Polytechnic Institute at an early stage. The first were four students of chemistry in 1892-95, but none of them completed her studies. In later years, women enrolled at other departments, and in 1905 Jenny Markelin graduated as Finland's first woman civil-engineer.¹⁵³

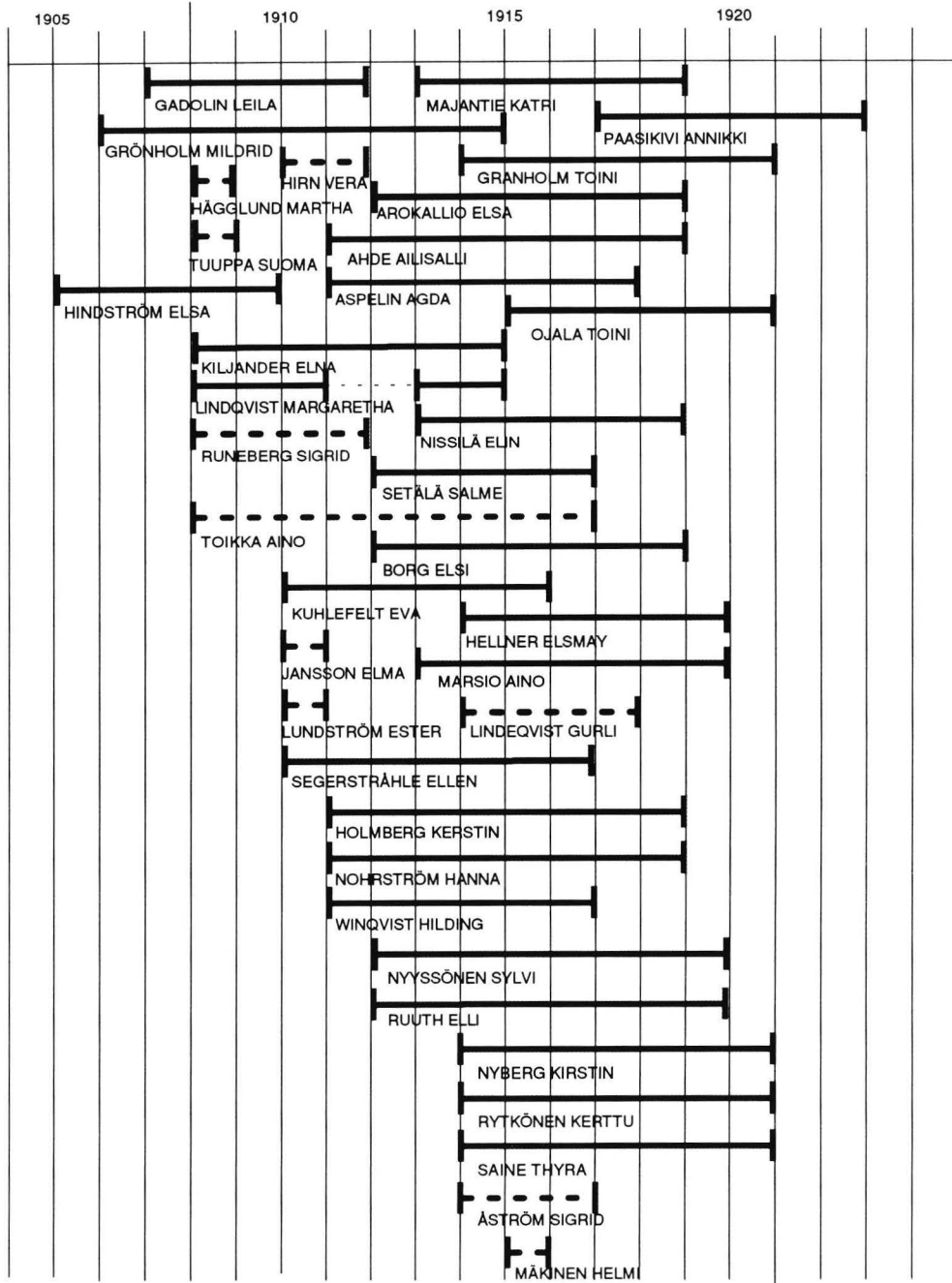
In 1908 the Polytechnic Institute was reorganized as the Helsinki University of Technology and became Finland's second university-level institute of learning. A special syllabus, approved in 1909, was laid down for the new university. This required students to complete a diploma degree consisting of two parts: a so-called general degree mainly in mathematics and the sciences, and a second part in professional subjects, including a diploma project. The scheme was geared to a four-year course of study. The diploma in architecture required the design of a middle-sized building with estimates of materials and costs, and written descriptions of construction methods and materials.¹⁵⁵

In 1911 the degree syllabus was changed to include a six-month trainee period in building, at a building-materials factory or in corresponding work. Students had to complete this stage before being given the subjects of their diploma projects.¹⁵⁶

Between 1908 and 1917 a total of 34 women enrolled

TABLE II

HELSINKI UNIVERSITY OF TECHNOLOGY



 GRADUATED
 INTERRUPTED STUDIES

TABLE II: Women's enrolments at the Department of Architecture of the Helsinki University of Technology 1908-1917¹⁵⁴

at the Department of Architecture, of whom 25 graduated and nine discontinued their studies. Some women graduates did not receive their diplomas until the late 1910s or the early 1920s. After the founding of the University of Technology, several women enrolled each year at the Department of Architecture. In the academic year of 1914-1915 seven women began their studies at the same time. By the end of the period, a total of over 20 women were studying at the Department of Architecture. The social background of these women was still predom-

inantly upper or middle-class. There was a slight overall majority of Finnish-speakers, although in some years they were outnumbered by Swedish-speakers. The number of students of architecture at the University of Technology grew from the first years until the First World War, when the number of men sharply declined. A similar drop in the number of women students began after 1915. There was no corresponding decrease in overall enrolment at the University of Technology. On the contrary, the war made foreign study impossible, and

TABLE III

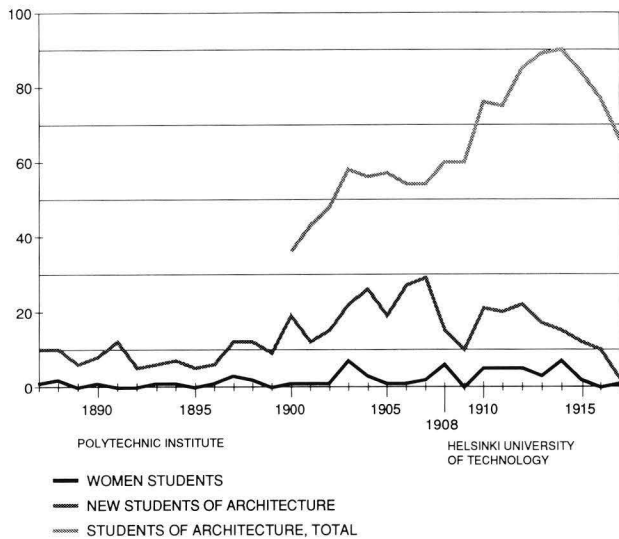


TABLE III: Total number of students at the Polytechnic Institute and the University of Technology 1887-1917, including first-year students and women.¹⁵⁷

TABLE IV

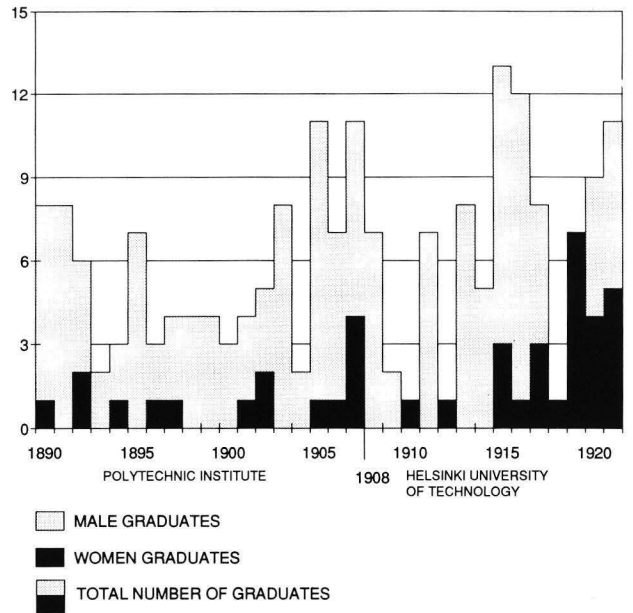


TABLE IV: Graduates in Architecture from the Polytechnic Institute and the Helsinki University of Technology 1880-1921.¹⁶⁰

enrolments began to grow, making it necessary to limit the number of new students to 125 in the academic year of 1916-1917.¹⁵⁸

Interrupted study can be explained, at least in the case of male students, as a result of a general interest in pro-independence activities and the so-called *Jaeger* movement, which organized military training in Germany for independence activists. Students at the University of Technology formed their own armed Civil Guard bodies, providing secret military training for members.¹⁵⁹ Fewer women discontinued their studies at the University of Technology than at the former Polytechnic Institute. One of the reasons for this was the custom of combining careers with marriage, which evolved at the end of this period. In the early days of the Polytechnic Institute a woman student's marriage meant an end to her formal studies, but later it became common marry one's fellow-students.

Forty-three out of the sixty-three women who enrolled between 1887 and 1917 at the Polytechnic Institute and later at the University of Technology managed to graduate. The first was in 1890, and the last one of this group in 1923. Most of the women who graduated in architecture in the last years of the 19th century and around the turn of the century were still professionally active in the early 1920s. At the Polytechnic Institute, completing the course of architecture took an average of 4.5 years. This was due to a number of reasons, including the varied nature of study in the early and late stages. This group of women included many who had graduated from vocational or industrial schools, some of whom could directly enter the second-year course. The early stages of study may have been easier for these women than for others.¹⁶¹

Women graduated in an average of six years from the University of Technology. Among all students of architecture the total period of study was an average of 9.5 terms in the early years, and 11.5 terms between 1914 and 1916. Men graduated in a shorter time, but longer periods of study were a general trend in all departments. In machine engineering, for example, an average of 11 terms were necessary for graduation already in the early years. The university administration felt that this clearly demonstrated the insufficiency of the four-year scheme in the face of additional requirements and mandatory practical training, e.g. in architecture.¹⁶² None of the women graduates in architecture completed her studies in the required eight terms, and only six men were able to do so.¹⁶³

2.4.2. Faculty, Teaching and Professional Knowledge

In architecture, professional knowledge is marked by a conflict between artistic and technological aspects. For this reason, the professional development of architecture has been described as weaker than that of engineering or other fields.¹⁶⁴

The architectural profession, however, had distinct groups and organizations defining the forms of professionalization, i.e. the professionals themselves, their clientele, and the state.¹⁶⁵ The interactive field of these three factors can be further divided, with professionals falling into those actively involved in professional work and

into groups of specialists producing professional knowledge.

Since professions are regarded as aiming at permanent goals, the formal and informal socialization of new members acquires an important role. In guarding the power of knowledge within professions, the educational system has adopted the role of controlling knowledge and producing the elements of status.¹⁶⁶ In Finland, architecture developed from a pre-modern profession into a modern one in the late 19th century. It was at this stage that specialized training and education began to provide scientific expertise. Training also created a degree of status, and the profession began to separate from other social structures and form its own organizations. These changes were part of an overall transformation of society from its traditional forms into its modern, bourgeois-liberal stage.¹⁶⁷

These changes coincided with the advent of women in architectural training. Unlike many other countries, Finland did not prevent women from studying in technical fields, and they were granted equal rights in this respect. In spite of this, women who began to study architecture appear to have disrupted the gender-based division of labour. Technical areas were dominated by men, and typical women's work was still related to the home, nursing or teaching.

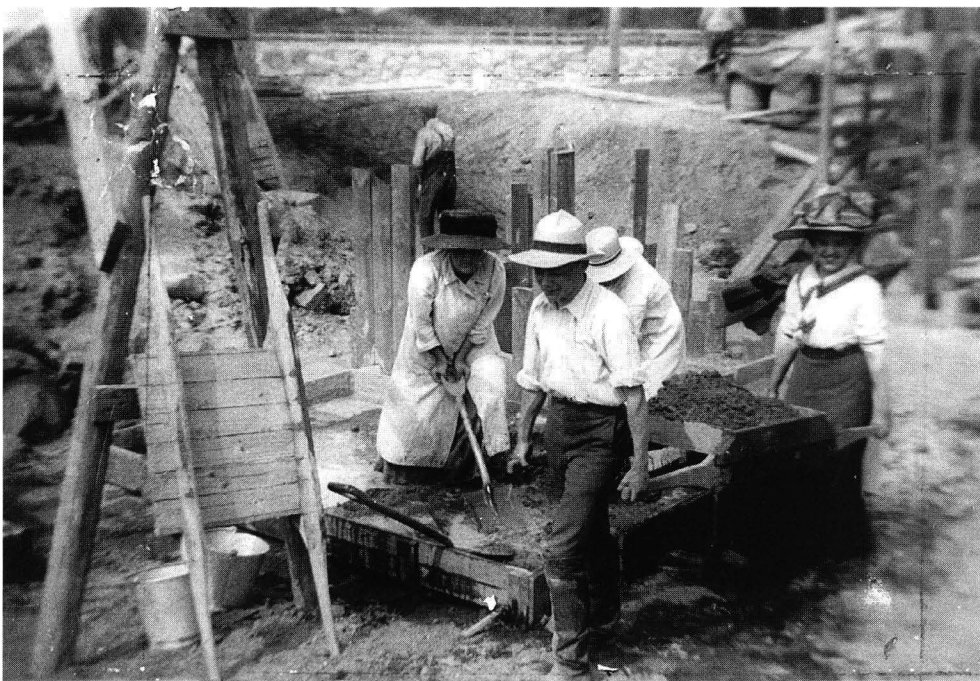
Within the institutions of technical fields, there were specific segregated areas, which had a greater appeal to women. In Finland, these were especially chemistry and architecture. Sociological studies have found a number of explanations for this, e.g. the fact that fewer men applying for study in these fields led to less severe competition.¹⁶⁸ In my opinion, another reason may be that around this time architecture in Finland was taking on

a strong role as an art. Studies in art had always been open to women, and the first women to enroll at the Polytechnic Institute were art students.

In the field of architecture, the Polytechnic Institute and its faculty were instrumental in generating, controlling, and diffusing the knowledge required for entering the profession. The reforms of specialized technical education in Finland were influenced by both leading industrialists and teachers in the field.¹⁶⁹

Development outside the formal institutions of training also affected the nature of professionalization and the type of knowledge required in professional praxis. The profession's ideals, role models and ethics were already adopted in the student stage, the initiation phase of the profession. These 'truths' were mostly related to the forms of scientific or scholarly discourse and the institutions producing them. Modern professions have often been described as aiming at a kind of elitism, and the professionals, i.e. 'the specific intellectuals', had the power to define the value and content of these 'truths'.¹⁷⁰ In architecture, professional ethics stressed the need to act as an impartial expert mediating between clients and builders. The architect should always serve his clients' interests and maintain their trust and confidence. This had already been the classic model of the profession in the 19th century.¹⁷¹ However, it implied architects as 'artists of building' and not as practical building experts. It was pointed out that an architect should also be a modern-minded man, '...standing at the pinnacle of his own culture. His training must therefore take a long time - and his education is a life-long process.'¹⁷²

The architect's role model included traits other than those of the expert-artists. At the end of the 19th century, architecture began to adopt an increasing degree of



12. Students of technology in training in 1912. Hilding Ekelund is in the foreground; Hanna-Lisa Nohrström is on the right. SRM.

entrepreneurial features, and professional ethics had to face this fact. Architects not only designed buildings, but were also consultants to individual or collective clients, and as such they had to keep in mind the often considerable sums invested in projects. 'An architect may be as much an artist as he likes, but there is no reason why an artist cannot be a businessman as well.'¹⁷³ Although professional identity still held to an idealized concept of an artist-architect disinterestedly serving his client, economic returns became an important part of actual professional practice, and it was by no means uncommon for architects to act as contractors.¹⁷⁴

Although changes in professional praxis or control required agreement between those in practical work and those producing professional knowledge, conflicts still arose.¹⁷⁵ In Finland, the training system and the field of active professionals were divided by the nature of professional knowledge and ideals.

The teaching of architecture at the Polytechnic Institute came under sharp criticism around the turn of the century. This was understandable in view of the highly traditional nature of the institute. Criticism was also levelled against Gustaf Nyström. Similar comments were familiar from other countries. Since the 1860s, the whole Beaux-Arts system had gradually evolved in a more 'rational' spirit, with increased focus on the national character of architecture.¹⁷⁶ Sharp criticism arose even in Sweden against Claes Grundström's teaching at the School of Architecture of the Royal Academy, where discontent erupted in 1910 in a 'student revolt' in which six students established a private school of architecture for a year, with four leading architects as their teachers.¹⁷⁷

Finnish architecture and its corps of professionals were clearly divided around the turn of the century. On the one hand were a group of 'young talents', who had emerged in the 1890s, and on the other hand, the older generation, including the faculty of the Polytechnic Institute, Gustaf Nyström, and the civil-service architects of the Board of Public Works and Buildings. There were also splits along ideological lines. The main points of dissension were the stress on historical materials in academic teaching, varying views on the restoration of older works, and the younger generation's strivings towards a new and 'more rational' architecture, which in itself arose from a variety of standpoints.¹⁷⁸

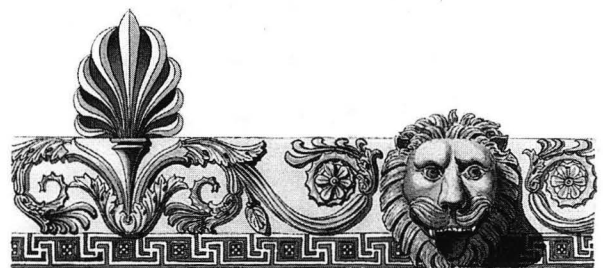
The conflict of professional ideals was crystallized in the contrast of Nyström's classical concepts of architecture with the completely new position of his successful students in Finnish culture. In the eyes of their contemporaries, Lars Sonck, Eliel Saarinen and Armas Lindgren were for Finnish architecture what Sibelius represented in music. Discussion on the need for 'new' features in Finnish architecture brought the above gentlemen to the fore, and inevitably raised a conflict with Nyström's ideas of historical models and prototypes. For Nyström, invention was linked with imitation in the classical sense, and he was accordingly wary of innovation. In his own



13. Students at the Department of Architecture, 1896. Standing in the back row are Albertina Östman and Wivi Lönn. In the front are (from the left) Torsten Montell, Eliel Saarinen and Armas Lindgren. National Board of Antiquities, Pictorial Archives.

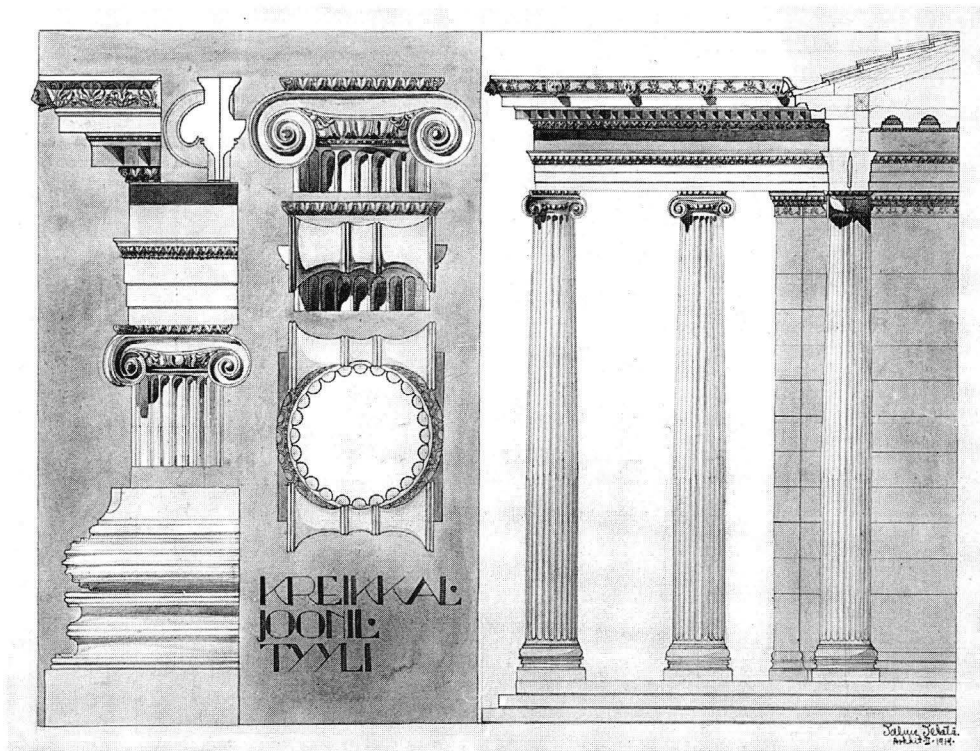
terms, 'only a master, having command of the principles of style and a full understanding of the needs and ideals of his own time can hope to find (new) expressions for them.'¹⁷⁹ On the other hand, Nyström never neglected to emphasize the new technical solutions required by contemporary architecture. In Nyström's opinion, the aims of his pupils, Lars Sonck and Eliel Saarinen, were examples of 'creating novelties for "originality's" sake.'¹⁸⁰

From its very beginning, teaching at the Polytechnic Institute differed from the French Beaux-Arts system. In design and planning this was evident in the lack of a competition system. Polytechnic education stressed mathematics and the sciences, even to the exclusion of professional or vocational subjects, and studies proceeded through a system of yearly courses. However, cer-



Sima des Tholos in Epidaurus

14. 'Sima des Tholos in Epidaurus'. Exercise project by Wivi Lönn for Gustaf Nyström's 'Notes on Architecture' lecture series, 1893. Oulu University Library.



15. 'The Ionic Style of Greece'. Project by Salme Setälä in the second-year course in architecture, 1914. SRM

tain Beaux-Arts principles were followed. Historically significant buildings were used as examples in solving certain types of problems, and students were required to draw and copy parts of them. The teaching of design and planning proceeded in stages towards more demanding projects, with themes such as an antique villa, a railway station, or a museum.

Elitist education of this kind had ritualistic overtones - although all education can be regarded as formally ritualistic. Participating in the rituals not only strengthened the collective identity of those involved, but also offered signs or symbols distinguishing oneself from others.¹⁸¹ In technological fields, group identities were shaped by the traditionally male-dominated nature of education. What was taught and the ways in which this information was passed on had historically been accommodated to the needs of male students alone, and women were required to accept and conform to existing standards and values. In this sense, women were socialized into the skills of the profession 'on an equal basis', but at the same time they had to confront the completely different attitudes that society had in store for them.

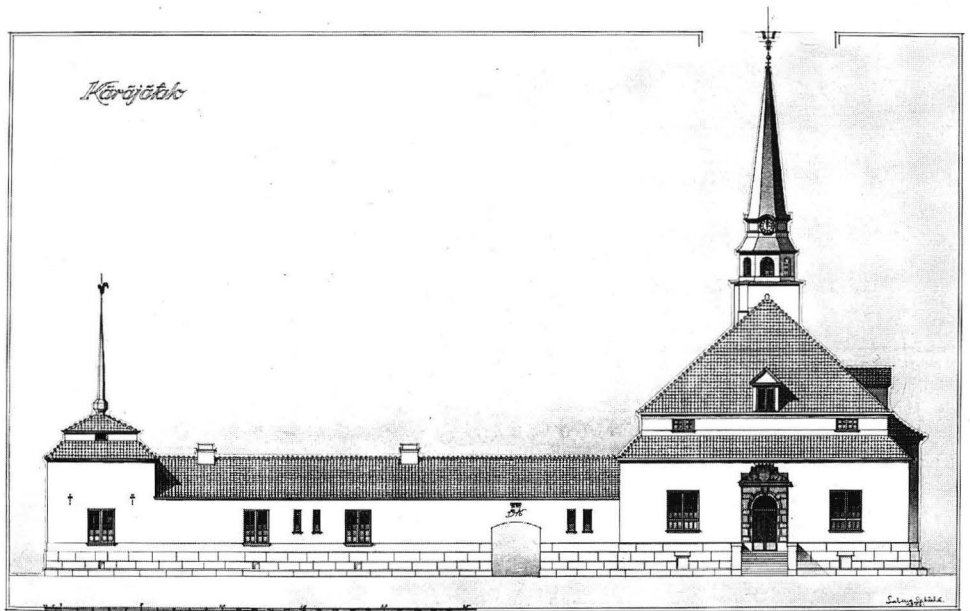
The curriculum in architecture had included compulsory diploma-type projects even before the institute was reorganized as the University of Technology. Students were required to present two or three projects of this kind. For example, Wivi Lönn's graduate project included the drawings and plans for both a church and a large villa *all'antica*.¹⁸² Salme Setälä's student projects¹⁸³ show that in the first-year course Nyström required only the drawing of architectural details. This continued in the second year, and it was not until the third-year course

that larger works and projects were designed. In the academic year of 1914-15 Setälä prepared designs for three projects; one these was still an exercise in style, while the others were for actual buildings, with elevations, floor plans, sections, and drawings in perspective. In the final, fourth-year, course teaching concentrated on designs for four separate projects.

In addition to classes in design, the curriculum included lectures and classes in building construction. Nyström had developed his lectures over the years, and in the 1910s the third-year course attended them throughout the academic year, and the fourth-year course in the spring term.¹⁸⁴ Examinations followed a method in which questions on the subjects of the lectures had to be answered in writing and in the form of drawings and plans in the space of a few hours. The examination on Nordic architecture, for example, contained eleven questions, ten of which required drawings of the works in question, possibly including floor plans, elevations and sections. This examination had to be completed in four hours.¹⁸⁵

Excursions both in Finland and abroad were an important part of the curriculum. Since the late 1880s, Nyström, however, stressed the importance of Finnish monuments and works of architecture. He was especially fond of the Cathedral of Turku, which he measured and drew with his students almost every year from 1889 to 1916. When the University of Technology was established, the faculty body immediately ruled that the diploma requirements in architecture were to include the measurements and drawings of an historic building or a significant part of it.¹⁸⁶

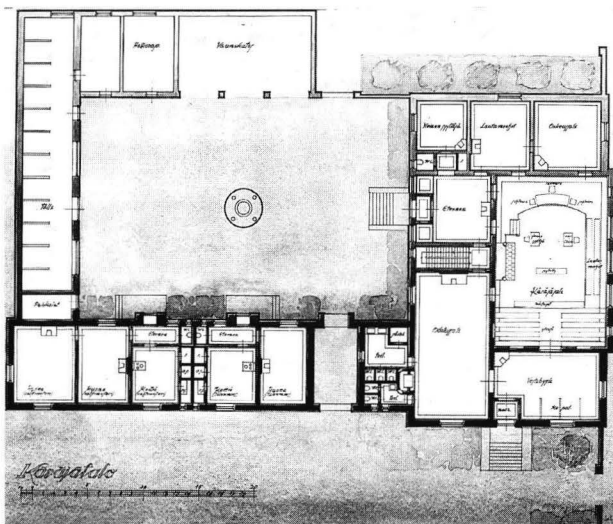
Nyström set the subjects of diploma projects according



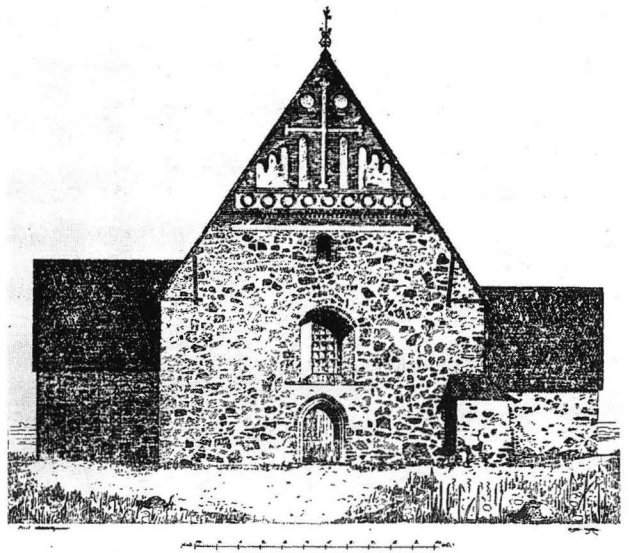
16. 'Court house', elevation. Project by Salme Setälä in the fourth-year course in architecture, 1916. SRM.

to a system and themes largely similar to those followed at the School of Architecture of the Royal Academy in Stockholm. Professor Claes Grundström made his students prepare competition projects of a variety of buildings in different styles (Renaissance and Baroque in the autumn term and medieval architecture in the spring). Also on the agenda was the main competition of the academic year with awards and a free choice of style. The competitions always involved large monumental buildings.¹⁸⁷ The diploma projects set by Nyström between

1909 and 1917 included monumental buildings, e.g. museums, schools, courthouses, and libraries.¹⁸⁸ There were also exercises in sketches and studies in the autumn term for the third- and fourth-year courses. Some of these exercises were arranged as competitions; the drawings were signed with pseudonyms, and the best entries were given small cash prizes.



17. 'Court house', floor plan. Project by Salme Setälä in the fourth-year course in architecture, 1916. SRM.



18. Measured drawing of the Church of Sipoo, prepared by the Polytechnic Institute and the Helsinki University of Technology in 1900 and 1915. Participating students included Carl Frankenheuser, Sigurd Forsterus, Valter Jung, Gustaf Strenge, Karl Kellberg, Agda Aspelin, and Weikko Kyander. Arkitekten 1/1916.

In assessing the motivations of women wishing enter this male-dominated field, we must avoid seeing them as a homogeneous group. The conditions for women's education changed significantly over the years. The experiences of the first women students in the 1880s and '90s greatly differed from the generation who studied in the 1910s, who, along with later women, could rely on a feeling of group solidarity. The first women students had no examples or role models to follow; in fact, they themselves became the role models.

The disintegration of a gender-based monopoly on education in late-19th-century Finland did not dissolve the male monopoly on positions in public service,¹⁹³ and the formal equality of women did not extend beyond the institutions of learning. Educated women were subject to a principle of restricted qualifications for office. This meant that there were no restrictions concerning some posts, while others required special dispensation. Women were barred from a number of civil-service positions for many years. At the end of the 19th century and even in the early years of Finnish independence this practice was based on an interpretation of the wording of the constitution, though not on its actual letter.¹⁹⁴

Women architects of different generations shared a confidence in the prevailing meritocracy and the opportunities for advancement in one's career. Many women strongly identified themselves with the idea of the profession as passed on in education and training. Possible conflicts relating to professional roles and the separate identity of women did not emerge until they entered working life.¹⁹⁵

The respective yearly courses at the Department of Architecture mostly kept to themselves in their studies, and it was not until the final years that students could mix, as studies lasted longer for some than for others. Students mostly identified themselves with those in the same

course, and distinctions were maintained with respect to others.¹⁹⁶ There is no information on relations between the early women students and their male colleagues. However, the case of Wivi Lönn suggests a few interesting features in this respect.

Lönn was in the same course as Birger Federley and Torsten Montell. Armas Lindgren and Eliel Saarinen were their juniors by one year. After graduating, Lönn assisted the office of Gesellius - Lindgren - Saarinen on several occasions, although she had work of her own in Tampere. At a later stage, she ran an architectural office together with Armas Lindgren, and was a close friend of his family.¹⁹⁷

Later women students formed their own circle, although the various year courses were still the strongest groups. Even in the 1910s, women at the University of Technology did not feel they could participate in the activities of the student body: 'The (Students') Society was a male world, and we felt we did not belong there. Nor did we try to take over the society; we had no desire to do so'.¹⁹⁸ Partly for these reasons, women students of architecture founded in 1919 their own unofficial club known as *Tumstocken*¹⁹⁹.

Interestingly enough, students of architecture, women included, were politically active in the 1910s. Four men in Salme Setälä's course went to Germany for military training as *Jaegers*, soon to take active part in the Civil War of 1918. In these events, women smuggled arms and ammunition, fed soldiers, and took part in secretly held shooting practices. These historical events created a close bond among the students of that time.²⁰⁰

Although education and training in a male-dominated technical field were now available to women, they were not necessarily on an equal footing in working life. Sociological studies of professionalism have pointed out that professions controlled by the state or the universi-

22. Birthday masquerade for Kerstin Holmberg, architecture student, in 1914. At the right in the back row is Holmberg, flanked by Elli Ruuth and Hanna-Lisa Nohrström. Middle row (from the right): Elsi Borg, Salme Setälä, and Elsa Arokallio. Aili Salli Ahde is in Elsi Borg's lap. SRM





23. Women students at the University of Technology took part in the Civil War of 1918 on the side of the Whites. From the left: Salme Setälä, Elsi Borg, Sylvi Nyyssönen, and Verna Maria Eriksson. SRM.



24. Salme Setälä participated in shooting practice organized by students of technology in 1918. The female student holding the binoculars is Verna Maria Eriksson. SRM.

ties more readily opened up to women, while those controlled by their members remained closed.²⁰¹

In the Finnish context, architecture and its formal training institution gave women a possibly warped idea of the reality and suggested equality of the field. Women architects' experiences of their teachers were mainly of friendly, though confused, behaviour. Wivi Lönn recalled how Ernst Qvist, the principal of the Polytechnic Institute remarked to her: 'Miss, how can you have the courage to come here, with all these men around?'²⁰²

There is no information on any negative attitudes regarding women students on the part of Gustaf Nyström or Onni Tarjanne, the leading teachers of architecture, and they are known to have employed former students, both men and women, in their own offices. In this respect, at least the teachers recognized the professional competence of women, although these instances do not reveal what these gentlemen felt about women's abilities to advance in their careers.²⁰³

3. WOMEN IN PLANNING AND DESIGN

By the turn of the century, architecture in Finland had become a specific field of the arts with its own prevailing rules. Pierre Bourdieu has explored relations in the world of art, stressing the complexity of artistic production. Seen in this perspective, architecture has a clearly collective character.¹ Bourdieu stresses that the social characteristics of those producing works of art cannot be directly projected onto their works. This view is in accord with other critical perspectives in the study of art. Both feminist art-historians and recent structuralist scholars of architecture have pointed to the myths inherent in research into the arts.² In studying women's art we must keep in mind the active historical role of the whole discipline of art history, which has created both the categories that are dealt with, and a certain image of 'women's art' in relation to 'Art'.³ Women have long been absent from architecture, and where they have begun to be identified, they have been seen as something different, distant, and separate. Nevertheless, art history has been able to approach works differing from the mainstream of tradition, although at first mainly as anomalies. Women producing art have been anomalies of some kind, although by no means a new phenomenon. The field of art did not necessarily accord them equal competence with men, and their output has often been relegated to historically insignificant areas.

Women architects in Finland were competent in their

education and training, which for Bourdieu also signifies social competence.⁴ Gender, however, remains the factor that creates distinctions within and among socially defined concepts of competence. The following section focuses on three women architects, who were active in different sectors of the field at partly different times. The discussion will attempt to outline various aspects of their work and the manifestations of their competence.

Studies of 19th- and 20th-century architecture in Finland have with only few exceptions concentrated on style. This perspective emphasizes innovations, influences, and their diffusion, proceeding from ideas to realized forms.⁵ Women architects will necessarily remain in the margins of such an approach.⁶ For this reason, I review the works and careers of Wivi Lönn, Salme Setälä and Aino Marsio-Aalto with reference to both influences and innovations, and the ways in which their professional activities found their place in the field. These three architects worked in different areas, and they clearly exhibit differences not only of a chronological order.

Wivi Lönn graduated in architecture in the 1890s, when professional discourse focused on the forms of a national architecture and the opportunities opened up by new materials. Lönn was one of the young architects who introduced both international innovations and their 'national' versions.

Her first major work was a Finnish-language girls' school in Tampere, which developed new solutions in the design of schools. In their style, her designs from the first decade of the 20th century belonged to the sphere of prominent contemporary ideas. She did not, however, adopt the most romantic concepts of the time. From the very beginning of her career, Lönn's works



25. Wivi Lönn (1872-1966) in Jyväskylä, 1915. SRM.



26. Salme Setälä (1894-1980) in 1931. National Board of Antiquities, Pictorial Archives.



27. Aino Marsio (1894-1949) in the early 1920s. AAA.

stressed rationality, structures, functionality of space, and economy. She kept to this approach in later projects, but by the 1930s (when she was in her sixties) she could no longer follow the latest innovations of Modernism.

Salme Setälä designed only a few buildings as independent projects. However, she was one of the young architects of the 1920s who showed an increasing interest in housing design and the problems of dwellings. In addition to plans and designs, she participated in professional discussion through her numerous articles and books. Setälä became a civil-service architect in the national building administration, and had to take on a completely new area of work: town and regional planning requiring a sensitive approach to traditionally built communities and villages. Her professional career, however, was a life-long succession of doubts and conflicts.

Aino Marsio was already interested in designing interiors and furniture as a student. Like her husband, Alvar Aalto, she was drawn to the Classicism of the 1920s, and for example in 1926 she designed a family summer house (Villa Flora) in a light Classicist style. Together with Alvar Aalto, Aino Marsio-Aalto studied the functionalistic ideas of International Modernism, but combined them with basic concepts already adopted in the 1920s. The marriage of these two architects is a telling example of how a woman's educational competence did not necessarily lead to social acceptance in her profession, or to the recognition of full-fledged competence.

The selection of works by these women and their analysis is based on a number of coinciding factors. Wivi Lönn has mostly been studied from an art-historical perspective, but here I have focused on her command of the complex design of public spaces. I also wish to point out how her gender was reflected, not necessarily in the design process, but in contemporary criticism and its influence on later studies of works in which Lönn collaborated as an independent designer. Analyses of the reviews of Armas Lindgren's and Wivi Lönn's joint competition projects clearly reveal the limited perspectives in the field of architecture at the time.

In reviewing Salme Setälä's career and works I have had to take into account her considerable literary output. As a civil-service architect, she worked in a completely different field of design and artistic creation than Lönn. Setälä's serious interest in interior design, dating back to the 1920s, remained a cornerstone of her career for many years. In her planning work and in other areas, Setälä was highly aware of the aesthetic dimensions of the environment.

The most independent stage of Aino Marsio-Aalto's career was in the founding and development of the Artek firm. However, her contribution to works jointly designed with her husband is difficult to verify or analyse in detail. Despite this, I have included in this study Villa Mairea, which she designed in collaboration with Alvar Aalto. This project involved Artek in a number of ways. This material demonstrates the scope and significance of Aino Marsio-Aalto's approach to design.

3.1. Wivi Lönn and Armas Lindgren - Joint Works

Olivia Mathilda Lönn (1872-1966)⁷ was the first Finnish woman to have an independent career in architecture. She designed a large number of projects between 1898 and 1945, including several significant public buildings, some of which were commissioned as the result of competitions. She began her professional education in 1892 in practical building at the Tampere industrial school, from which she transferred, prior to graduating as a master-builder, to the Department of Architecture at the Polytechnic Institute in Helsinki.

In 1898, only two years after graduating, Lönn was commissioned to design the building of a Finnish-language girls' school in Tampere, where she herself had matriculated. This was followed by over thirty school projects throughout Finland. In 1906 she won a competition for the municipal fire-station in Tampere, her most significant success thus far. She was actively employed in those years, and in fact took on more commissions than she could effectively handle, making it necessary to enlarge her office and employ her first assistants.⁸

Lönn won most of the architectural competitions between invited entrants which were held in Tampere in the early years of the century. It is interesting, however, that in these productive years she began to collaborate with Armas Lindgren, with whom she had studied in Helsinki. Lönn had already assisted Lindgren, when the latter

had worked together with Herman Gesellius and Eliel Saarinen. She was a friend of Lindgren's family, and they travelled together at an early stage. For Lönn, Armas Lindgren and his family were 'more family than my own relatives'.⁹ This warm friendship is naturally one of the reasons behind their close co-operation, but Lindgren may have had other reasons for choosing to work with her.

Armas Lindgren (1874-1929) belonged to a group of young architects who had graduated in the 1890s and soon influenced the new steps taken in Finnish architecture at the time. Together with his fellow-students Herman Gesellius and Eliel Saarinen, Lindgren founded an architectural office in 1896. Their firm soon received significant commissions.¹⁰ The partnership was dissolved in 1905, and its projects were taken over by its former members.¹¹ In 1902 Lindgren became the artistic director of the Central School of Industrial Art in Helsinki, which placed extra requirements on his private architectural practice.

According to Wivi Lönn, Lindgren was the first to suggest that they collaborate. Lönn often stressed that architectural work strained Lindgren's health.¹² This may be one reason why Lindgren went into partnership with the architect Bertel Liljequist in the 1910s.¹³



28. The architect Armas Lindgren (1874-1929) c. 1915. SRM.



29. Wivi Lönn in 1911. Kivinen 1982, fig. 50.

Lönn's and Lindgren's first joint project was a competition entry for the building of the Helsinki University Students' Union, which was also realized on a joint basis. This was followed by a competition entry for the Estonia theatre and concert hall in Tallinn, and also its construction. The design of the Sakala Student Corporation building in Tartu (Dorpat) in Estonia was commissioned from Lönn, but because of other work she forwarded this project to Lindgren in 1909 at the floor-plan stage. Lönn herself regarded the rest of the design as Lindgren's creation.¹⁴ They collaborated in yet another project, a shopping arcade in Helsinki (1913), but this time Bertel Liljequist also took part in the work. The Students' Union building in Helsinki and the Estonia theatre in Tallinn have long been analysed solely with reference to other works by Lindgren, and Lönn's contributions have remained in the background. The following sections will attempt to outline the historical context of these projects and the respective contributions of both architects.

3.1.1. The Students' Union Building in Helsinki

By the turn of the century, the Old Student House in Helsinki had become too small for the large number of

students at the then Imperial Alexander University. This building, designed by Hampus Dahlström in 1868, was inaugurated in 1870.¹⁵ Economic reasons prevented the student corporations, representing different provinces of Finland, from acquiring their own buildings, and plans were launched for a building serving six of these associations. Even this was too expensive for the corporations, and the project was taken over by the Students' Union of the university. The architect Yrjö Sadeniemi, who had been employed by the Students' Union in earlier projects, was commissioned to prepare a programme and draft plan for the layout of rooms and space in the new building. The New Student House, as it later came to be called, was to contain business premises, meeting rooms for the corporations, a restaurant, and a middle-sized auditorium. The Students' Union decided to hold a competition with the architects Yrjö Sadeniemi, Kauno S. Kallio, Armas Lindgren, and Eliel Saarinen as invited participants.¹⁶

A building committee was set up with Kaarlo Koskimies, Oiva R. Kyrö and J.W. Havulinna as members, and a site was selected on present-day Mannerheimintie Road next to the Old Student House. The committee also formed the jury of the architectural competition. Additional jury members were the architects Onni Tarjanne, Knut Wasastjerna, and Bertel Jung. The programme of the competition was laid down on 4 November 1907, and entries were due by the end of the month.¹⁷



30. In the foreground is Helsinki's Old Student House, designed by Hampus Dahlström and built in 1870. In the background is the Students' Union building, designed by Armas Lindgren and Wivi Lönn and completed in 1910. Photograph by A. Pietinen, HKM.

The jury met four times, and its technical experts first reviewed all four entries to see whether they corresponded to the programme. Some of the entries were regarded as unsuccessful in view of their arrangement of space, and one was even contrary to municipal building regulations. In the jury's opinion, the project called 'Hampus' was the most successful one.

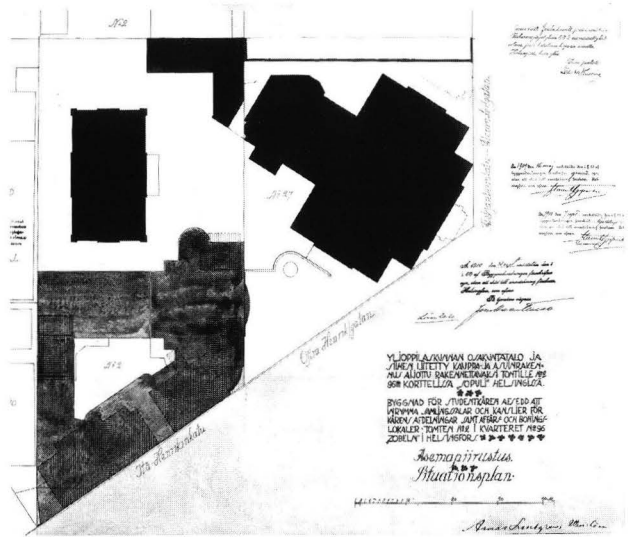
'Hampus' was the work of Armas Lindgren and Wivi Lönn. The jury, however, was not unanimous, and some members suggested that the designers of the best entries should collaborate in the final plans and designs. The Students' Union declared an extended competition between Lindgren and Lönn, and Kauno S. Kallio.¹⁸

Additions were made to the programme for the extended competition, and entries were now due by 20 February 1908. The jury was the same as before, and the results were declared on the first of March 1908. Lindgren's and Lönn's entry was regarded as the more successful one in all respects, and was unanimously given first place.¹⁹

The project entailed many problems. The site was in the centre of Helsinki, and the Old Student House dominated the surroundings. The Student Union's old library building still stood on the lot, which was in the shape of an obtuse triangle sloping steeply towards the yard. The building was intended for a variety of uses, with the corporations' meeting rooms as its main spaces. Owing to financial reasons, the Students' Union wished to have a large proportion of space that could be let out. Separating these areas, i.e. the meeting rooms and space for letting, and communications between them posed a number of problems for the architects.

In their first entry, drafted in late 1907, Lönn and Lindgren placed space to be let and the corporations' rooms in different wings which met under a tower at the corner of the building. Their design for the meeting rooms was described as providing light and offering suitable routes of access, but the proposed wing for rental space and apartments was not as successful.²⁰

In the second entry (1908), business premises and rental space were further separated into their own wing, and the stairwell leading to the corporations' rooms was moved to the courtyard side of the building. There were two club rooms on each floor, as well as a large meeting room. The project was praised for its locations of public spaces, the entrance, and the auditorium. A low-cost restaurant in the area to be let still posed problems.²¹ The final designs were commissioned from Lindgren and Lönn in May 1908, and were completed by the end of the year.²² The main alterations concerned the restaurant, which was now moved from the street to face the courtyard one storey below the auditorium. The large kitchens were reduced in size, providing more rental space and potential income for the owners. A long hall leading to the auditorium was preserved, but a foyer was excluded from the final version. The stairway leading to the meeting rooms was enlarged and placed on the central axis of the building. This created a symmetrical di-

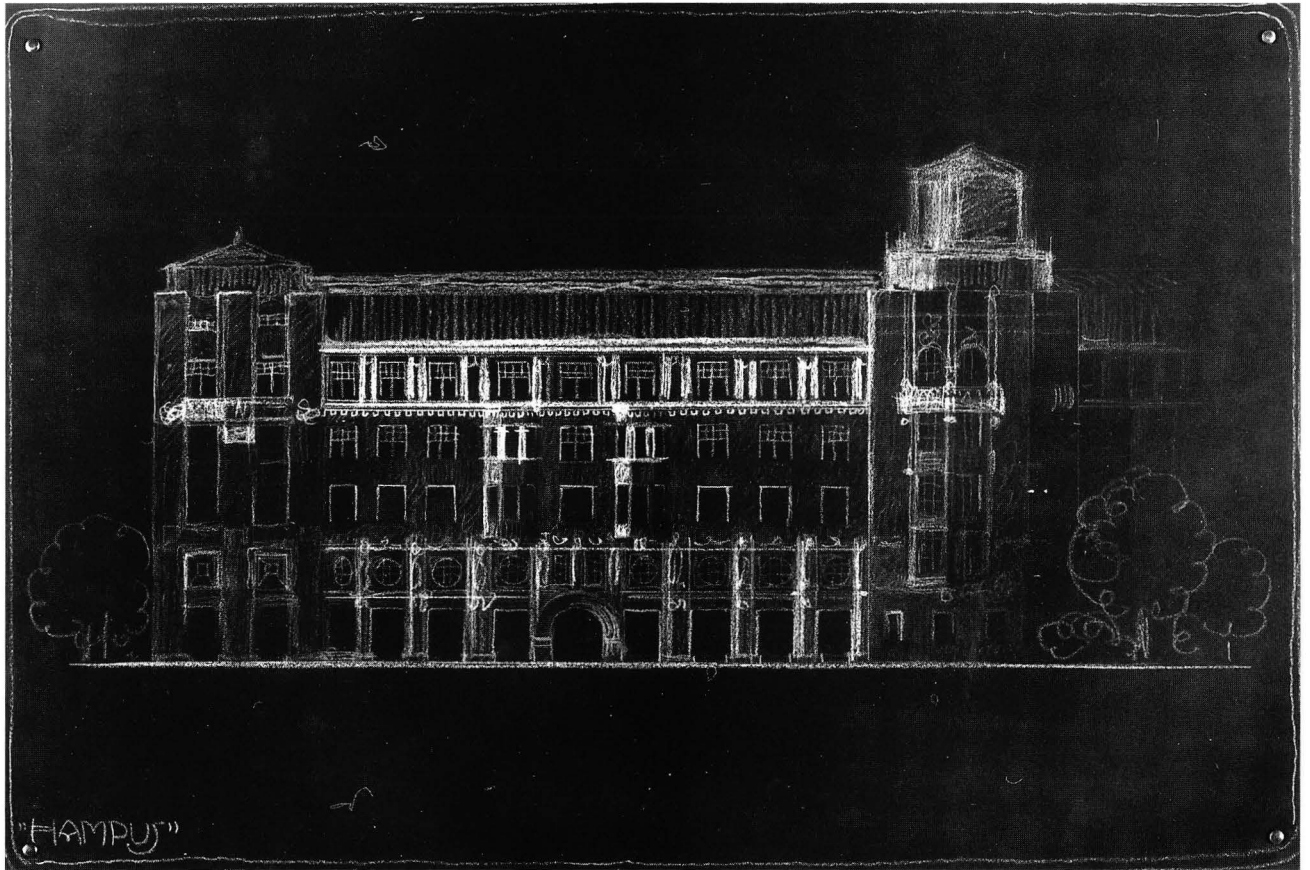


31. Site plan of the Students' Union building. Armas Lindgren and Wivi Lönn, 1908. HYY, Archives.

vision of space, which was reflected in the façade. Riitta Nikula²³ has pointed out that Armas Lindgren concentrated on the composition of the façades in this building, and his posthumous material includes several studies and sketches for the tower and other details. In the first competition version, the façades were only sketched. The elevation facing present-day Mannerheimintie is almost similar to a competition entry by Lindgren from the previous year for the Pietinen building in Viipuri.²⁴ In the extended stage of the competition, the façade facing the adjacent courtyard or square was emphasized with a dominating central part and a large number of sculptured ornaments. The tower at the corner still remained as a slightly uncertain accent flanked by the two wings. The tower dominated the surrounding townscape to such a degree that Lindgren did not realize it even according to the final designs and plans.

If there is no other source material than plans and drawings, the collaboration of two architects will always present a number of difficult problems for study. Armas Lindgren wanted Lönn to work with him, and both architects prepared the competition entries and the final version of the design. In her study on Armas Lindgren, Riitta Nikula has suggested that in this project he was chiefly responsible for the façade, ornament, and the design of the interior. She bases this conclusion on the fact that Lindgren's extensive collections of sketches and studies contain no material concerning the floor plans of this building.²⁵

The preserved drawings and plans of the Students' Union building support this conclusion. The final designs were signed by both architects, except for the elevations which bear only Armas Lindgren's name. In my opinion, the complex design of the floor plans required the work of both architects, although Lönn was more responsible for constructional details and solutions. In 1909 she made



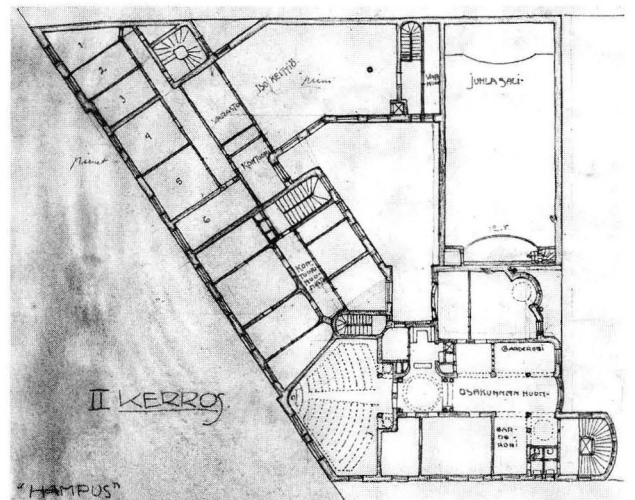
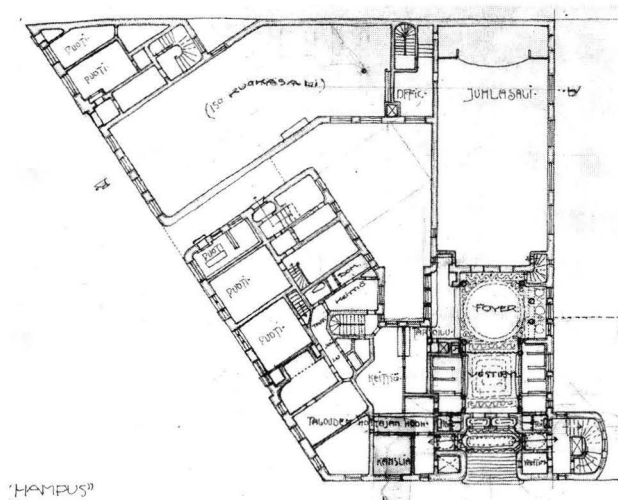
32. 'Hampus', elevation. Entry in the first competition for the Students' Union building in 1907. Armas Lindgren and Wivi Lönn. HYY, Archives.

the alterations suggested by the student corporations prior to the final design, which clearly reflects her leading role in the design of space in this project.²⁶

The final plans for the building work also appear to have been Lönn's responsibility.²⁷ According to her, she and Lindgren divided their work in this way. 'Floor plans

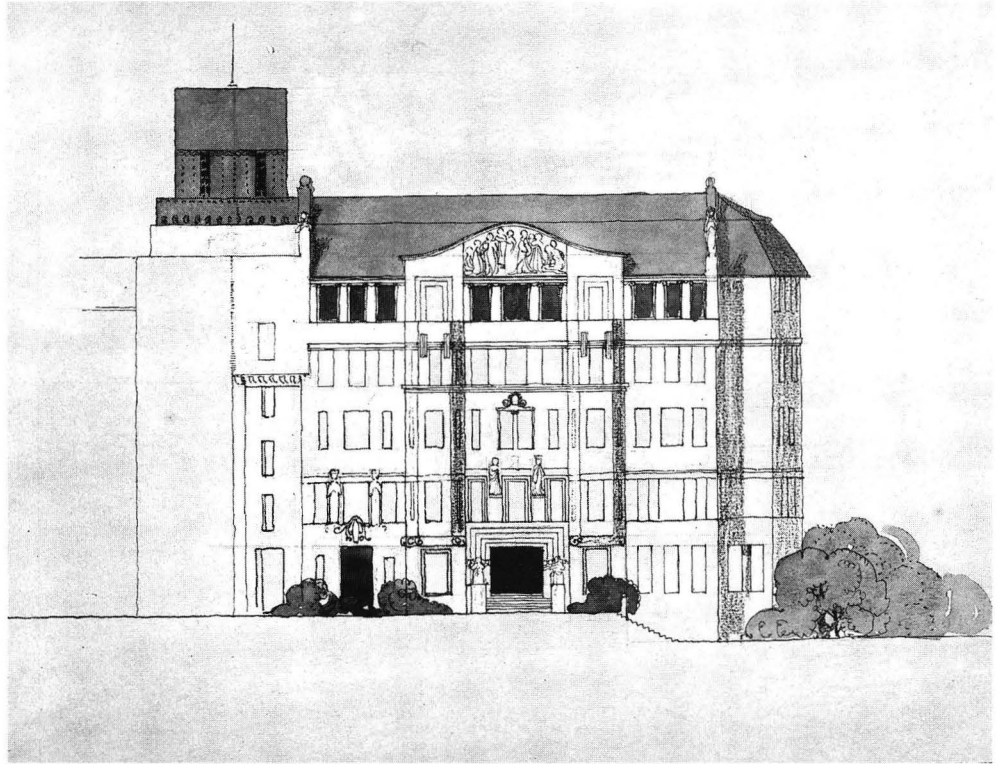
have always been my forte.' Lindgren designed the façades, although these details also had to be taken into account in the floor plans.²⁸

In earlier years, Wivi Lönn had designed a number of large public buildings in Tampere. In addition to the girls' school (1899), she had won competitions held for



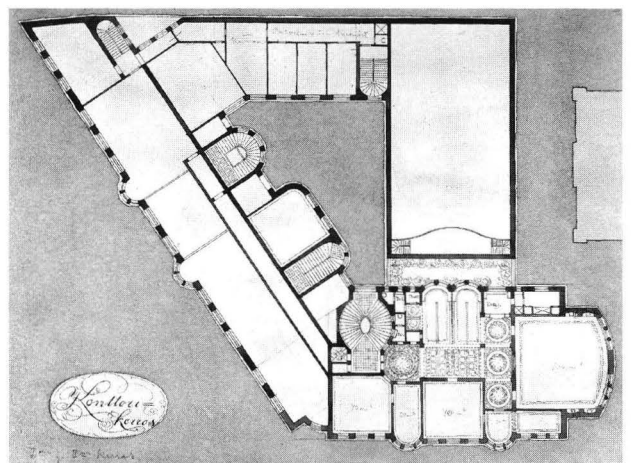
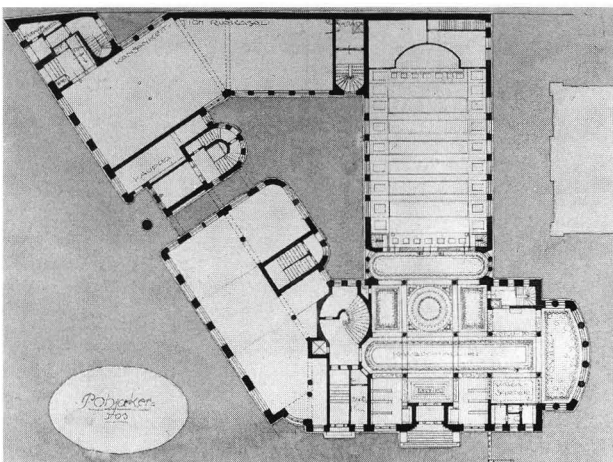
33. 'Hampus', plans of the first and second floors. Entry in the first competition for the Students' Union building in 1907. Armas Lindgren and Wivi Lönn. HYY, Archives.

34. Elevation submitted by Armas Lindgren and Wivi Lönn in the continued stage of the Students' Union building competition, 1908. HYY, Archives.

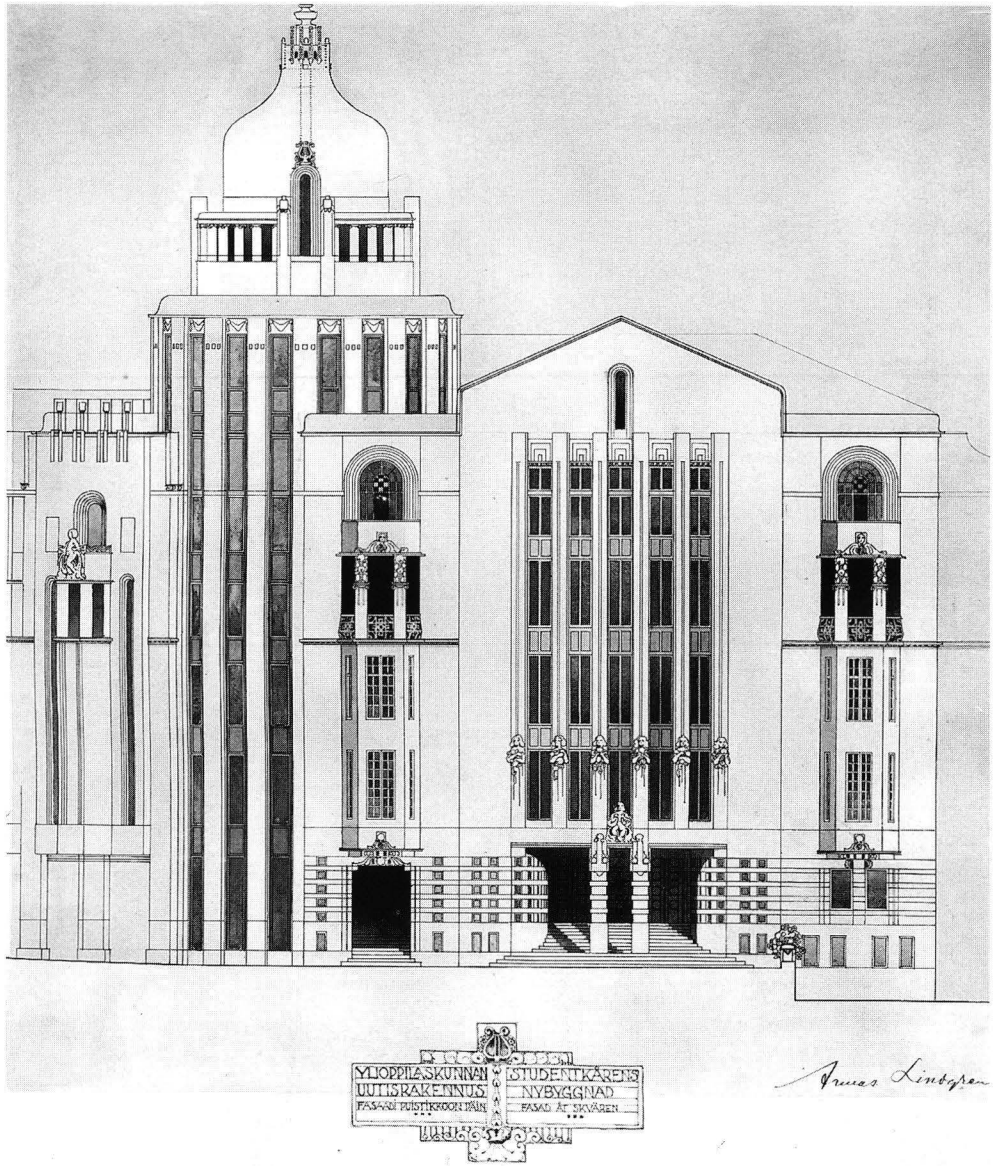


the Alexander Primary School (1903), the Tampere School of Home Economics (1904), and the Tampere Fire Station in 1905.²⁹ In these projects Lönn, developed her skills in arranging communications and routes of access within buildings. In the Tampere girls' school project Lönn made a care-

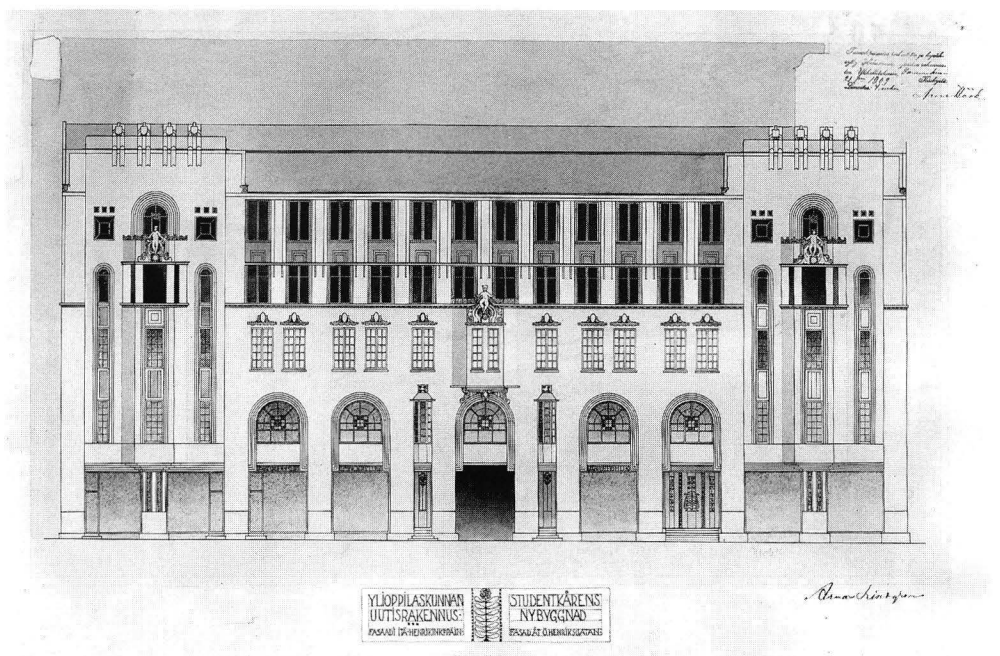
ful study of English school design and its innovations.³⁰ She introduced a system of rooms arranged around halls, avoiding unnecessary corridors wherever possible. In the Alexander Primary School she produced an even more skilled plan of spacious halls and stairways, with separate routes and clothes-storage areas for boys and girls.³¹



35. Plans of the ground floor and office storey in Lindgren's and Lönn's entry in the continued stage of the Students' Union building competition. HYY, Archives.



39. Elevation facing adjacent small park, Students' Union building. Signed by Armas Lindgren, 1908. HYY/SRM.



40. Streetfront elevation of the Students' Union building, signed by Armas Lindgren 1908. HYY/SRM.



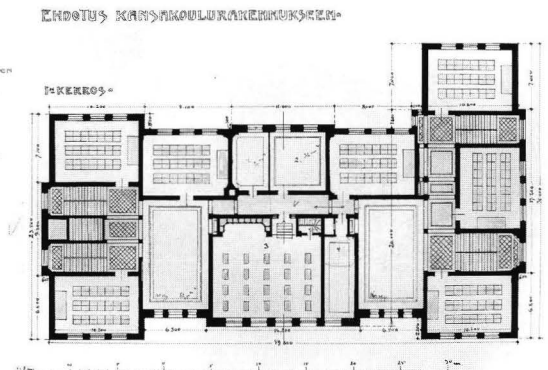
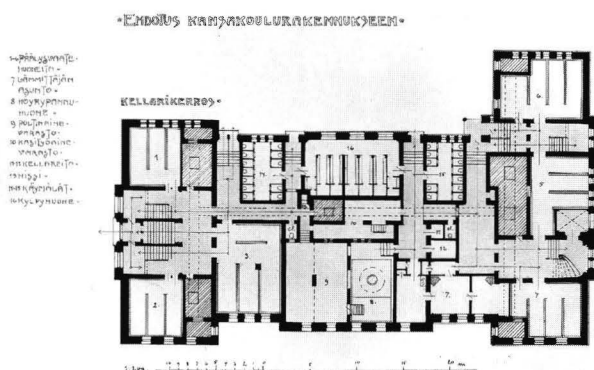
41. The Students' Union building in its original state, 1920. Photograph by Eric Sundström, HKM.

Lönn's winning entry in the fire-station competition was especially praised for its emphasis on the symbolic aspects of different spaces and rooms.³²

In the Helsinki Students' Union building, Lönn's original concept of rooms and space remained in the final plans and designs. In all the versions, the access route to the auditorium was articulated as a kind of main axis in the building. Lönn was able to eradicate the problems caused by the slope of the site through her arrangement of rooms in the basement and ground floor. The original symmetrical configuration of the corporations' meeting rooms helped in developing the final version of the façade.

3.1.2. The Estonia Theatre in Tallinn

The Estonia theatre in Tallinn is perhaps one of the most significant national monuments created by Finnish architects in the early 20th century. It had hardly any 'national' significance for Finns, but it was all the more important for Estonians. The Estonia Choral and Dance Society had been founded in the 1860s as an amateur body. Together with its counterpart, the Vanemuine Company in Tartu, it became a professional theatre company in the early 1900s. These were years of growing interest in Estonian culture, which was expressed by building new cultural institutions. The Vanemuine the-



42. Plans of the basement and first floor. Winning entry by Wivi Lönn in a competition for the Alexander Primary School in Tampere, 1903. SRM.

atre in Tartu was built in 1906 according to Armas Lindgren's design. A theatre was also built in Narva in 1908, and the Estonian Folk Museum (Est. *Eesti Rahva Muuseum*) was completed in Tartu in 1908.³³

Plans for a theatre in Tallinn were launched in 1902 by several musical societies, but had to be postponed because of political unrest. When the Estonia Company became a professional theatre in 1906 it soon needed suitable premises. After a number of problems, the future site of the theatre was acquired in 1907, and a committee was set up to prepare a specific programme for the building project. A large building was planned, with 1,000 seats in the theatre section and 1,200 in the concert hall. A continental-style casino and restaurant section was also planned, with access to the theatre and concert hall. The programme was drawn up in view of the intended architectural competition, and it even mentioned the desired style: 'the whole building should be in the Finnish style' (*terve hoone tuleks soome stiilis*). This apparently referred to the Finnish architecture of the turn of the century, and especially Armas Lindgren's Vanemuine theatre in Tartu.³⁴

The competition was declared in March 1908 with entries due by the first of August. It was publicized in journals and newspapers in Russia, Finland, Germany, and France. The small number of competent Estonian architects was given as the reason for an international competition. Seventeen entries were submitted, but the names of all the participants are not known. Armas Lindgren ordered the programme in late May. A copy was also sent to Eliel Saarinen, but we do not know if he participated. The jury was composed of international experts. Finland was represented by Onni Tarjanne, and along with Estonians there were also experts from St Petersburg. The interests of the Estonia society were represented by the civil engineer K. Mauritz and Dr J. Masing.³⁵

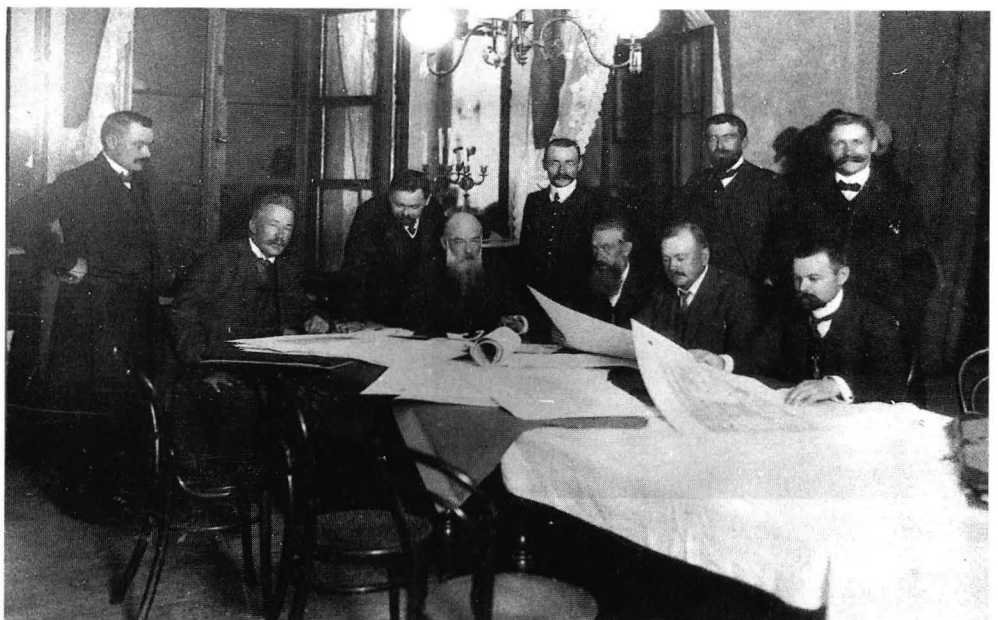
The judges convened in early August for two days. None of the entries received first prize. The second prize went to the entries under the pseudonyms 'Punane Ring' and 'Thalia', and the third prize was given to an entry called 'Omega'. The second-prize entries were by the architects A. Bubor and N. Vassilyev of St. Petersburg, and Armas Lindgren and Wivi Lönn of Finland. The entry which was placed third was by the French architect Alphonse Gravier. The Estonia society went on to arrange an additional competition between the recipients of the shared second prize.³⁶

Financing the building project was arranged by establishing a joint-stock company for the project ("*Estonia*" *ehituse ja ülepidamise osaiühisus*), which was officially approved by the czar in early 1909. The company included Tallinn's leading businessmen and real-estate owners, with the Tallinn Credit Association as the main shareholder. The required capital could thus be raised, and no state aid was needed.³⁷ Equity was 125,000 roubles in 25-rouble shares, which were freely sold.³⁸

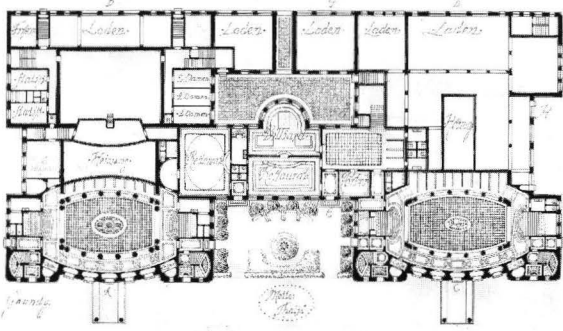
The site of the planned theatre and concert hall was between what were then Gogol Park and the Market Square in Tallinn, partly covering an old moat on the south-east boundary of the old town. The northward-sloping site presented a number of problems, requiring the removal of large volumes of soil and fill. Ground water was at a high level, making a strong basement structure necessary.³⁹

The relation of the building with the surrounding townscape was an important consideration. The theatre and concert hall was to be much larger in volume than any of the surrounding buildings. Along with its status as a national monument, the Estonia theatre also ranked among the first in the hierarchy of public buildings in Tallinn.

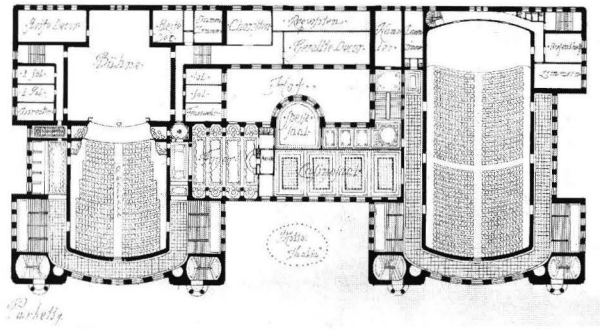
In Lindgren's and Lönn's first entry (*Thalia*),⁴⁰ the main functions, i.e. the theatre part and the concert hall,



43. The jury of the competition for the theatre and concert-hall in Tallinn, 6 August 1908. Onni Tarjanne second from left. Peets 1938.



44. Ground plan. 'Thalia', entry by Armas Lindgren and Wivi Lönn in the Tallinn theatre and concert-hall competition, 1908. SRM



45. Plan of the first floor. 'Thalia' by Armas Lindgren and Wivi Lönn, 1908. SRM.

also permitted access between various parts of the building and along spacious stairways and foyers to the restaurant and casino section.

Movement between floors was not restricted to a single monumental stairway in each wing; wide stairs led from both sides of the lobbies to the main floors. In the theatre wing the stairs led on to the first balcony or dress circle. The gallery was reached by another stairway leading to a separate cloakroom and foyer.

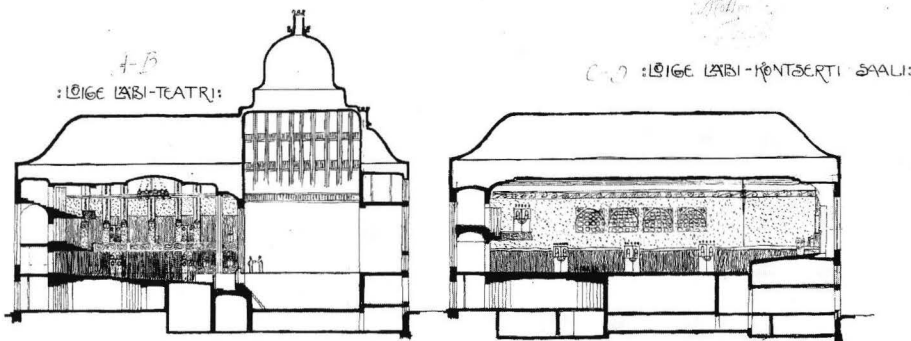
The stage followed the traditional 'peep-box' design with a stage tower part for scenery and equipment.⁴¹ The stage was level, and the stalls were on a sloping floor. Both the theatre and the concert hall were given a rectangular ground plan.

Lindgren's and Lönn's first version succeeded in combining the different functions of the building much more effectively than the other competition entries. Bubor's and Vassilyev's design also concentrated activities around a central courtyard, with the joint restaurant and casino section to one side. They, however, placed the theatre on a transverse axis in relation to the concert hall, which considerably lengthened the whole building⁴² and made access to the casino and restaurant much more difficult.

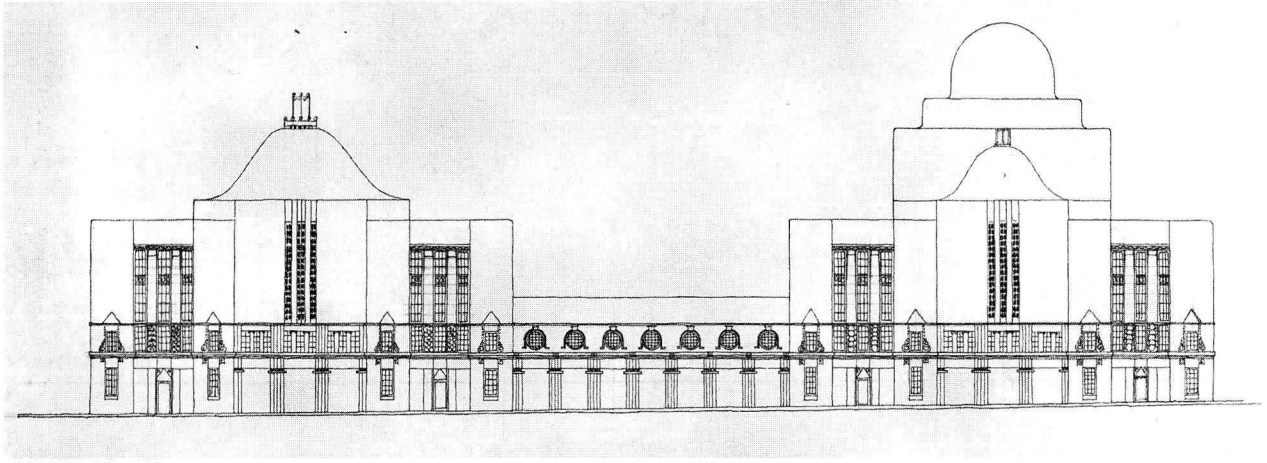
Gravier's entry did not separate the functions of the building with entrances. In this design, the public entered all parts of the building through a main entrance in the middle part. This meant that the casino and restaurant could not be accommodated in the same building and had to be placed in a separate wing.

Lindgren's and Lönn's entry in the continuation stage of the competition was given first prize, and in September 1909 the company representing the project commissioned the designs and plans from them. This second entry⁴³ corresponded to the first version in its basic arrangement of rooms and space. An inner courtyard was excluded, which slightly changed the order of rooms required by the public areas and the theatre. Additional boxes in new locations were designed for the theatre.

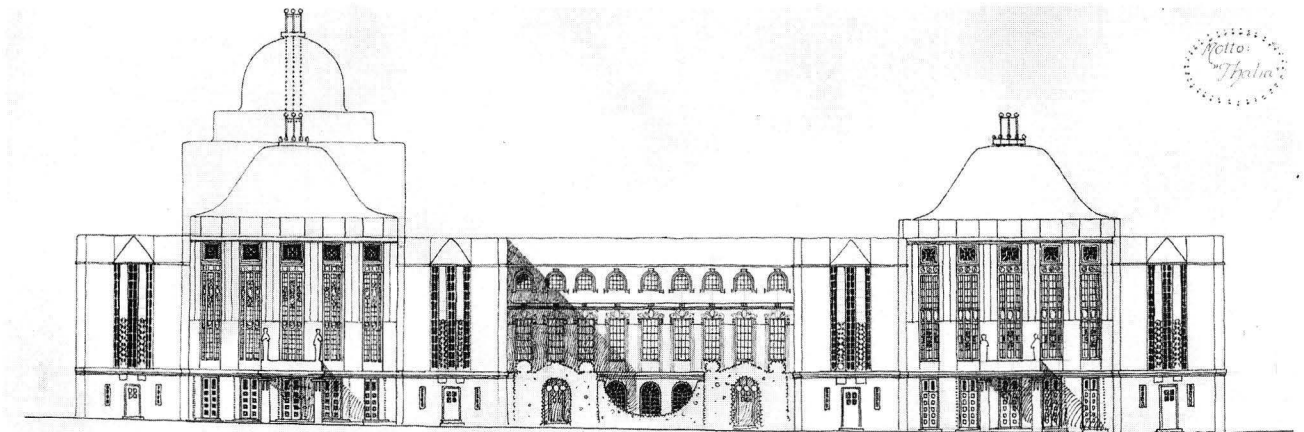
The elevations of the first and second competition version differed in many respects. In the 'Thalia' entry, the building, despite its symmetry, had a subdued romantic appearance with round domes on the stage towers. The second version was along stricter classicistic lines, with colossal columns, pediments and angular roof profiles. Both designs, however, emphasized the main floors of the theatre and the concert hall either with large windows or columns. The stage tower was lowered, and it



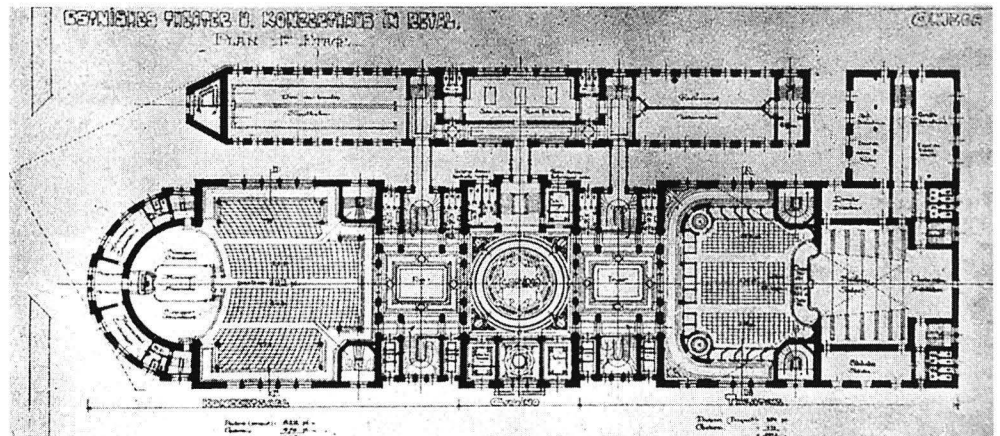
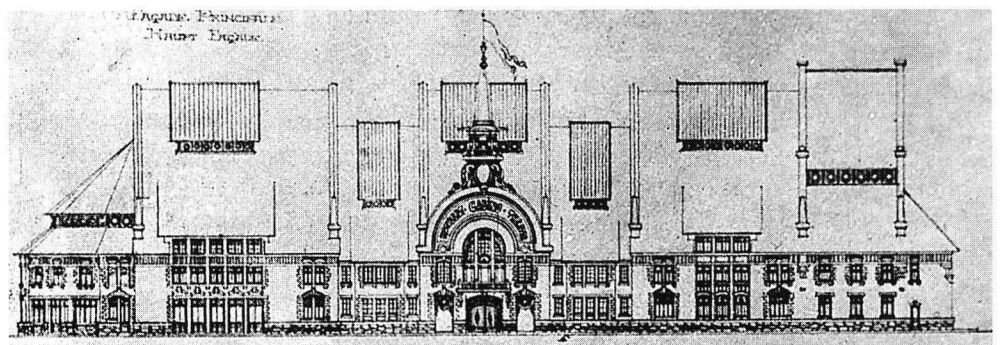
46. Sections in the 'Thalia' entry, 1908. SRM.



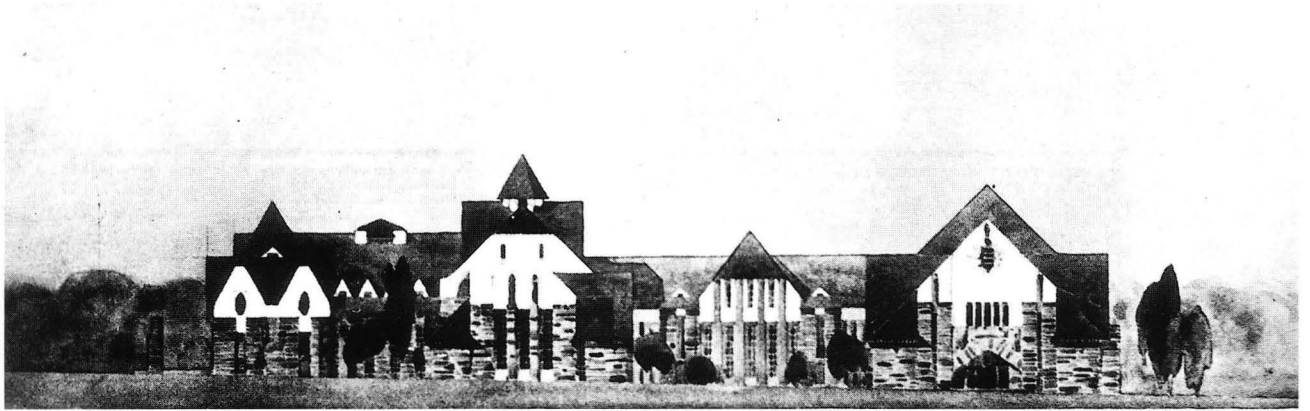
47. Main elevation, 'Thalia', 1908. SRM.



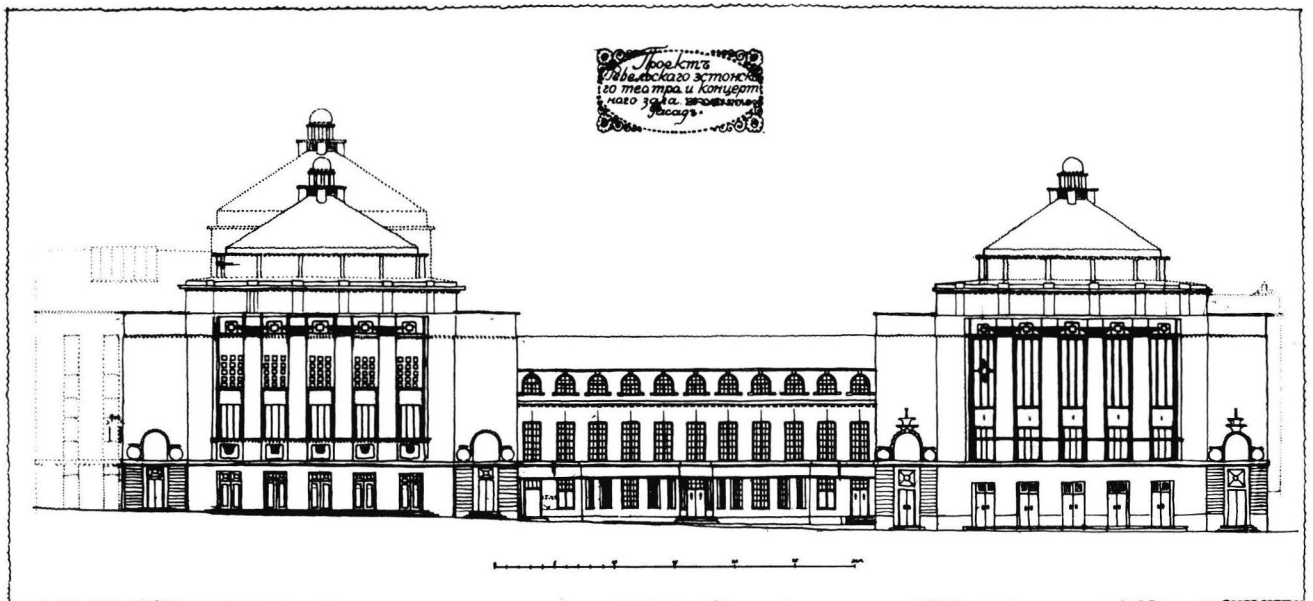
48. Rear elevation, 'Thalia', 1908. SRM.



49. 'Omega' by Alphonse Gravier (1908) was ranked third in the Tallinn theatre and concert-hall competition. Peets 1938.



50. Elevation submitted by A. Bubor and N. Vassilyev in 1909 in the continued stage of the Tallinn theatre and concert-hall competition. Peets 1938.



51. Elevation by Armas Lindgren and Wivi Lönn in the continued stage of the Tallinn competition, 1909. SRM.

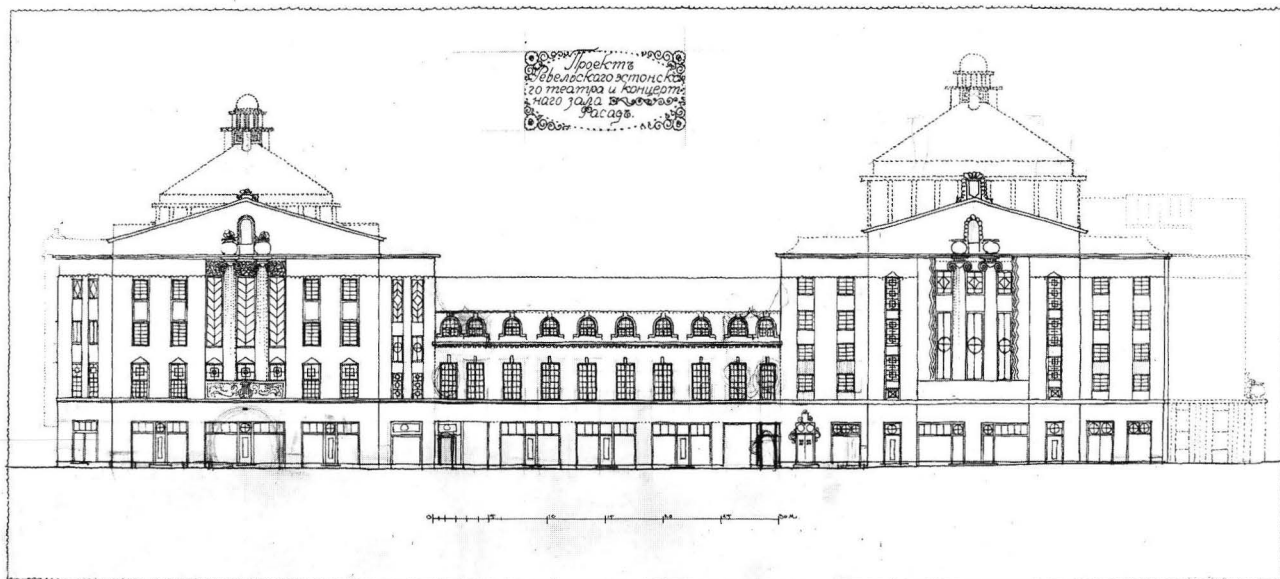
no longer dominated the surroundings as in the first version.

The winning entry was regarded as more successful in its arrangement of rooms and its basic concepts, and the logical order of rooms was commended by the judges. It has been claimed, however, that an extra measure of sympathy was awarded to the Finnish architects, and that the judges' decision was influenced by Lindgren's design for the Vanemuine theatre, which was greatly admired in Estonia.⁴⁴

When the final design was commissioned from Lindgren and Lönn in 1909, they were asked to prepare coloured illustrations of the intended building.⁴⁵ This was a series of only three lightly coloured drawings, in which

the elevations corresponded to the first competition entry. It is reasonable to assume that this request was due to the commissioning party's need to advertise its project. The sketch found its way into a series of postcards, visualizing the future theatre and concert hall to raise interest among potential shareholders. The Estonia Company was short of funds throughout most of the project, and without financing from the Tallinn Credit Association construction could not have begun or continued.⁴⁶

The design and planning process was at times difficult for Lindgren and Lönn. The Estonia Company's documents and Lindgren's correspondence show that the plans were not finished on time.⁴⁷ Lindgren was made



52. Rear elevation by Armas Lindgren and Wivi Lönn in the continued stage of the Tallinn theatre and concert-hall competition, 1909. SRM.

the head architect of the project, and he had promised to have all plans and designs ready by September 1910. This deadline was missed by a few days.⁴⁸

The main problems were caused by changes to the original designs. The floor plans of this version have only been preserved as blueprints.⁴⁹ This material shows how the width of the wings was considerably increased, and the forms of the original 'Thalia' entry were again used in the elevations. The building committee had to point out to Lindgren that in the new version the whole building covered an area larger than the actual site and the elevations did not correspond to the floor plans. The architect was instructed with a *'Wunsch über die Verkleinerung der Dimensionen des Hauses in Auge zu behalten.'*⁵⁰

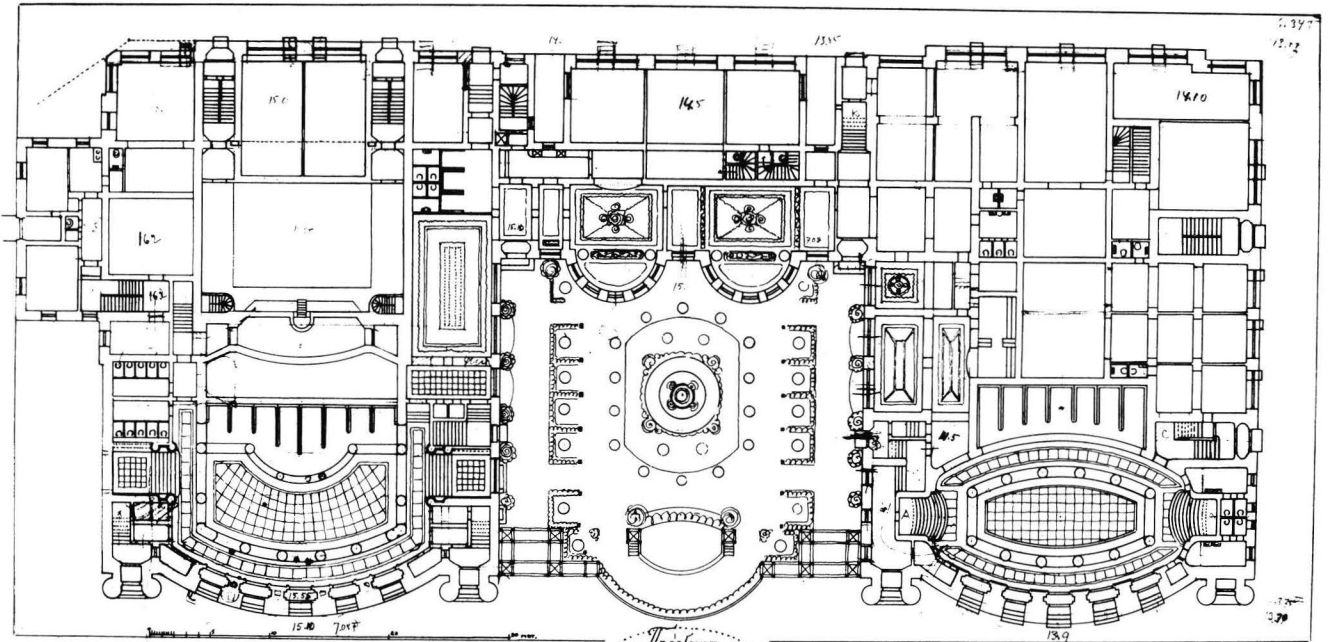
Lindgren and Lönn still worked on the floor plans as late as the winter and early spring of 1911. The main designs and plans, approved by the authorities in May 1911, were mainly identical with the entry in the second stage of the competition. Construction work, which began already in the spring of 1911, did not, however, follow these plans. The bricklaying was finished by November 1911, although work had been delayed when a wall collapsed in September, killing one of the workmen.⁵¹ The contracting agreements were signed in the autumn of 1911; the Swedish firm of Kreuger & Toll built the roof of the concert hall and the engineer Paavo Kyrenius of Finland was responsible for the reinforced-concrete work of the ceiling of the theatre.⁵²

The final plans were finished in July and August 1911.⁵³ Only part of this material has been preserved, and all the elevations and sections are missing. However, photographs of a scale model provide added detail.⁵⁴ The floor plans correspond to the competition entries. The

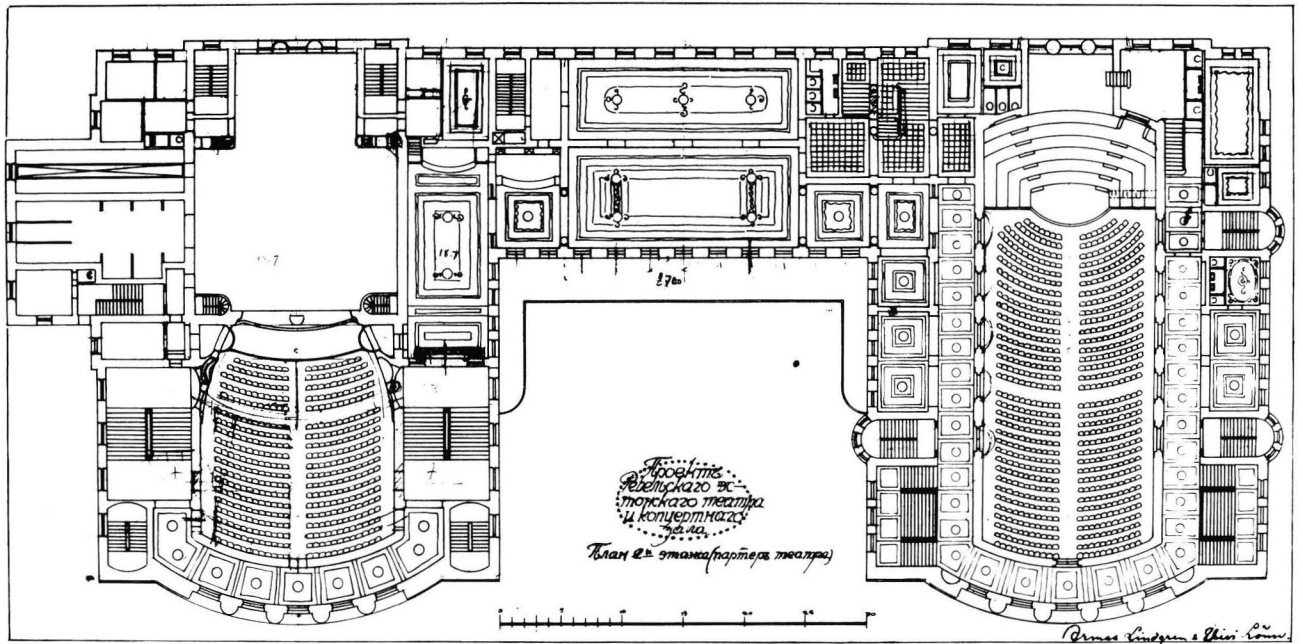
span of the ceiling structures was 16 metres in the theatre and 14 metres in the concert hall. Except for the roofs, the façades followed the design of the second competition entry. The roof had a gently curving profile as in the drawings from 1910.

Building work proceeded slowly in 1912, mainly because of a shortage of materials and labour. In 1911 all exterior work had been finished, and Lindgren sent his young assistant, the architect Bertel Liljequist, to supervise work on the interiors.⁵⁵ The Estonia theatre and concert hall was inaugurated in a series of festivities held between the 6th and 8th of September, 1913. Minor work still continued until the end of the year.⁵⁶

In this extensive commission with its complex stages, Lindgren and Lönn followed a clear division of tasks. Wivi Lönn has unequivocally stated that she was responsible for the floor plans, the final versions of which were drawn in Jyväskylä in 1911.⁵⁷ This is confirmed by well-known anecdotes concerning the respective contributions of these architects and their exceptional division of tasks and responsibilities. According to one version, a speech of thanks was delivered at the inauguration, praising Lindgren for the overall design and Lönn for the beautiful ornament. Lindgren is said to have responded by pointing out that their roles were completely reversed.⁵⁸ Both architects had previously worked on theatre projects. Lindgren had designed the Vanemuine theatre and concert hall in Tartu in 1906. In 1899 Lönn had assisted her former teacher, Onni Tarjanne, with the floor plans of the National Theatre in Helsinki. Lönn was not regularly employed by Tarjanne, but during the winter and spring of 1899 she had an opportunity to study the basic architectural solutions of Tarjanne's theatre design.⁵⁹



Проектъ
Эвельского эстонскаго
театра и концертнаго
зала в Ревелю
1909.



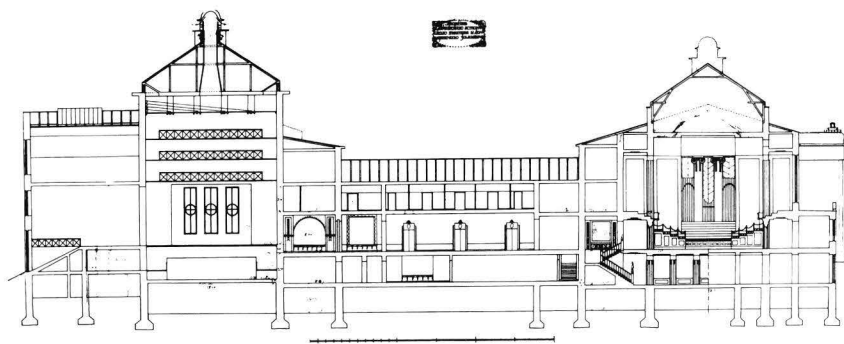
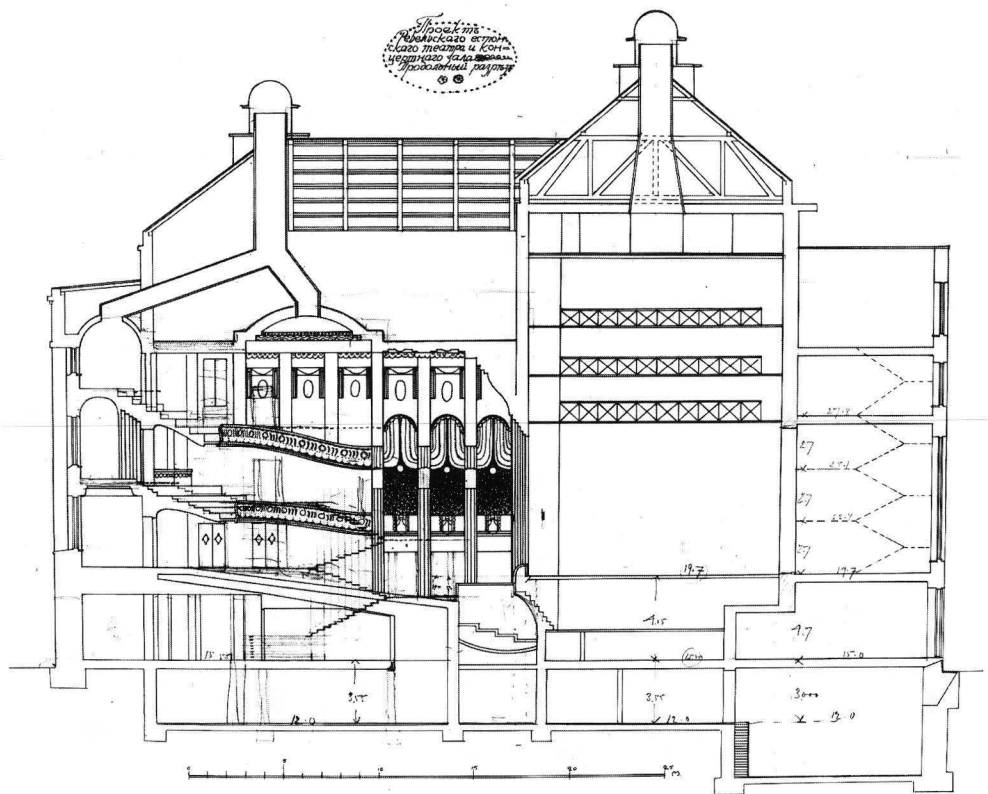
Проектъ
Эвельского эстонскаго
театра и концертнаго
зала в Ревелю
1909.

Armas Lindgren & Wivi Lönn

53. Armas Lindgren's and Wivi Lönn's versions of the plans of the first and second floors, 1909. SRM.

Both Lönn and Lindgren seriously studied the technical requirements of the Estonia project. In the late winter of 1910 they undertook a tour to at least Vienna and Munich to study theatre equipment and stage machinery.⁶⁰ The Estonia project, however, entailed a number of features that are similar to the design and arrangement

of space in the National Theatre in Helsinki. This may underline Lönn's leading role in the floor plans of the Estonia project, especially as the arrangement of space in Lindgren's Vanemuine Theatre does not in any way parallel the floor plans of the Estonia Theatre. The main auditorium in the Vanemuine building was a combined



54. Sections in Lindgren's and Lönn's 1909 entry. SRM.

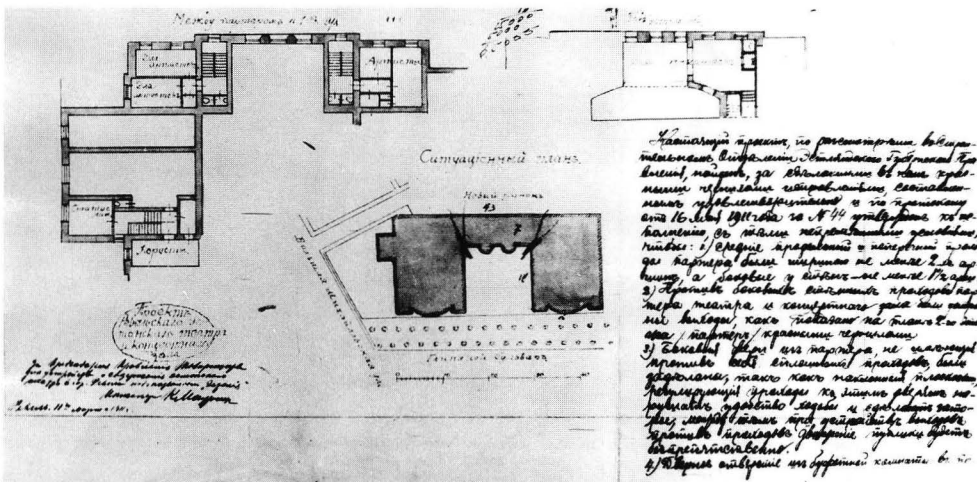
theatre and concert hall, and was more like the auditorium of the Students' Union building in Helsinki than an actual theatre.⁶¹ Tarjanne's Finnish National Theatre in Helsinki was completed in 1902, but its planning had already begun in 1897.⁶² The Estonia theatre corresponded in size to the

main hall of the Finnish National Theatre. In both projects a large monumental stairway had to be excluded because of costs, and with their large galleries both were related to the popular theatres of Central Europe. The stages were similarly designed in both, as well as the form of the main hall and the sloping floor of the stalls.



55. Post card printed and sold to raise funds for the theatre and concert-hall in Tallinn. ETM.

The relatively rare design of the vaulted ceiling in the theatre section in the Estonia building has been attributed to Wivi Lönn. Here, a flat structure of slabs was suspended from the sides of a vault-shaped ceiling. The calculations of strength required by this construction were prepared by the engineer Paavo Kyrenius; Lönn herself said that she feared that it would collapse.⁶³



56. Site plan for the theatre and concert-hall by Armas Lindgren and Wivi Lönn, 1911. Estonian State History Archive, Tartu.

3.1.3 The Myth of National Architecture

Contemporary critics and later scholars have neglected Wivi Lönn's contribution in her and Lindgren's jointly planned winning competition entries. At the time, the bourgeois concept of citizenship was so gender-defined that it was very difficult to see women's activities in a public role in society.⁶⁴ Furthermore, architectural discourse at the turn of the century focused to such a degree on style that Wivi Lönn's versatile skills and achievements may easily have been ignored.

Contemporaries did not see Lindgren's and Lönn's designs (the Students' Union building and the Estonia theatre) as joint works, but specifically as part of Lindgren's oeuvre.⁶⁵ As pointed out above, he was one of the leading architects of his generation.

Arkitekten, Finland's leading technical journal in architecture, followed both projects. In May 1908 the journal published a detailed account of the Students' Union building competition, including the judges' statements.⁶⁶ This project was again discussed in early 1909, when the architects had completed their main drawings.⁶⁷ The elevations and the scale model were published, as were the plans of two of the floors. Other floor plans did not merit publication, as they had not changed in any essential way. The names of both architects were prominently mentioned, although there were no comments on their drawings.

When the Students' Union building was completed in 1910, it was again discussed on the pages of *Arkitekten*.⁶⁸ Now the chief editor, Sigurd Frosterus, presented a brief evaluation of the place of this work in the output of its creator Armas Lindgren: 'Interestingly enough, it is not among the architect's best works. This is mainly because of the unfavourable shape of the site and its relation to the Old Student House.' There is no mention of the arrangement of rooms and space, and all the pub-



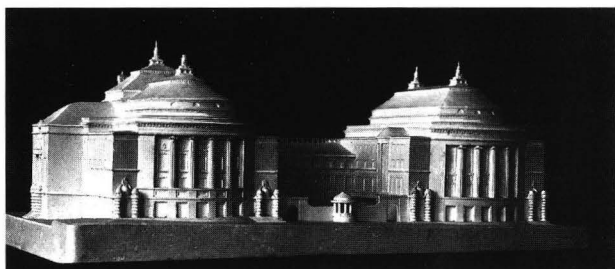
57. Work on the foundation of the theatre and concert-hall in Tallinn, 1911. Photograph by Parikas, ETM.

lished illustrations are of the exterior or of ornamental interior details. This may indicate that Frosterus was aware of the respective contributions of Lindgren and Lönn. On the other hand, his review does not mention that two architects collaborated in the work. The main point of Frosterus's article is a somewhat sharp criticism of the siting of the building.

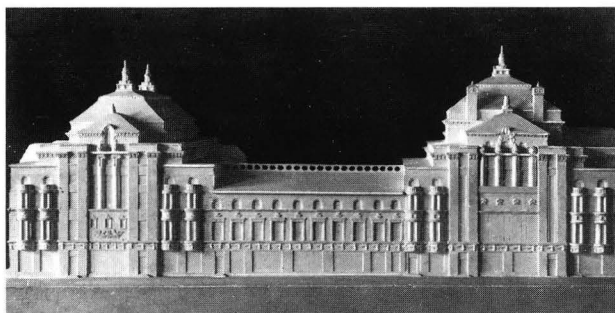
Arkitekten discussed the competition for the theatre and concert hall in Tallinn in only one number.⁶⁹ The second-prize entries were, however, published in full. There was also a communication from the head of the Estonia building committee concerning the jury and the prize-winners. The published illustrations were of the first competition stage. There were no articles or comments on the second stage.

The completion of the Estonia theatre was prominently mentioned in the daily press. The newspaper *Uusi Suometar* had sent a reporter to take part in the several days of festivities arranged for the inauguration, and the event and its background were described to readers in three separate numbers. Only Armas Lindgren is mentioned as the architect of the much-praised building, and as the subject of all speeches of thanks at the festivities.⁷⁰

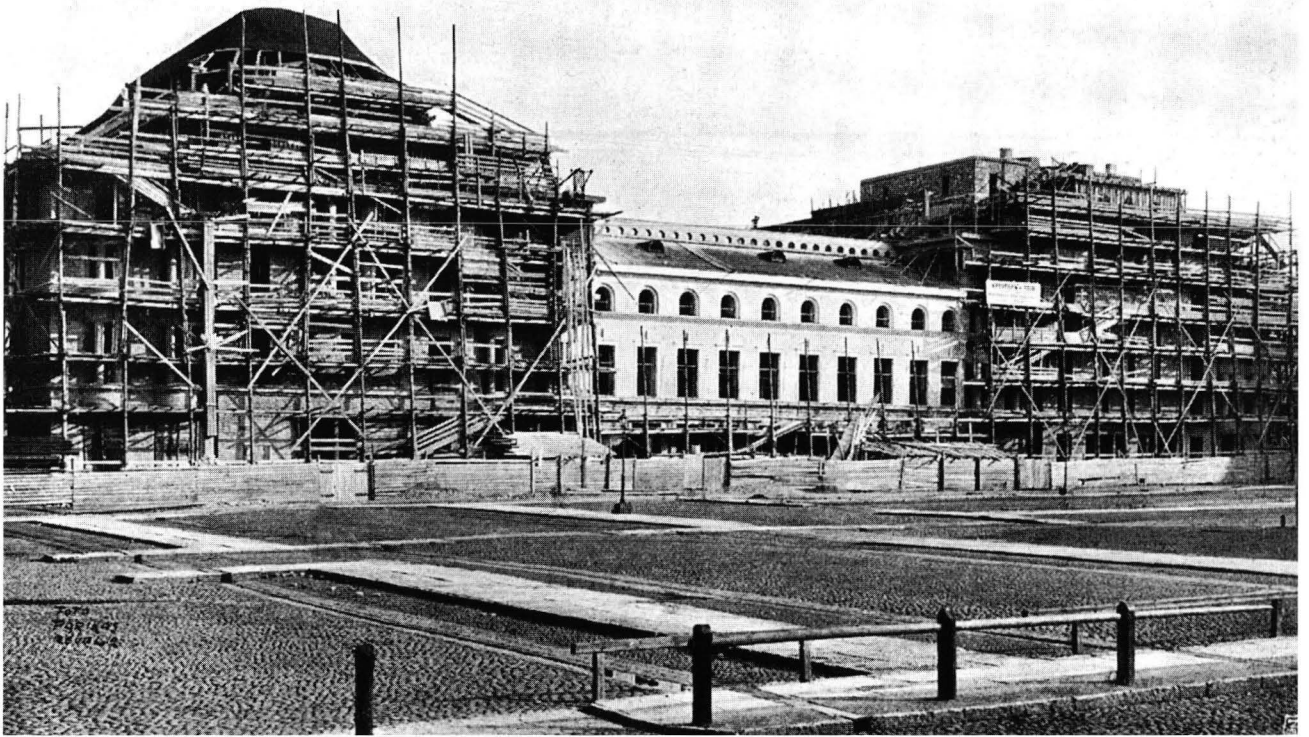
The importance of these articles and news items should not be exaggerated. These buildings are described as joint works only in Johannes Öhquist's history of Finnish art from 1912, where Lönn is mentioned in a cap-



58. Façade, scale model of the Tallinn theatre and concert-hall, 1911. SRM.



59. Rear façade, scale model of the Tallinn theatre and concert-hall, 1911. ETM.



60. The Tallinn theatre and concert-hall under construction in 1912. Published as fig. 69 in Kreuger & Toll's 1913 catalogue.

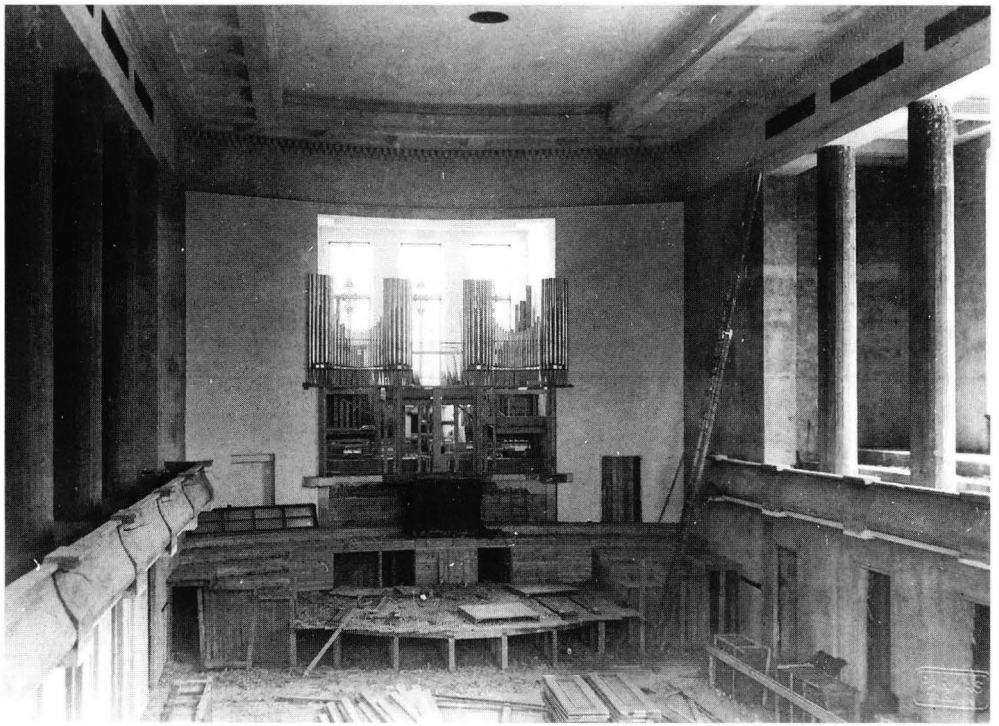


61. Finnish craftsmen were also employed in the ornamental work on the theatre and concert-hall. Photograph by Parikas, SRM.

tion, and later in studies published in the 1970s. It may thus be necessary to outline some of the reasons for this omission.⁷¹

Over the decades, the retrospective image of architecture at the turn of the century has recurrently surfaced in many connections, including studies published in recent years. In this picture, the nationalism that dominated political life in Finland was directly reflected in the arts. The shift to a clearly different, and more classicist, style in the 1910s has often, and almost normatively, been explained as a reaction to the tasteless plagiarism of 'epigones' imitating 'masterpieces bearing the imprint of artistic spirit.' These remarks from 1903 by Gustaf Strengell were still referred to in the late 1950s in describing the development of Finnish architecture. The discussion concerning the breakthrough of a new style at the turn of the century was readily seen as the beginning of a specifically Finnish architecture.⁷²

The Modernist aesthetics of architecture that came to dominate in the 1920s and '30s tried to break loose from earlier tradition. Orthodox Modernism stressed clarity in floor plans, programmatic functionalism, simple and unadorned rationalism, the use of industrially produced materials, and building with the objective of creating a universal architecture suitable to everyone in all places.⁷³ These ideals naturally influenced research, and Armas Lindgren's architecture could no longer be appreciated. Riitta Nikula has pointed out that 'in biographical studies the main attention has been focused on those who had the most power, and those who were later seen



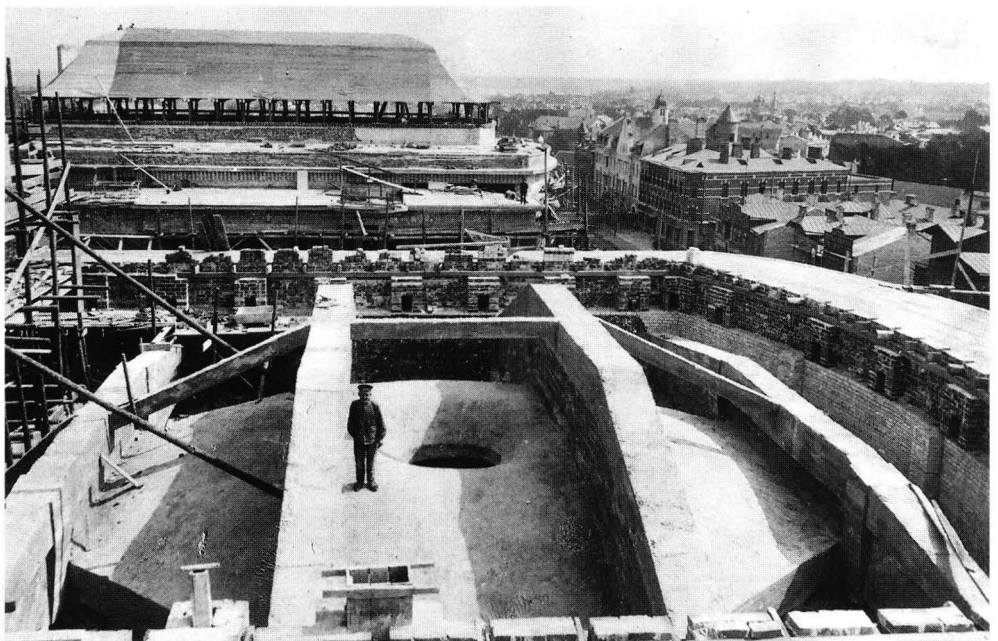
62. The concert-hall during work on the interior, 1912. Photograph Parikas, ETM.

as the "most progressive" elements, most clearly anticipating what was to come.⁷⁴

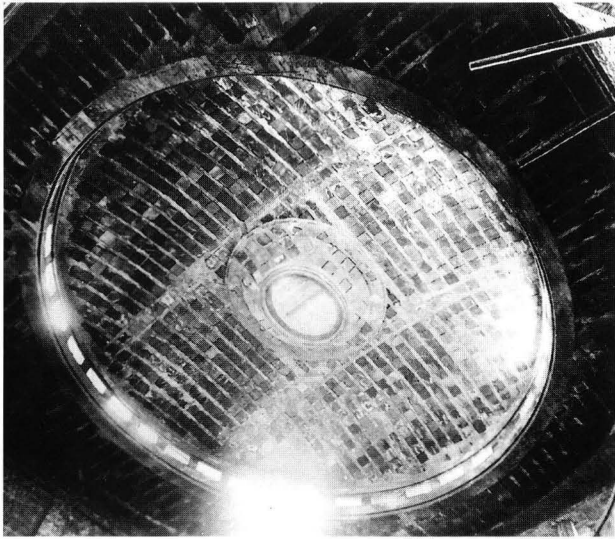
The decreased appreciation of Lindgren's architecture partly explains why Wivi Lönn's main architectural achievements were not noted in Finnish architectural studies for many decades. Furthermore, an overall pic-

ture of architecture at the turn of the century has only begun to emerge recently.

Ritva Wäre⁷⁵ has shown how this striving for 'a Finnish style' has not been approached in research from its original aims and perspectives. Scholarly interpretations and studies have focused on architects, monuments, and



63. Ceiling construction of concrete designed by Wivi Lönn for the theatre in Tallinn, 1911. SRM.



64. The domed vault of the theatre under construction in 1911. SRM.



65. The interior of the theatre in 1913 soon after completion. Photograph by Parikas, ETM.

themes that were already regarded as important in their own day. Published sources from the turn of the century brought the office of Gesellius-Lindgren-Saarinen to the fore, followed by Lars Sonck a few years later. The leading professional journals, *Arkitekten* and *Tekniska föreningens i Finland förhandlingar*, concentrated on urban architecture and monuments. Even in these areas, schol-

ars failed to reach any new conclusions for many years. For example, the relations of the profession with the state and rich clients were not studied until the 1980s. Seen in this perspective, turn-of-the-century architecture and its myths of 'Finnishness' also require a focus on the role of the profession itself. Architects actively described and defined their own contributions in contem-



66. The theatre and concert-hall of Tallinn, known as the Estonia Theatre after completion. Post card sent by Wivi Lönn to a relative in 1914. SRM.



67. The original courtyard wing of the Estonia Theatre in 1913. Photograph by Parikas, ETM.



68. Rear façade of the Estonia Theatre under construction. Post card from Wivi Lönn to her mother, 1912. SRM.

porary writings. Professional interests were clearly present, and architects readily took a critical and exclusive attitude towards those regarded as outsiders. This was evidenced by the competition rules of the Architects' Club, which expressly prevented individuals with other kinds of training from participating.⁷⁶ Discussion also centred on Helsinki. By this time, the profession already had an elite whose writings and works came to be recurrently treated in later studies.

3.2. Salme Setälä - Architect and Author

Salme Setälä (1894-1980) belonged to a completely different generation of women architects than Wivi Lönn. She studied at the University of Technology in Helsinki at a time when the number of women students began to rise sharply, with increasing numbers enrolling in architecture in consecutive years. When Setälä began her studies, she was among fourteen other women students



69. Salme Setälä as a young student at the Helsinki University of Technology. Helmiiriitta Honkanen collection.

at the Department of Architecture. In Lönn's day, there may have been only one woman student in each year course, and possibly two or three at the whole department.

In comparison with her female contemporaries, very little is known of Setälä's architectural output. There is, however, much more information about her literary activities. Setälä was born into the Finnish intelligentsia. Her father, Emil Nestor Setälä, was a professor of Finnish and a prominent statesman, and her mother was the author Helmi Krohn. Their example gave Salme a literary background for the rest of her life. Salme Setälä's writings range from books for the young and novels to memoirs of general cultural interest, and she published dozens of titles. Some of her autobiographical works describe her private life and her decisions in such depth that it is impossible to ignore them, although an analysis of this aspect of her oeuvre is beyond the scope of this study.⁷⁷

Setälä refers to her decision to study architecture in a number of books, but does not give any specific motives for her choice. It is interesting, however, that four former classmates from her secondary school in Helsinki also began to study architecture. Of these, Aili Salli Ahde and Hanna-Lisa Nohrström remained Setälä's friends for many years.⁷⁸ Her decision may well have been influenced by her friends. Her father's example made her first consider the University of Helsinki and its options, and



70. Salme Setälä and Frithiof Cornér upon their engagement in 1919. Helmiiriitta Honkanen collection.

she enrolled there for the 1911-1912 academic year to study aesthetics, art history, mathematics, and languages. The University of Technology began to interest her at the same time, and she enrolled in the middle of the spring term of 1912.⁷⁹ According to Salme, Emil Nestor Setälä did not greatly encourage his daughters' academic studies, nor did he appear to support women's education in general. He commented on her choice of technological studies in the following words: 'So that's your inclination, then - you'd be better off as a good housewife than a poor architect.'⁸⁰

Salme Setälä's student years were marked by political activism. She was a member of the so-called Summer Club, led by Yrjö Harvio from 1914. The young men of this club were sympathetic to the *Jaeger* movement, and many of the women students, Setälä included, found their future husbands in this club. The women were also active, especially in the Civil War of 1918 when Setälä was imprisoned by the Reds together with a number of other club members. She wrote of these experiences in her book *Polusteekin koulussa*.⁸¹

Salme Setälä graduated in 1917. She married, gave birth to two children, and remained at home for several years. Divorce in 1930 made it necessary to seek work in architecture; by this time she had written innumerable articles, translations, and even eight books of her own. In 1929 she was employed by the Board of Public Works and Buildings (the predecessor of the National Board of

Construction), where she remained with almost no interruptions until retirement. She explained her own choice of a civil-servant's career by pointing out that after eight years at home she could not imagine competing with other architects in the open market. She chose government service, though fully aware of its low pay and the traditionally negative attitudes of architects towards the Board of Public Works and Buildings.⁸²

3.2.1. The Everyday Life of a Civil-Service Architect

'A woman has to be a genius to succeed as well as a stupid man. You see, this is a man's world.'

Erkki Huttunen, Director of the National Board of Construction⁸³

In February 1929, Setälä was hired as a supernumerary draughtswoman at the house-building department of the Board of Public Works and Buildings. In June of the same year she was given a supernumerary architect's position until the end of 1930. Little is known of her work from that time; one of her designs was for the façades of a teacher-training institute in Kajaani. Supernumerary staff did not have work for long in the depression years, and Setälä began the 1930s as an unemployed divorcée with two children.⁸⁴

She was again employed by the Board a few years later. A friend, Yrjö Sadeniemi, was then head of the Board, and she asked him for work. She was engaged as a supernumerary draughtswoman in early 1934, and her contract was renewed in 1935 and 1936. This procedure saved state funds, as each renewal formally meant a completely new contract. In 1936 the Board underwent a

major reorganization, and became the present National Board of Construction, with the architect Väinö Vähäkallio as its new head. At the time, Setälä was a supernumerary draughtswoman in the planning department. Of the 29 draughtsmen in this department fourteen had diplomas in architecture, ten of whom were women.⁸⁵

In 1937 the Board's planning department employed Ottolivi Meurman, former town-planning architect of the City of Viipuri. Meurman was made responsible for the Board's planning work. Setälä became his assistant, which marked the beginning of her almost 25 years in planning. Meurman familiarized his assistant with the work before becoming Professor of Town Planning Theory at the Helsinki University of Technology in 1940.⁸⁶

Political conditions in the newly independent Republic of Finland led to legislation in the 1920s and '30s for developing the rural areas, and a large number of laws and acts were passed concerning communities and settlements in the countryside. An act was passed in 1925 permitting changes to municipal boundaries, making it possible to join suburbs and other areas to towns and cities. This was, however, unsuccessful, as it did not prevent the unplanned and unregulated growth of suburbs, nor did it improve conditions in existing suburbs.

In 1931 a town-planning act came in force, as well as an act concerning larger rural communities. They made all construction subject to municipal plans and regulations, and municipalities were given the legal right to carry out their own measures and monitor those of property-owners in municipal-engineering services. The planning act was followed in 1932 by building ordinances with specific instructions concerning rural areas.⁸⁷

The resettlement of Karelians from areas ceded to the Soviet Union in World War II led to new legislation,



71. Staff of the Board of Public Works and Buildings in the early 1930s. Women architects seated in the front row (from the left): Agnes Dahl and Sirkka Koskela. Standing: (left) Toini Waskinen (née Granholm) and Salme Setälä (second from right). SRM.

which was probably one of the main factors promoting building and housing construction in the rural areas. In 1945 an act was passed concerning the purchase and acquisition of land, making the municipalities primarily responsible for providing sites and lots for housing purposes. Only areas with officially approved local or town plans were exempted. This act promoted the founding of small farms as late as the 1950s, and it was ultimately responsible for the establishment of some 100,000 new holdings after the war.⁸⁸ Binding regulations for building in rural communities and areas were not laid down until the end of the 1940s. In 1949 an act was passed concerning rural building and construction, and it was only now that permission for all construction work had to be sought from local authorities.⁸⁹

The Board of Public Works and Buildings was reorganized as the present National Board of Construction in 1936. It had two departments, of which the planning department was responsible for new construction projects and alterations as well as matters relating to building work in towns, townships, and other built-up areas. From 1927 town and regional plans were presented to higher authorities for approval by the architect responsible for building works at the Postal Board. In 1937 these tasks were taken over by Otto-Iivari Meurman as head of the planning department of the National Board of Construction. In 1944 a special senior-architect's position was established to handle regional and town-planning issues; its first holder was Eino Siira. At the end of 1944, Siira became head of the Board's newly established department of town and regional planning. This department was responsible for plans, local building ordinances, building inspection, and for maintaining its own archives. It carried out the technical preparations of plans, and the

Ministry of the Interior supervised their realization at the regional and urban level. After Siira's death in 1949 the post went to the architect Heimo A. Kautonen.⁹⁰

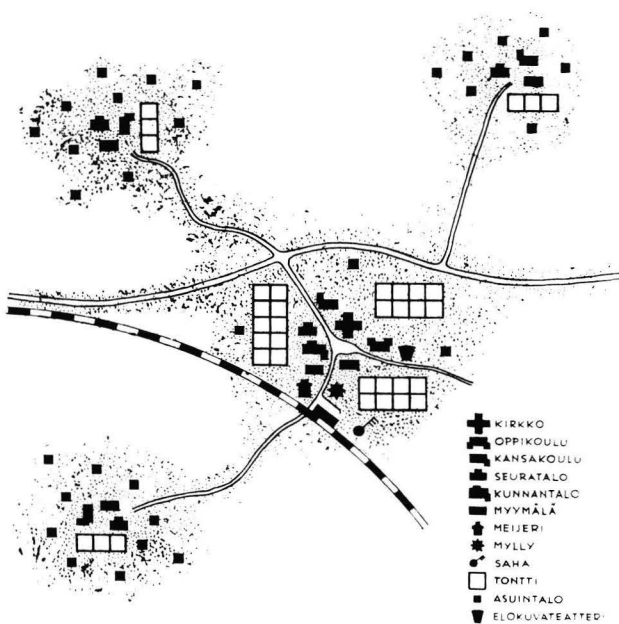
Building legislation and regulations concerning urban and regional plans increased the responsibilities of the state at the end of the 1930s. Plans for rural areas were still regarded as nationally important issues. Setälä's former chief, Meurman was the first to concentrate on planning and he often stressed the importance of continuity in this area of work. A plan was not only a map, but entailed the complete design and future of housing in an area. The planners should take into account considerations of economy, health, and artistic design. Errors and omissions were especially fatal, as realizing the plans involved considerable sums of money. For a number of reasons, e.g. the lack of suitable statistics, rural plans were more difficult. Economy was a special consideration in rural conditions, as the local municipalities or other bodies were not necessarily prepared to compensate property-owners.⁹¹

Building plans for rural areas were usually drawn up on the orders of provincial administration, and were mostly carried out with state funds. The state's main objective in rural planning was to concentrate denser settlement in suitable and practical locations, leaving the remaining areas completely unsettled or with only few inhabitants. Planning was obstructed by the slow process of approval, which was made worse by the lack of legislation concerning regional and general plans.⁹²

Salme Setälä's career as a planner covered a period from 1937 to 1961. She began work under Meurman, who was in many respects her model. She had already become familiar with planning issues in England, where she had spent a brief period as a student on the eve of the First World War. Setälä had worked in Raymond Unwin's office at Hampstead Garden Suburb in 1914 for a period of eleven weeks. She recalls having prepared drawings of standardized houses for Unwin, which means that she was familiar with English house types and their planning.⁹³

Setälä's ideas of planning were also influenced by Gustaf Strengell, whose book *Staden som konstverk* (The City as a Work of Art) she had translated into Finnish in 1923. Strengell was a proponent of English garden-city ideals, and a harmonious and aesthetically designed townscape. In his book, he pointed out that urban planning and architecture did not mean two-dimensional plans on paper, but a three-dimensional art of creating spaces, combining emotion with reason.⁹⁴

While working with Meurman, Setälä also wished to study planning on her own. After complaining to her chief about her restricted work, she was given in 1937 the task of preparing the plan for the community of Kuusamo in Northern Finland. Setälä was allowed to draw up the plan independently, but the actual consultations and negotiations in Kuusamo were handled by her superior. Her next plan, for the Liikala area in Ristiina, was a private commission received in 1938 upon Meurman's

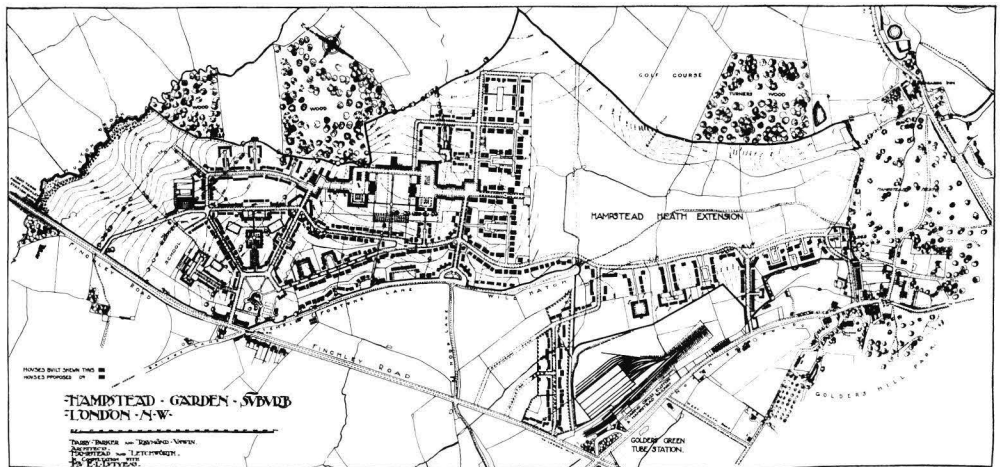


72. Otto-I. Meurman's model plan of a large rural village in his textbook on town-planning theory. Meurman 1947, fig. 409.

73. Sir Raymond Unwin's studio 'Wylde's' at Hampstead Garden Suburb, 1914. Photograph by Salmie Setälä, SRM.



74. Hampstead Garden Suburb, Barry Parker and Raymond Unwin 1906. Unwin 1910, Map VI.



recommendation. At the time, regional and town plans were often arranged as private commissions, although few architects were willing to take on this work. On a general level, this reflects the unpreparedness of the profession for the problems of regional and town planning. Setälä carried out the consultations concerning the Ristiina plan together with Meurman, and she later recalled how this project taught her how to manage these situations.⁹⁵

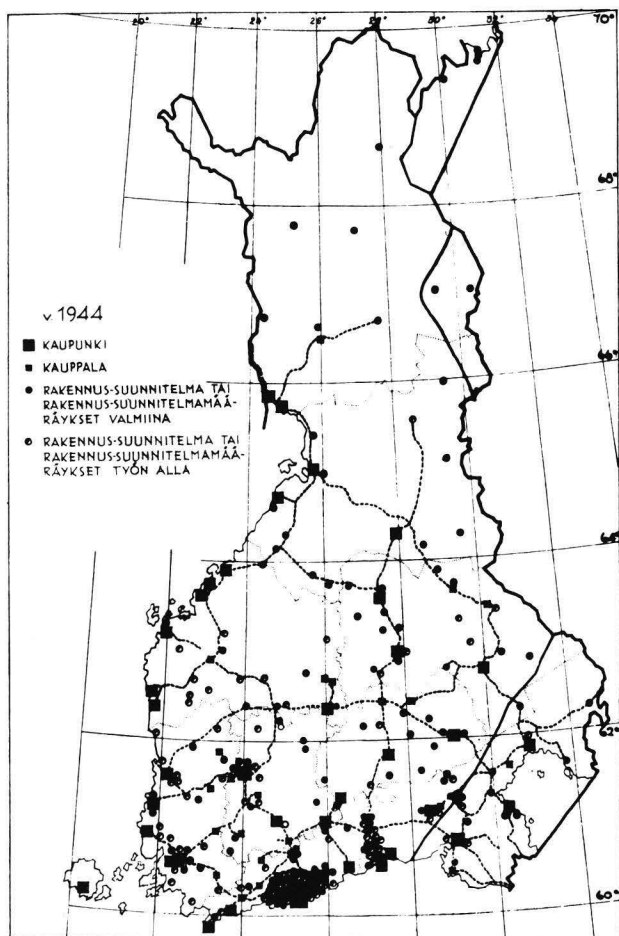
In early 1940, when Finland was already at war, Setälä was removed from her supernumerary architect's position and made a supernumerary draughtswoman working on commission. This was part of general scheme to lower wages, although the work remained the same. Setälä commented on the Board's general attitude to planning by remarking that it did not interest the leading architects very much. This point will not be followed here,

but it appears that planners were often frustrated by the difficulty and problems of their work. There were no available statistics on projected population growth, nor on the growth of vehicular traffic, and the National Board of Construction and the municipalities paid little attention to social considerations or the well-being of inhabitants in the planned areas.⁹⁶

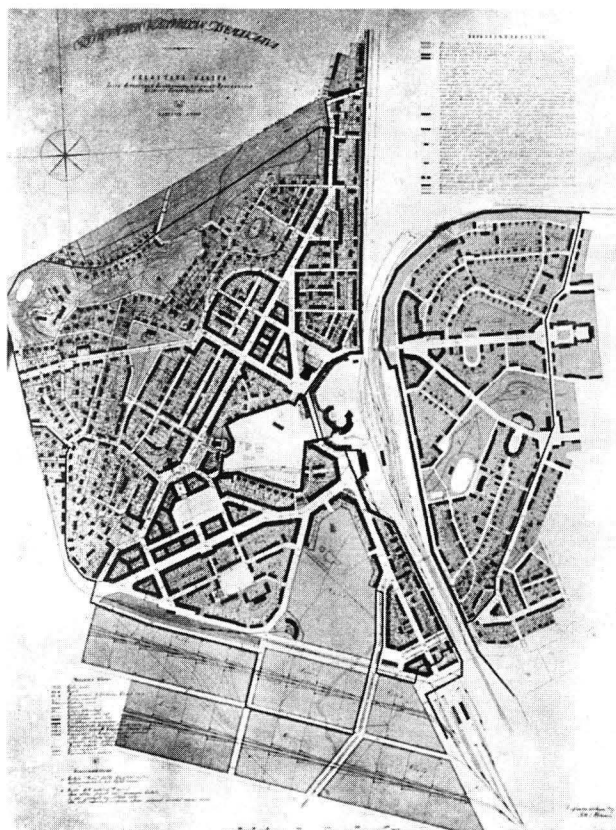
Setälä made a major contribution to the planning work of the National Board of Construction. This was not only a result of her long career, but also due to the numerous construction, site-allotment, and regional and town plans which she prepared and drafted over the years. She is known to have prepared at least 68 different general building plans for non-urban areas. Otto-I. Meurman may have strengthened her links with English garden-city concepts, which may also date back to her own work at Unwin's office.

In her evaluation of Meurman's role in Finnish planning from the 1920s onwards, Riitta Nikula has pointed out that he was not enthusiastic about German town planning with its focus on large cities and their problems. Meurman himself described his work as having developed 'in a free Unwinian spirit', and he continuously stressed the importance of understanding the natural surroundings, terrain, light, and the existing strata of history. He has also pointed to the example set by Eliel Saarinen's Munkkiniemi-Haaga plan. Meurman worked for Saarinen in 1914-15 and 1917. These experiences led to a strong identification with the concepts of Unwin and Camillo Sitte, who was especially popular among younger Finnish architects around the turn of the century.⁹⁷ In his textbook on town-planning theory, Meurman published a map prepared by the National Board of Construction, showing the extent of town and regional planning in 1944.⁹⁸ According to this map, most plans had been drawn up for the parts of Uusimaa Province surrounding Helsinki and around the larger towns and cities. There were few plans for the inland regions, Eastern Finland, and especially Northern Finland. Salme Setälä had already begun to follow her own planning concepts in her projects of the late 1930s. In her 1939 building plan for the Pello area in Turtola, North-

ern Finland, Setälä took into account the village's location in relation to the nearby Tornionjoki River as a basis for focusing and enlarging the intended area for housing. Lots facing the local highway had front yards over 12 metres wide, and Setälä modelled her plan after Meurman's and Unwin's principles of using trees and other vegetation.⁹⁹ In her plans, Setälä was especially concerned with arrangements for traffic, and usually discussed these issues in detail with representatives of the National Board of Roads and Waterworks. For example, in the written description of roads and streets in her plan for Keuruu, Setälä underlined the problems of traffic in the centre of the community. At the time, the area offered few solutions to these problems.¹⁰⁰ Even in other plans Setälä was in contact with the National Board of Roads and Waterworks regarding roads, which were always planned and designed in collaboration with this authority. She mentions, however, that her superiors did not care much for her detailed plans. 'The Head of the Board (Väinö Vähäkallio) approved the plan for Enso after making one alteration. In only fifteen seconds, he changed the course of an important road, to which the Board of Roads and Waterworks and I had devoted a great deal of time and planning.'¹⁰¹ In projects involving historic locations Setälä often tried



75. Town and community plans in Finland in 1944. Meurman 1947, Fig. 2.



76. Plan for the township of Riihimäki, Otto-I. Meurman 1922, Lindberg 1923, p. 15.

to take local building traditions into account. This was also typical of Meurman, who had spent many years as a planner in Viipuri, which was an especially difficult city in this respect. Unwin, too, stressed the historical individuality of towns. In her years at the University of Technology, Setälä had benefited greatly from Gustaf Nyström's teaching. Nyström was acutely aware of the historic value of Finland's old traditions of building. The villages and small communities for which Setälä drew up plans required a careful approach, and she often tried to control the height of buildings in the centres of old villages. For example, she regarded a high building planned near the old church of Kangasala as an element disturbing its surroundings. In support of her arguments, she had even checked the height of the church, but, as an impartial government official, she was not allowed to have any say in the matter.¹⁰²

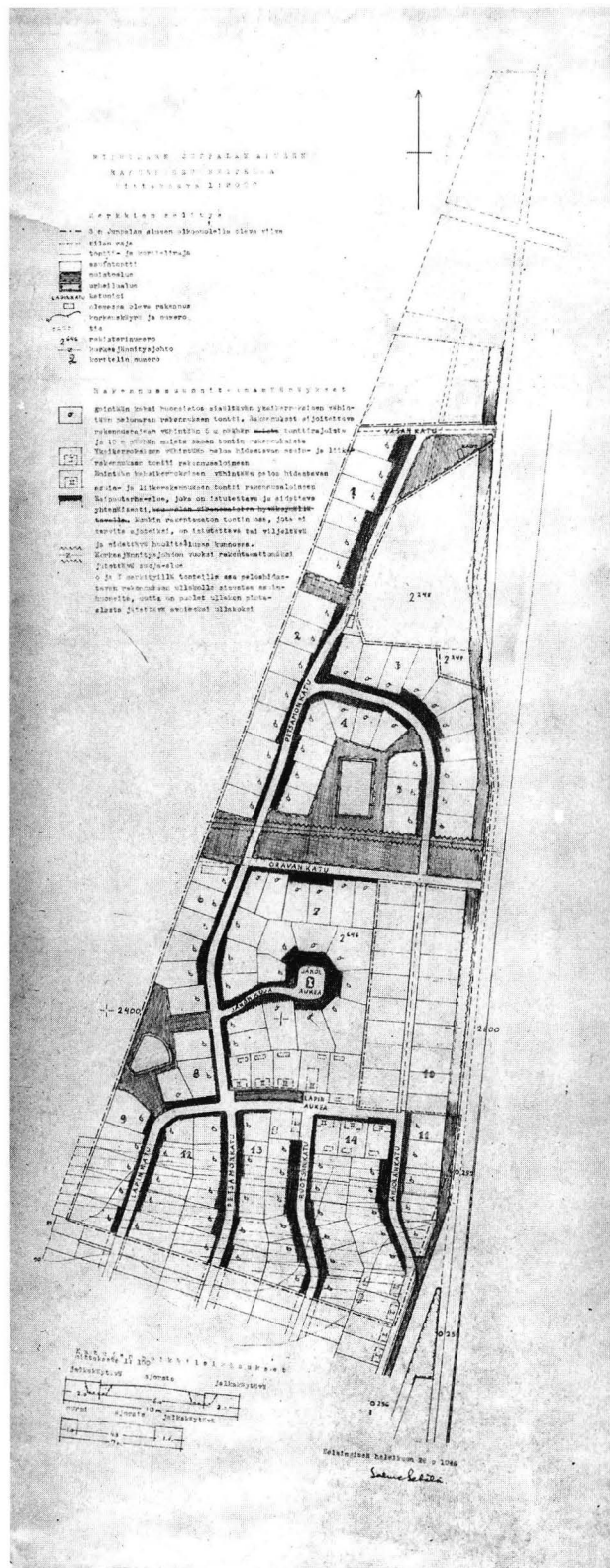
Most of the areas planned by Setälä were sparsely inhabited. In typical cases, almost half of the area covered by the plan was farmland, and the built-up community was centred on some earlier element such as a church or industrial plant. Accordingly, these plans had to make provisions for changes to existing buildings.

One of Setälä's most interesting projects was the 1946 plan for the Juppala area in Riihimäki. Otto-I. Meurman had prepared the original plan for the municipality of Riihimäki in 1922. This was the first example in his work of influences from Swedish planners.

Meurman had placed the main thoroughfares of Riihimäki in almost symmetrical configurations radiating from squares. These roads and streets were flanked by multi-storey apartment buildings, behind which was a zone reserved for single-family houses along gently curving streets. Riitta Nikula has pointed to Meurman's first elevations of streetfronts, which he prepared for the Riihimäki plan. All the main building fronts were drawn in detail, reflecting the classicist ideal of a uniform townscape. The planned area of 230 hectares was intended for some 40,000 inhabitants in various types of houses and buildings. At the time of the plan, Riihimäki had a population of 9,000, and the scheme created a solid foundation for the future growth of the community.¹⁰³

Through Meurman's influence, Salme Setälä was given the task of extending the plan into the Juppala area. The original plan was now over 20 years old, but the ideals of planning for this small area were still largely the same. Juppala was planned for some 900 inhabitants, mainly in single-storey detached houses.

Setälä kept to Meurman's arrangement of the main thoroughfares, with two squares in the centre of the area. One of these was the main square, which was to be flanked by business premises. The other square was to be surrounded by a wide zone of gardens, collectively planted and fenced by the inhabitants. Setälä's plan, however, lacks the earlier version's rows of apartment buildings along the main routes. Nor were there any apartment buildings along the nearby railway line. The Juppala housing area corresponded in some respects to



77. Plan for the Juppala section of Riihimäki, Salme Setälä 1946. SRM.

Unwinian ideals; the single-family houses further away were not directly on the streets, which were planned as boulevard-type routes with trees.¹⁰⁴

Locality	
Kuusamo	begun 1937, completed 1940
Liikala, Ristiina	begun 1938 (private commission)
Friitala, Ulvila	begun 1939 (private commission)
Kolmperä, Espoo	preliminary draft 1940, not realized
Kemijärvi I & II	approved 1942
Puumala	completed 1942 (in collaboration with the architect Schmidt)
Nikkilä, Sipoo	approved 1942
Enso	begun by Nieminen reviewed 1942
Merikarvia	preliminary draft 1942
Laihia, Lappee	preliminary draft 1944 (under Otto-I. Meurman's supervision)
Jupper	preliminary draft 1944
Sodankylä	begun 1940, approved 1945
Sysmä	approved 1945
Rantasalmi	approved 1945
Haapamäki	begun 1940/41, approved 1945
Viirinkangas	preliminary draft 1945 (joined to Rovaniemi)
Pello, Turtola	preliminary draft 1939, completed 1945 (private commission)
Hämeenkylä-	
Friherrns-Jussas	approved 1946
Kemijärvi II	alteration 1946
Sodankylä	alteration 1946
Kuusamo	alteration 1946
Juppala, Riihimäki	completed 1946 (private commission)
Mynämäki	begun 1941 by the architect Ypyä approved 1947
Viitasaari	completed 1947
Lapua	begun by Eerikäinen completed 1947
Sokkala	preliminary draft 1947
Porokylä	begun by the architect Söderlund approved 1948
Ivalo I	begun 1946, approved 1948
Juuka	begun 1947, approved 1949
Gräsa-Matinkylä,	
Espoo	begun 1948, reviewed 1949, continued
Rural commune of	
Pietarsaari	begun 1944, draft version 1949 (under Ekelund's supervision)
Virrat	begun 1948, draft version 1950
Koria	begun 1948, draft version 1950
Lapinlahti	draft version completed 1950
Ii, main village	draft 1950, approved 1952
Turenki, Janakkala	begun 1947, completed 1950 (under Erno's supervision)
Kauhava	preliminary draft, completed 1950
Keuruu, main village	draft 1952, completed 1952 (private commission)
Extensions to	
Kemijärvi	reviewed 1952
Saarijärvi	begun 1946, reviewed 1953 (private commission)
Kontiomäki	approved 1954
Paltamo, main village	approved 1954
Rural Commune of	
Kemi	reviewed 1954
Lautiosaari, Rural	
Commune of Kemi	draft, completed 1954
Alatornio	begun 1954 (joined to Tornio)
Mäntyharju	begun 1950, approved 1955
Ruovesi	begun 1948, approved 1955
Ummeljoki	approved 1955
Virojoki	approved 1955
Nivala	draft 1951, second review 1955
Haapavesi	reviewed 1955
Sysmä	reviewed 1955
Extension to Juva	begun 1953, draft completed 1955
Gammelgård, Espoo	begun 1955
Oilola, Suomussalmi	begun 1945, approved 1956
Muhos	approved 1956
Anjala, main village	approved 1956

Utajärvi	approved 1957
Vihanti	approved 1957
Hyrnsalmi	begun 1945, approved 1957
Uusikylä, Kajaani	approved 1957
Taivalkoski	approved 1957
Valtiala, Kangasala	draft 1956, completed 1957 (private commission)
Träskända, Espoo	begun 1955, draft version completed 1957
Extension to Anjala	draft version completed 1957
Viinijärvi, Liperi	approved 1958
Orivesi	begun 1953
Alavus, main village	draft 1960, completed 1961 (private commission)

3.2.2. Interior Design

The young Finnish architects of the 1920s were interested as much in industrial art and interior design as in the actual design of buildings. This interest dated back to the turn of the century, when architects began to design their buildings as 'total works of art'. In the 1910s Swedish designers began to emphasize the aesthetic values of everyday objects and the standardization of industrial products. This movement for 'more beautiful everyday objects' (SW. *vackrare vardagsvara*), as coined by Gregor Paulsson in 1919, soon spread to Finland.¹⁰⁶

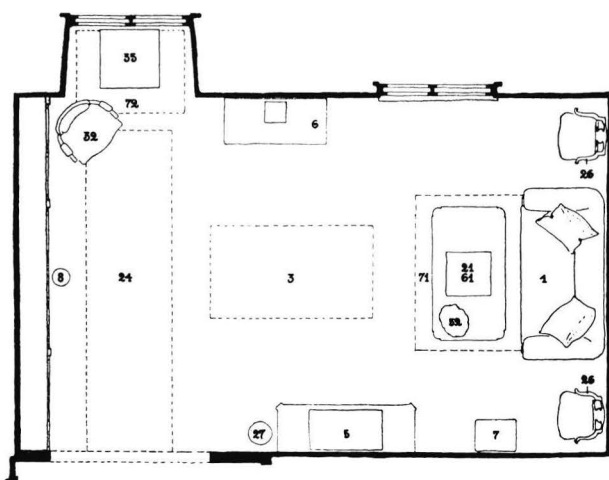
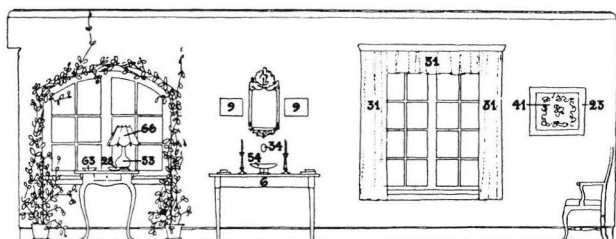
Typical of this period were ideals of hygiene and practical measures for the home, which were often discussed in connection with broader issues of housing and dwellings. In the 1920s a specific ideology of home economics, based on considerations of national economy, began to support a women's identity which had been propagated by the middle-class women's movement since the late 19th century. This ideology maintained that home economics should be recognized as part of the national economy, and it also campaigned for improving the skills of housewives.¹⁰⁷

The modern concept of home economics began to

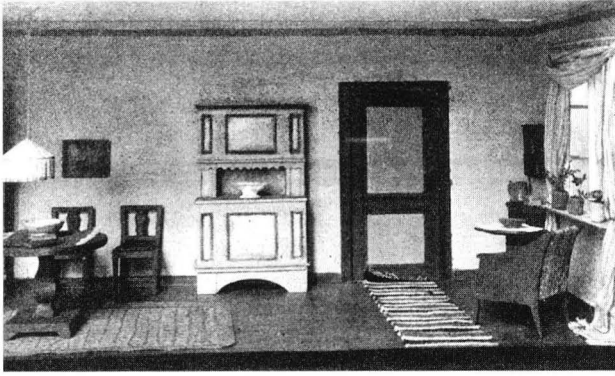
emerge in the 1920s; it became a subject of public discussion, and the active role of women was emphasized with reference to 'scientific housekeeping'. For example, the Finnish *Martta* organization of women campaigned for the teaching of home economics already in this decade.¹⁰⁸ However, a more distinct picture of the double standards of Finnish society was given by the Marriage Act of 1929. The new act specifically recognized the contribution of women to the welfare of the family by their role in managing the home. The social role of women was thus defined by their skills in practical home economics.¹⁰⁹

Home design, the housing problem and rational home economics became socially important issues in the 1920s and '30s. Young women graduates in architecture actively participated in furniture design competitions, often successfully.¹¹⁰ Around this time a corps of interior designers had begun to emerge in Finland. In 1922 Gustaf Strengell published *Staden som konstverk* (The City as a Work of Art), which was followed in 1923 by *Hemmet som konstverk* (The Home as a Work of Art). Translated into Finnish by Salme Setälä, these books, following Nordic trends and ideals, soon received wide acclaim as guides for laymen.

The themes of Strengell's books reflect the emergence



78. Model interior of a study in the home. Strengell 1923, figs. 262-263. The author presented his own home as an example.

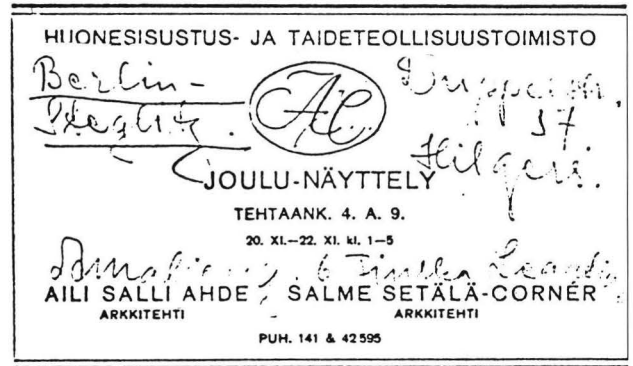


79. Living-room interior designed by Carl Malmsten for the courses of the Nääs crafts institute, 1924. Malmsten 1924, fig. 29.

and extent of these and corresponding aims. The idea of 'social responsibility' spread from Sweden to other Nordic countries. Gregor Paulsson's works *Den nya arkitekturen* (The New Architecture) from 1916 and *Vackrare vardagsvara* (More Beautiful Everyday Objects) from 1919 criticized the isolationism of industrial art, and its focus on aestheticism.¹¹¹ August Brunius's *Hus och Hem* (House and Home) was translated into Finn-



81. Salme Setälä and Aili Salli Ahde with Elsi Borg in Viipuri in connection with an exhibition by the AC office, 1926. SRM.



80. Invitation to the Christmas exhibition of the AC interior-design office, 1925. Helmiriitta Honkanen collection.

ish in 1917 by the woman master-builder Adèle Asp. This book presented an ideological review of villas, villa communities, and the nature of homes. It discussed ideal floor plans, and the required course of interior design for creating a new culture of the home.¹¹² Setälä also had a copy of this book.¹¹³ The separateness and individuality of the home and the family were especially stressed by the Swedish architect Carl Malmsten, whose book *Skönhet och trevnad i hemmet* (Beauty and Comfort in the Home) appeared in Finnish translation in 1926.¹¹⁴ Malmsten subscribed to a bourgeois middle-class idea of the family, maintaining that the roots of society were in the home and its customs. He regarded safe dwellings as a gift for children, and defined the purpose of Nordic homes as providing for the future the traditional security of peasant and farmer homes. The comfort of a home was based on a sound and active civic spirit. Malmsten's work was one of Setälä's sources for her own book *Miten sisustan asuntoni* (How to Furnish the Home).

Salme Setälä's connections with vernacular architecture had already formed in her student years. In 1915 she assisted Professor A.O. Heikel on his travels to various parts of Finland to acquire old houses and buildings for the Seurasaari open-air museum in Helsinki.¹¹⁵ In the 1910s interest had arisen in Sweden in the country's own architecture of the 18th century. In Finland, architects had discovered old iron foundries and rural manor houses. In 1921 Salme Setälä and Sylvi Erikson (née Nyssönen) received a grant from the Kordelin Foundation to prepare measured drawings of manor houses in the Mäntsälä region. In 1918 Setälä had measured and drawn the old buildings of the island fortress of Viapori (Suomenlinna) near Helsinki, under the direction of the architect Selim Savonius of the Board of Public Works and Buildings. Viapori was at the time a prison camp for the defeated Reds of the Civil War.¹¹⁶

These tasks, and assisting Otto-I. Meurman in preparing Finland's first congress on housing in 1917, laid the basis for Salme Setälä's personal interest in housing and the interior design of homes and dwellings.¹¹⁷ Translat-

82. Blown-glass objects designed by Salme Setälä and Aili Salli Ahde in 1925. Photograph by Vilho Setälä, SRM.



83. Blown-glass objects by Salme Setälä and Aili Salli Ahde, 1925. Photograph by Vilho Setälä, 1925.



ing Strengell's books and study tours, especially to a major exhibition of architecture and applied arts in Paris in 1925, provided the final incentive for entering the field of interior design. In 1925 she established an office for interior design and industrial art (called AC) together with the architect Aili Salli Ahde.¹¹⁸

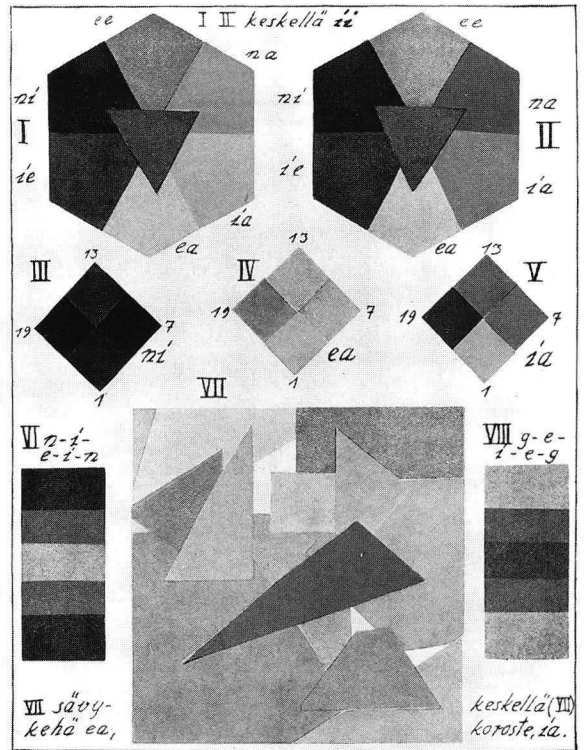
Around this time the home environment and interior decoration began to interest architects in general. Setälä's and Ahde's office was, however, one of the first of its kind in Finland.¹¹⁹ Their office followed the general trends of its period in the design and improvement of home interiors. Setälä and Ahde were prepared to offer

complete interior designs down to the smallest details, as well as acting as the local agents for modern design and art products from abroad. The AC office arranged an exhibition in Helsinki and Viipuri in late 1925 and early 1926, which was the subject of much attention. One of the highlights of the exhibition was a series of decorative blown-glass objects designed by Ahde and Setälä. They were modelled after similar Austrian pieces of opal and net glass. Also displayed at the interior design exhibition were textiles by Eva Anttila and Karin Hildén.¹²⁰ The office was discontinued in 1928, possibly because of Salme Setälä's return to architectural work. At the



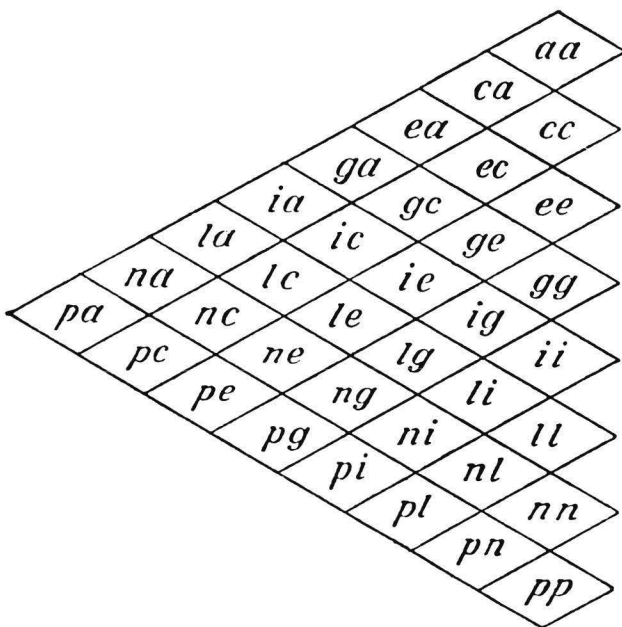
84. Cover of Setälä's 1929 interior-decoration guide.

Väritaulu II.



I, II. Värien ja sopuisuutensa yhdistelmät Ostwaldin mukaan. — III, IV, V. Vastaväripareja vastakkain, väripareja vierekkäin. — VI, VIII. Harman-yhdistelmiä. — VII. Sopuisuutensa väriyhdistelmät: ee värikokoin värit, joiden keskellä vastakkainen koroste, punninen fa.

86. Model of colour harmony developed by Salme Setälä from Ostwald's theory of colours. Setälä 1929, plate II.

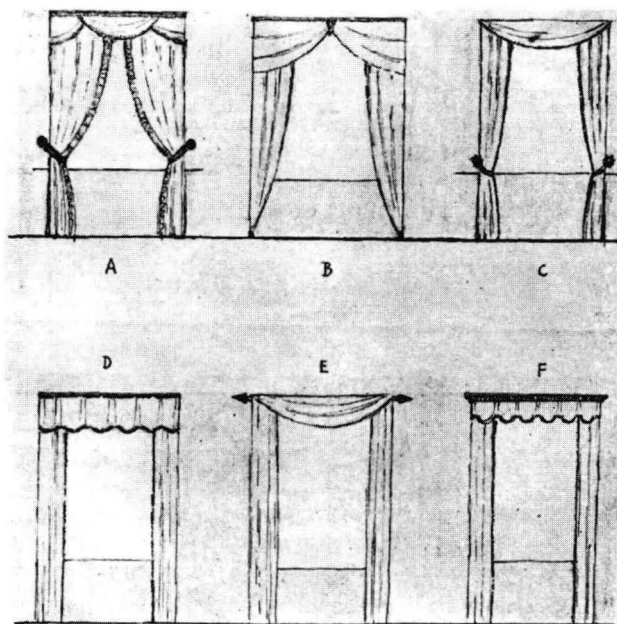


85. Colour code based on Wilhelm Ostwald's theory of colours. Setälä 1929, p. 38.

time, she assisted her friend Elsi Borg, who was finishing her work on the rural parish church of Jyväskylä.¹²¹ Despite other work, interior design continued to be one of the main themes of Setälä's articles throughout the late 1920s. Many of these writings were collected in her book on interior design and furnishings (*Miten sisustan asuntoni*) from 1929.

In this book, Setälä described interior decoration and the furnishing of the home as women's work. Once completed, this work is no longer seen or recognized. For her, the woman was the guiding force of the household, even when married to an architect, and she felt that a woman's education was of little use if she couldn't keep her home in order. Colour was the main element in interior decoration and design. Setälä's book presents a classification of colours based on Wilhelm Ostwald's theories in a very practical and detailed manner. It appears that her most modern influences were from the Paris exhibition of 1925. This is suggested by her comments on the combination of reason and aesthetics, and the dynamic beauty of an object's function. She also writes of small modern kitchens, and, with reference to Le Corbusier, of the apartment or dwelling as a machine.¹²²

The concepts and models underlying Setälä's interior decoration guide and the world view implicit in this book



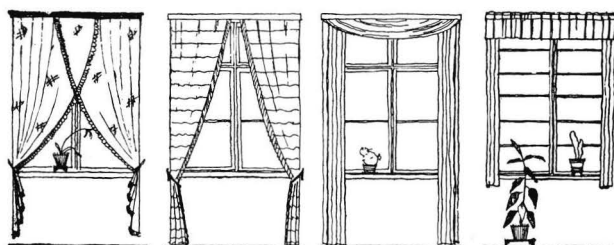
87. Carl Malmsten's suggestions for various ways of hanging curtains. Malmsten 1924, p. 38.

refer back to her own concept of a woman's identity. She felt that even highly educated modern women should be concerned with the home and the family, the basic unit of civic society. Although Setälä herself was leaving the privacy of her home for working life, she nevertheless emphasized the dichotomous division of labour among the genders into the private and public spheres.¹²³

Setälä's book was most probably inspired by Gustaf Strengell's work on interior decoration and design, but Strengell had written at a very general and aesthetic level, mostly avoiding practical instructions. The actual model for Setälä's book may have been Carl Malmsten's work on home interiors. Malmsten's emphasis on the family, his ideas of harmony and balance in the design of interiors, and the importance of the living-room are all reflected in Setälä's text. Malmsten's discussion of alternative uses for rooms reappeared in many of Setälä's articles.¹²⁴

Setälä kept up her interest in the problems of interior design, and in 1931 she published a book on kitchen interiors (*Keittiön sisustus*). In the mid-1920s a Swedish model kitchen had been on display in Finland as part of a campaign for the standardization of kitchens, organized by a committee set up in 1920 by the Swedish League of Towns and Municipalities.¹²⁵ In the background were new developments on the Continent, and especially in Germany for social, hygienic and rational alternatives in housing.

Before Setälä's book appeared, the *Deutscher Werkbund* organization had held a housing exhibition at Weissenhof in Stuttgart. Its themes were further developed in an exhibition on 'minimum apartments' (*die Wohnung für das Existenzminimum*) erected in Frankfurt in 1929 un-



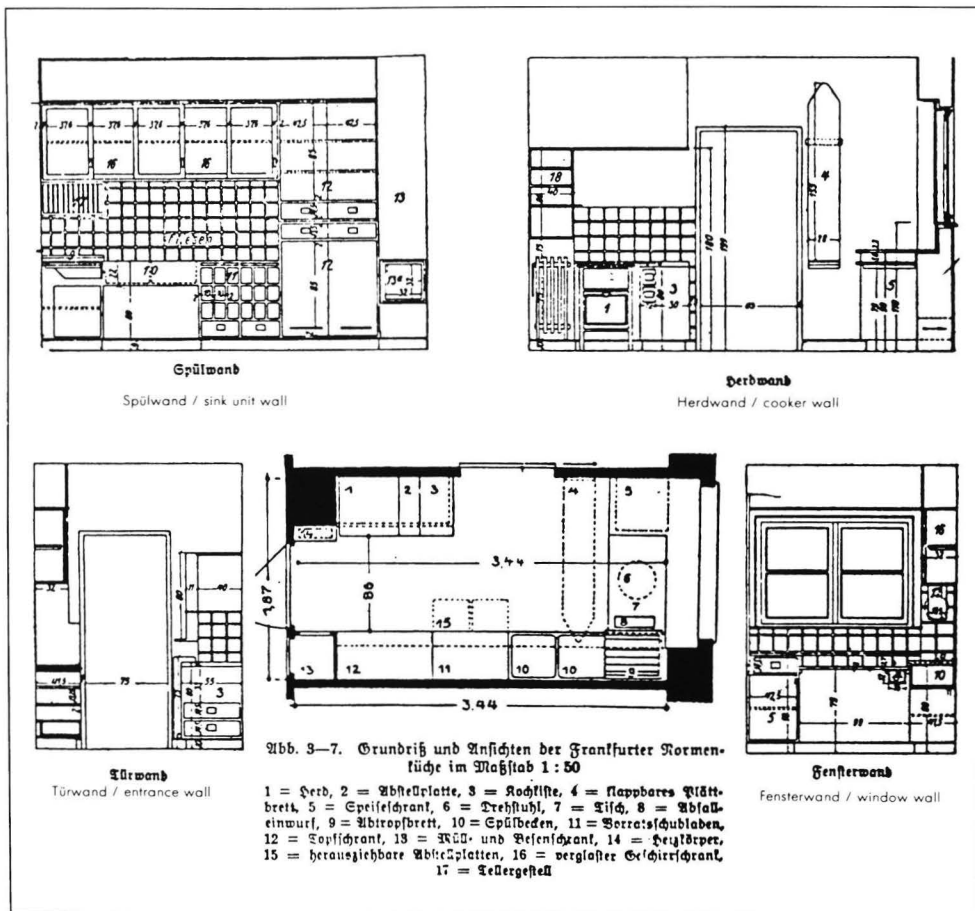
88. Salme Setälä's drawings of ways to hang curtains. Setälä 1929, p. 90.

der the direction of Ernst May. One of the most acclaimed designs of the exhibition was the 'Frankfurt kitchen' by Margarete Schütte-Lihotzky. This small kitchen of only 6.5 square metres was intended solely for cooking and other work, saving both space in the home and the housewife's labour.¹²⁶

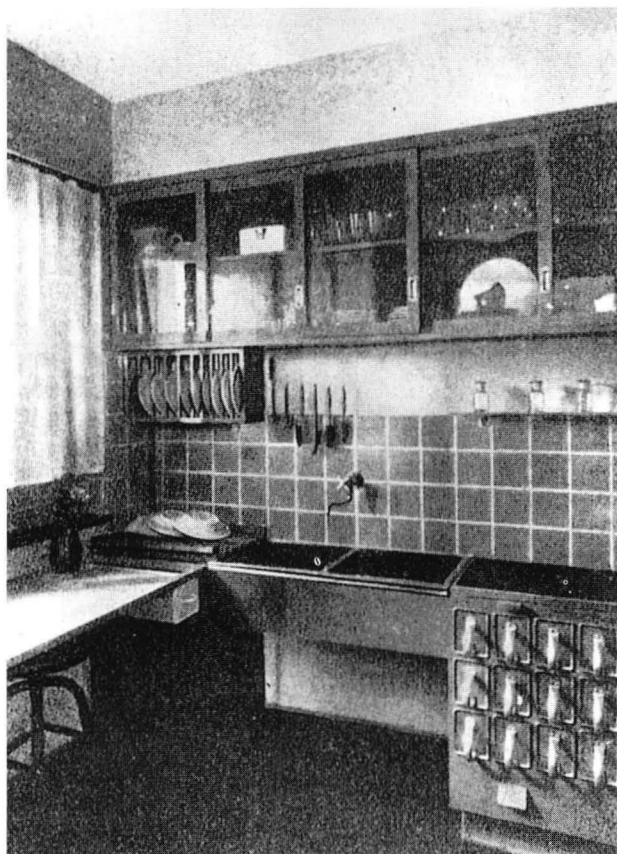
These concepts found their way to Finland partly from Europe and partly via Sweden. The Swedish Crafts Association (*Svenska Slöjdföreningen*) had arranged a home-design exhibition in Stockholm in 1917, where practical and functional interior designs were on show. Technically modern kitchen interiors did not, however, appear until the association's *Bygge och Bo* (Building and Dwellings) exhibition in 1922. The kitchens of this exhibition were on show in Helsinki in 1925, in a display arranged by the Martta organization. A Nordic conference on building and architecture held in Stockholm in 1927 focused on standardized furnishings and fixtures.¹²⁷

The Stockholm Exhibition of Architecture and Industrial Design, held in 1930, was especially important for Finland. According to Raija-Liisa Heinonen, this exhibition was a kind of synthesis of European Functionalism and its development so far. Finnish designers were mainly influenced by the housing exhibits, where the problems raised by the German housing areas and exhibitions were solved in ways more familiar to Finns.¹²⁸ In 1930, an exhibition was also held in Finland presenting industrial art and the rational design of small apartments. This was influenced by both the Stockholm exhibition and the solutions and designs of the housing fair in Frankfurt.¹²⁹

Salme Setälä had participated in the Nordic building and architecture conference in Stockholm in 1927, and she also visited the 1930 exhibition, writing articles on both events.¹³⁰ In her book on kitchens, Setälä points to the changed post-war situation, in which building costs had risen and women had achieved independent roles. From these starting points, Setälä sketches a course of development leading directly to the rational design of modern kitchens. She was, however, speaking of kitchens in modern urban apartments, where it was not necessary to carry out all the tasks oneself, as foodstuffs could be bought in nearby groceries. Setälä's discussion excluded the vast majority of Finnish homes and dwellings -



89. The so-called Frankfurt kitchen, designed by Margarete Schütte-Lihotzky in 1929. Kramer 1989, p. 158.



90. Sink and cupboards of the Frankfurt kitchen. Kramer 1989, p. 171.

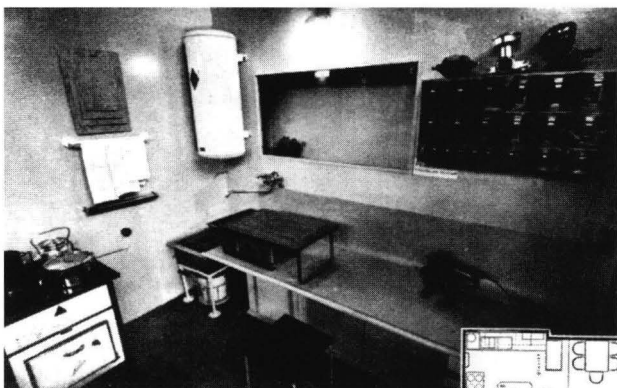
in rural areas far from electricity or gas supply. In these homes, it was hard to imagine the kitchen as a laboratory, or the housewife's work as a scientific pursuit.

In the 1920s a great deal of literature calling for social justice and equality was published in Finland. In the changed world that followed the First World War, women wage-earners became an important group, and the concept of a self-supporting woman began to emerge. In her book, Setälä linked these points with the modern design of kitchens. The use of space and various arrangements for work and storage derived from the German idea of a 'minimum apartment'. Setälä's illustrations include a model of a standardized apartment at the Stockholm exhibition, and she also presented to her readers the Aaltos' 'seated solution' for a small kitchen and the rational design of small apartments from the Industrial Art exhibition.

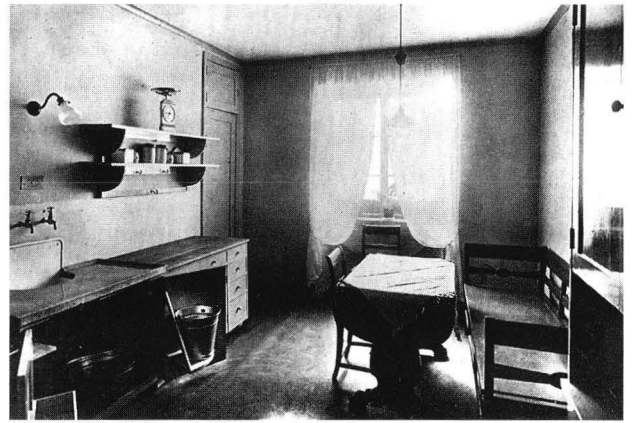
These two books by Salme Setälä interestingly differ in their concepts of the home, and of women in general. They were published almost consecutively, but their models of domestic life are clearly different. In her first home-interior guide, Setälä describes women's work from a very family-centred perspective, but in the kitchen guide the post-war independence of women is already a matter of course. The kitchen had become a kind of focal point of the various aspects of modern dwellings, but this does not completely explain the author's changed views. According to Irma Sulkunen, women's



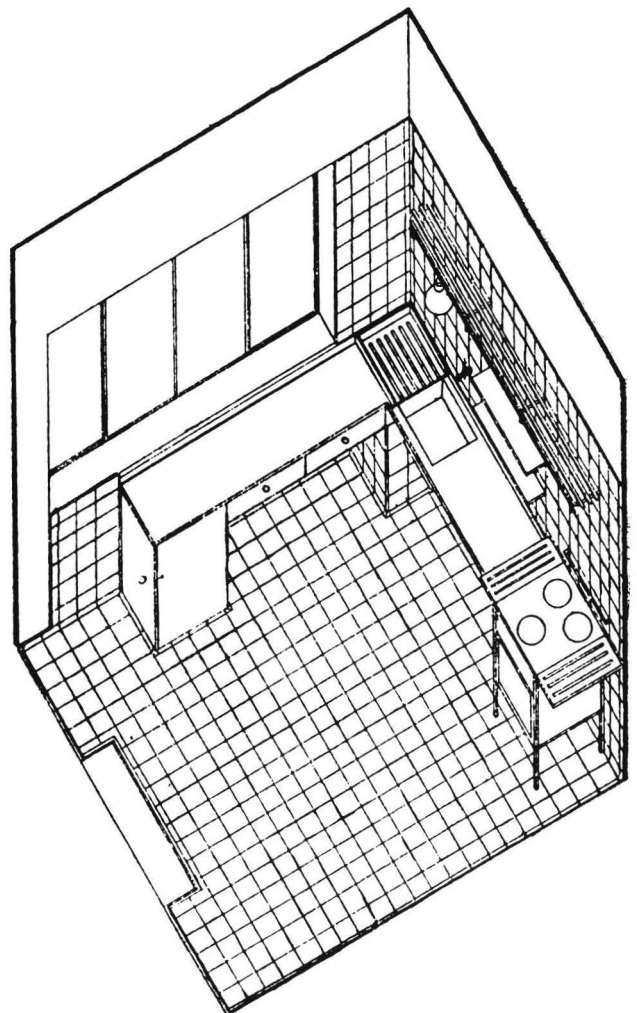
91. Cover of Setälä's 1931 book on the design and decoration of kitchens.



92. Aino and Alvar Aalto's 'seated kitchen' at an exhibition held in 1930 to promote the rational design of small apartments. Setälä 1931, fig. 11.



93. A kitchen designed by the architect Elna Kiljander was published in Setälä's interior decoration book in 1929. Setälä 1929, fig. 81.



94. Setälä's book on kitchens presented an L-shaped kitchen at Weissenhof in Stuttgart from 1927. It was designed by the architect J.J.P. Oud. Setälä 1931, fig. 102.

independence did not lead them into public positions, or roles in society that would have changed their responsibilities towards the home and the family.¹³¹ Even in Setälä's work, the independence of women was dis-

cussed as a relationship between managing the home and outside work. She felt that the lack of recognition of women's work in the home was one of the reasons why women specifically wished to work outside the home.¹³²

In both her books on interior design and decoration, Setälä directly refers to German models, e.g. Bruno Taut's designs for dwellings and apartments and the housing designs of the *Deutscher Werkbund* of Stuttgart. Finnish architects had become familiar with most of these new ideas in the early 1930s.

'Mesdames, a small kitchen accommodating everything contained in a large one, and even more, is not a step backward.'¹³³

In the 1930s Setälä actively followed interior design and decoration themes in her articles. Her new position as a civil-service architect limited wider interest in this area, and her main literary efforts of these years were children's books and novels. Housing issues and the design of apartments did not become topical until after World War II.

In 1947 the members of *Architecta*, an association of Finnish women architects, proposed to arrange lectures on interior design and decoration for the public. This idea had most probably come from Sweden, where the Swedish Crafts Association (*Svenska Slöjdföreningen*) held interior decoration courses in Stockholm and other cities, and in the countryside. Finnish experts felt that the post-war situation was a suitable time to address the question of organizing and decorating homes. The war had changed many things: dwellings had become smaller, and there was a shortage of furniture and ready cash.¹³⁴

In the background was a clearly ideological concern to keep families together, in the sphere of the home. The objective was to create a better society through better homes. 'If the home is cramped and uncomfortable, it will not invite its members to gather round the hearth. It seems that a well-organized and harmonious interior would help prevent the dispersal of the family, and could serve as a combining factor against the disruptive forces of our time'.¹³⁵

In the post-war years, the home became far removed from the earlier idea of a work of art, which Setälä now openly criticized. At the same time, the functionalist ideas of rational dwellings had achieved wider acceptance. The beauty of a home was seen in a combination of harmony and rationality. Functionalism had made dwellings, apartments and habitation in general one of the main areas of architecture, and the 1940s created a new model of habitation: the standardized, or type-planned, house.

The design concepts of these mass-produced houses were practical and rational. Single-family houses were regarded as the best solution for the demographic needs of society. Their construction served an actively publicized cult of the home, in which detached houses were regarded as the right solution for families with children. Their design reflected the emergence of the modern model of a uniform nuclear family. According to Kirsi Saarikangas, these houses became the architectural expression of a 'dichotomous citizenship'.¹³⁶ The interior decoration courses arranged by women architects were suited to this

way of thinking. Salme Setälä's lecture notes show how she rejected the theme of a modern, independent woman and reverted to the family-centred model, already proclaimed by Carl Malmsten in the mid-1920s, where good homes ensured a safe and active society.¹³⁷

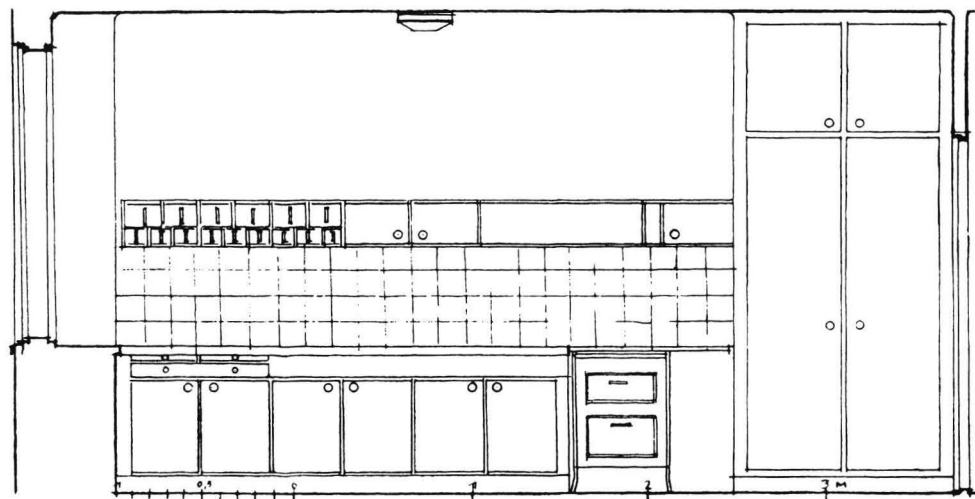
The courses were naturally aimed at women, mainly housewives, who were responsible for 'keeping the family together'. Before the courses were held, the Home Economics Department of the Board of Agriculture arranged a survey on what was desired from the courses. They were mainly intended for teachers in home economics schools and the advisors of home economics organizations, who could spread the information further. A background idea was to provide systematic information on the rational organization of homes.¹³⁸

Because of her interior design activities, Salme Setälä participated in the course scheme from its very beginning. She visited Stockholm to study similar programmes. The other architects of the programme had also been involved in interior design in various ways.¹³⁹ Kerstin Holmberg-Palmqvist had already founded a permanent interior-design exhibition in Helsinki in the 1920s. On display were furniture of her own design and textiles by various designers.¹⁴⁰ Hanna-Lisa Kalliala (née Nohrström) worked only intermittently in her profession after marriage. Setälä, Holmberg-Palmqvist and Kalliala had studied together, while the architects Kyllikki Halme and Sirkka Tarumaa were considerably younger.¹⁴¹ The architect Aili Pulkka also participated as a lecturer.

Courses were arranged four times in 1948, including one series in Tampere. In Helsinki, they were held at the Taidhalli Art Gallery. The programme included lectures, exercises, and visits to museums and exhibitions of interior design. The lectures were slightly different on each occasion, but they usually proceeded from the general principles of interior design and decoration to the history of furniture. Furnishings of different periods were studied at the National Museum of Finland and the Helsinki City Museum. In modern furniture, the main points of interest were their practicality and price. Materials were also discussed, and each series of lectures reserved considerable time for colours and colour schemes. Kitchens, storage space and household objects were also important subjects. Some of the courses included lectures and exercises in the arrangement of furniture, the use of old furniture, and the comforts and functionality of the home environment. Setälä was mostly responsible for the lectures on colour schemes and lighting, and a few times on furniture materials and textiles.¹⁴²

The classes were held in the evenings and became very popular, attracting over 150 participants.¹⁴³ Setälä later pointed out that it appeared that the time was ripe for studying these questions. In her official work at the National Board of Construction, she had travelled all over Finland during the war and immediately after it, and she had become acutely aware of the problems and outright distress faced by homes and families.

95. Salme Setälä's design for a kitchen in a small apartment. Setälä 1931, fig. 161.



'Anyone who visited Rovaniemi, Sodankylä, Inari and the Tornionjoki River region after the war and saw the former villages and communities, where only old saunas now stood, can never forget the sight.'¹⁴⁴

Salme Setälä's work involved both the micro and macro levels of architecture and design. On the one hand, she planned models and schemes for building whole communities, and on the other hand she focused on the smallest details of the home. This division of tasks had been familiar to Finnish architects since the turn of the century; Eliel Saarinen designed both new homes and the master plan of the Greater Helsinki area. Setälä's total concept of community planning derives from the ideals of Finnish town planning at the turn of the century, and especially the principles of the garden city. These influences were still present in her work in the 1940s, although conditions had greatly changed by then. The interior decoration of dwellings and habitation in general were areas where Setälä felt most at home, even before embarking on her career in government service. Through her writings, she was able to follow this aspect of her career alongside her official work. Setälä's books and articles most clearly expressed her bourgeois concepts of habitation, families, and women's activities. For her, the sphere where women could operate was almost uniquely private, whether outside the home or not.

3.3. Aino Marsio-Aalto - Marriage and Career Combined

'Aino Aalto claimed she wasn't creative. Those who, in passing, saw her working at Artek may have compared her to a housewife attending to her daily tasks without any thought for personal acclaim - as housewives have done throughout the millennia. Her modesty and retiring nature underlined this impression.' From Gregor Paulsson's obituary of Aino Aalto.¹⁴⁵

Aino Marsio (1894-1949) studied at the Helsinki University of Technology in the 1910s at the same time as Salme Setälä. In 1924, soon after graduating, she mar-



96. Salme Setälä's interior design for a summer cottage at Vääksy, 1934. Helmiriitta Honkanen collection.

ried her colleague, Alvar Aalto, whom she had already known as a student. She thus found herself in a situation that was quite typical of architect women at the time - a combination of marriage and career.

Aino Marsio has been described as a mature and balanced individual, who had a clear idea of the implications of her choices. She could have chosen a completely different spouse than Alvar Aalto. On the other hand, the potential which was to blossom in Alvar Aalto may not have been so foreseeable in 1924. Inevitably, Aino Marsio-Aalto's work was measured against the achievements of her husband, who was soon ranked as a genius and one of the great men of the arts in Finland. She stood by and saw how their joint projects and the work of their office were praised as the fruits of Alvar Aalto's creativity.¹⁴⁶

In this situation, it is difficult to outline or assess Aino Marsio-Aalto's independent achievements. However, she had a significant position in Finnish industrial art and interior design, and cannot be ignored, although she was never placed at the same level as her husband. For this reason, it is necessary to briefly review the Western concepts of genius, creativity and tradition that clearly ap-



97. Aino Marsio-Aalto in the 1920s. AAA.

plied to contemporary and later evaluations of Aino Marsio-Aalto.

The idea of artistic 'genius' had changed with the Enlightenment of the late 18th century and the advent of Romanticism. Reason and imitation were no longer important. Artists were now seen as guided by emotions, intuition, and imagination; their art was new and original, and their work was bound to the concept of creativity. Artists who aspired to the highest achievements were regarded as geniuses. Their abilities were no longer defined along the scale of the Enlightenment, which focused on the faculties of reason, whereby geniuses surpassed others in their faster capabilities of comprehension. Romanticism introduced the idea of a genius as a type of individual, and no longer as a specific ability. The bases of artistic creativity were now discussed; inspiration and imagination were seen as the power to break down the boundaries between reality and artistic vision.¹⁴⁷

These ideas, or beliefs, concerning genius and creativity were almost uncritically adopted in the present era. The best indications of an artist's creativity and originality were seen in the novelties and unique features of works of art, despite the fact they are never created without some influence from existing tradition. Originality and novelty were not only descriptive terms but also highly valued qualities. This often obscured the point that

originality or novelty were not always necessary conditions for masterly achievements.¹⁴⁸

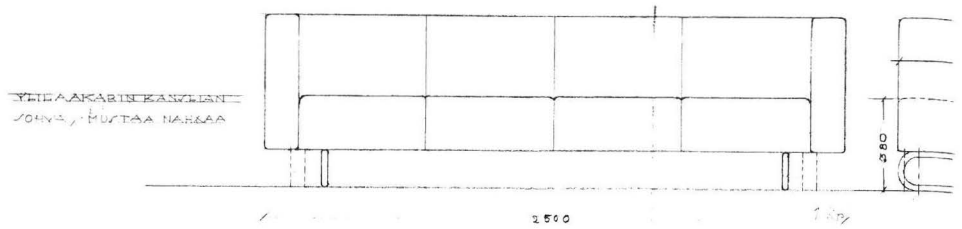
Artists cannot create their works in a void or out of nothing. The traditions passed on by the institutions of the arts help to preserve society's own concepts of identity. Because of this, the most valuable areas of tradition must be recognized; artists do not lose their originality by choosing familiar themes. These may offer a challenge in seeking new solutions and variations. Alvar Aalto was a consummate master of this skill. He based his inspiration on earlier elements, shaping them into new syntheses.¹⁴⁹

In the eyes of posterity, Aino Marsio-Aalto has had the minor role in the play where Alvar Aalto was cast as hero. As mentioned by Gregor Paulsson in his obituary, she was reticent, steady, and serious. It may well be true that she balanced her husband's highly extroverted disposition, as suggested in many analyses. Despite this, her own artistic achievements of many years require further discussion. At Artek she was first head of the design department and later managed the whole firm. In this capacity, Aino Marsio-Aalto created a diverse and flexible range of products. Her husband's chairs were perhaps the most radical elements, but they alone could hardly have furnished a whole home.

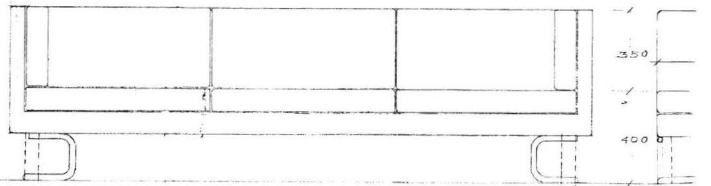
3.3.1. Artek and Aalto Furniture

One of the best studies on the founding of Artek is by Pekka Suhonen.¹⁵⁰ The art critic Nils Gustaf Hahl, who was influential throughout the scheme, introduced Alvar and Aino Aalto to the Ahlströms, one of the country's leading families in the lumber industry. In 1931 Maire Gullichsen's (née Ahlström) husband Harry Gullichsen succeeded his father-in-law as head of the Ahlström concern. At the founding meeting of the Artek firm in 1935, Maire Gullichsen held 150 shares, and Alvar Aalto had 190 shares. Other shareholders were Nils-Gustav Hahl (80 shares), O.W. Puhakka (30 shares), Aino Marsio-Aalto (20 shares), and Aili-Salli Ahde, Carl Hahl, and Aarne Ervi with ten shares each.¹⁵¹

Furniture designed by Alvar Aalto became the main articles of the new company. The original objective was to promote standardized glass and textile products, as well as furniture and building materials. Artek was also intended as a centre for propagating a new ideology of dwellings and for exhibitions of modern art.¹⁵² In 1929-30, before the founding of Artek, Alvar Aalto had designed a stackable chair with folding legs (standard no. 611) for the Huonekalu ja Rakennustyötehdas firm in Turku. Furniture designed by Aalto for the Paimio Tuberculosis Sanatorium became Artek's standard articles. His Paimio chairs (standards nos. 31, 41 and 44) were at the time completely new and original concepts in international furniture design. The origin and early stages



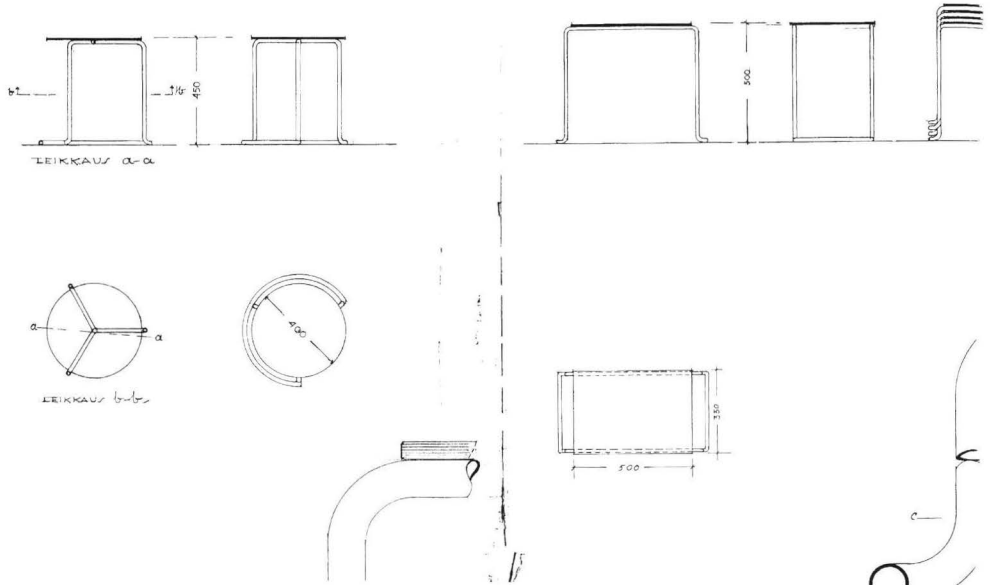
PEIRÄEN HOIMA JATTA-
NEN. KÄYRUSTEUSHIO-
NEN. SOHVA. KÄYR-
TUNNUS. KÄYRUSTEUS.



LEIKKAUS 2800 CM
LEIKKAUS 400 CM

SOHVA

98. Sofas for the nurses' lounge and office of the senior physician of the Paimio Sanatorium. Aino Marsio-Aalto 19.10.1932. Artek.



99. Stackable metal-legged stools and tables of the Paimio Sanatorium. Aino Marsio-Aalto 19.10.1932. Artek.

of these designs have been the subject of several studies.¹⁵³

The methods and procedures of Artek's design department, which were established under Aino Marsio-Aalto, have made reliable datings of all works problematic. Marsio-Aalto familiarized new designers with the products of the firm by having them redraw the designs. As a result, most of the originals were lost over the years. The recurrent copying of original designs does not, however, prevent their attribution. In almost all cases the initials of the original designer were copied in new versions.¹⁵⁴ In the early years of Artek, standards and other major designs were mostly the responsibility of Aino Marsio-Aalto and, to a lesser degree, Maija Heikinhei-

mo. Of these hundreds of designs, only a few are by Alvar Aalto. The well-known image of Aalto furniture is mostly based on a few world-renowned chair models by him, but Artek produced innumerable pieces of Aalto furniture in different versions.

Even before Artek, Aino Marsio-Aalto was a versatile designer. Her series of pressed-glass objects was awarded a prize at the Milan Triennial in 1936, and are among her main achievements, though by no means the only ones.¹⁵⁵ Some of the designs for the interiors of the Paimio sanatorium have been preserved at Artek. These include Aino Marsio-Aalto's designs from 1932 for sofas for the head physician's office and the nurses' lounge.¹⁵⁶ She also designed desks, stools, and tables



100. The Artek exhibit at the Finnish pavilion at the Paris World Fair, 1937. Artek 1985, p. 39.

with metal legs for the offices of the sanatorium's head physician and economic director.¹⁵⁷ Marsio-Aalto later varied these designs for similar office furniture produced by Artek.¹⁵⁸

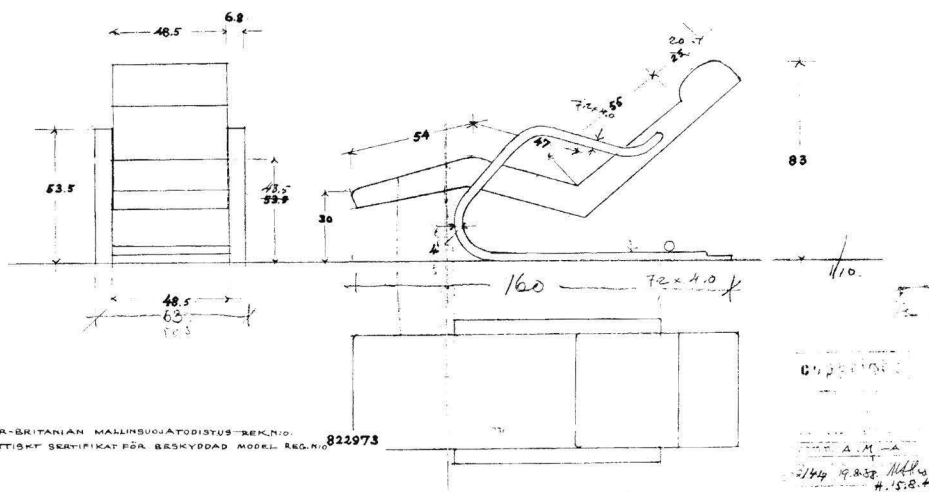
Between 1936 and 1949 Aino Marsio-Aalto was one of the main designers of Artek's furniture, lamps, screens, household objects, mats, and other textiles. Exhibitions were important events for the firm. The Paris World Fair of 1937 was especially significant; the Finnish pavilion, designed by Alvar Aalto, gave Artek its first opportunity to present its products to an international public.¹⁵⁹ On display in a small conservatory room of the pavilion were Artek's earlier Aalto models, a three-legged stool, a small tea trolley, a high-backed armchair with cantilever sides, and, as a new product, the 'Paris'

chaise-longue (standard no. 39). This chair, with curved leg parts similar to the Paimio chairs, was originally upholstered. Aino Marsio-Aalto was responsible for its design, and she produced numerous versions of it after the Paris World Fair.¹⁶⁰ These models led to a garden chair which was developed in 1938 (standard no. 321).¹⁶¹ Aino Marsio-Aalto was one of the ten children of a railway worker from Helsinki. This background may partly explain her modest and unassuming nature. A profound understanding of her childhood environment laid the basis for her interest in minimalism, the simple solutions of design, a certain economy of forms, and the social orientation of her work.¹⁶²

All the children of the Marsio family were educated, and Aino is known to have considered becoming a kindergarten teacher as an alternative to studies in technology. Her younger sister had chosen the former alternative, and her brother Aku had followed the latter course. Although the ultimate reasons for her choice must remain unknown, Aino Marsio-Aalto combined these early interests with her work as a designer. She was interested in Montessori pedagogy, which was much discussed in Finland's Swedish-language press in the 1920s. Her sister may also have introduced her to modern educational concepts. The Montessori method may have appealed to her because of its emphasis on music. Aino Marsio-Aalto's musicality was perhaps her most prominent artistic trait.¹⁶³

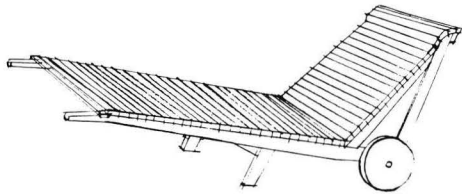
Aino and Alvar Aalto's first child, Johanna, was born while the couple still lived in Jyväskylä. After moving to Turku in 1927, Aino designed the nursery of their new home, from which she later developed a number of themes for Artek. The main features of her nursery design were a crib, a large children's bed, and two tables, of which the lower one could be stored under the high-

artek
PARISIN
LEPÖTUOLI
CHAISE LONGUE
n:o 39



101. Artek's chaise-longue 'Paris'. Standard no. 39, 1937. Designed by Aino Marsio-Aalto, drawn by Maija Heikinheimo 19. 8. 1938. Artek.

artek
 PUUTARVIKKI
 NO. 321



145 x 50 CM.

ARTEK standard		
copyright		
SOMM.		
NOL.	P.	PIIL.
14.12.	29.3.	105.2.
		MT

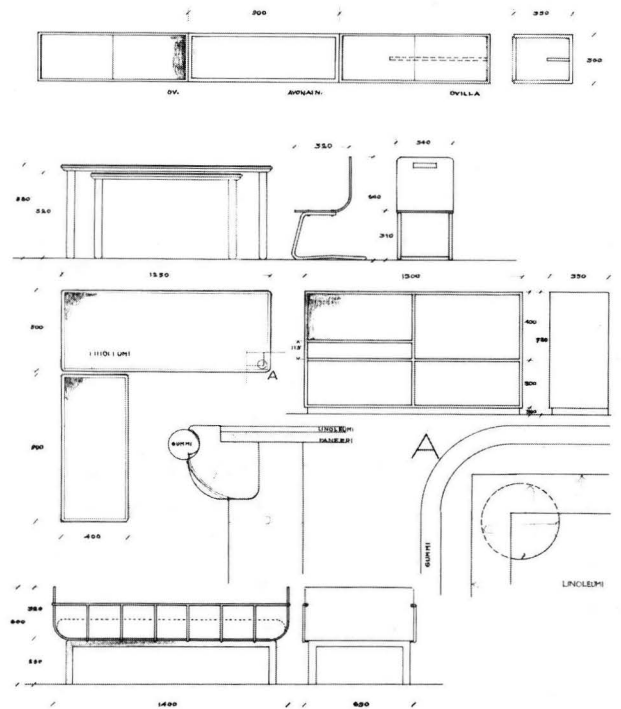
102. Artek garden chair. Standard no. 321, 1938. Designed by Aino Marsio-Aalto, drawn by MT 29.3.1957. Artek.

er one.¹⁶⁴ The tables were lined with soft rubber around the edges, and they were covered with linoleum. There were also special children's chairs, resembling Alvar Aalto's 'hybrid chairs' for adults, which he designed around this time. Aino Marsio-Aalto developed a children's model of this design. The nursery also had cupboards for toys, both freely standing and affixed to the walls.

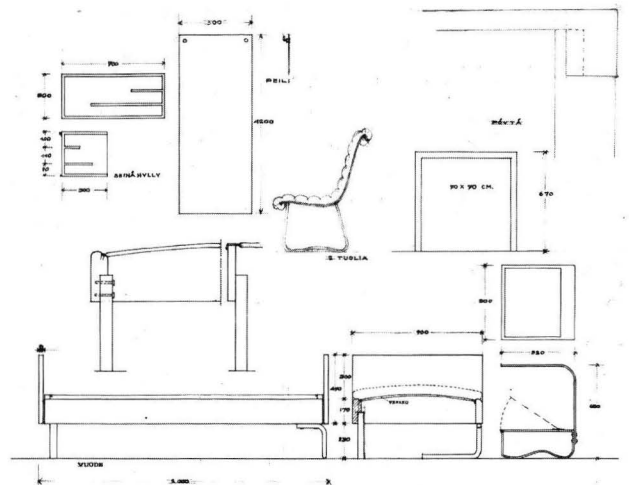
Standardized bedroom and nursery furniture by the Aaltos was displayed at the 1929 exhibition of the Finnish Association for Industrial Art. Their simple, practical nature and low cost were noted by critics: 'The nursery furniture is easy to clean, and the small cupboard is open to promote the child's interest in order, while the wall cupboards are placed so high that small hands cannot reach where they shouldn't. The edges of the tables are lined with rubber tubing...Finally, the colours are well-thought and restrained...' The critic, Salme Setälä, predicted future success for these everyday items of furniture designed for 'everyone'.¹⁶⁵

Nursery furniture was one of the main areas of Aino Marsio-Aalto's work in the early days of Artek. She de-

LASTENHUONEEN
 KALUSTUS



103. Aino Marsio-Aalto's design for nursery furniture for the Aaltos' home in Turku (1927-28). Drawings for a crib, tables, chair and cupboards. SRM.



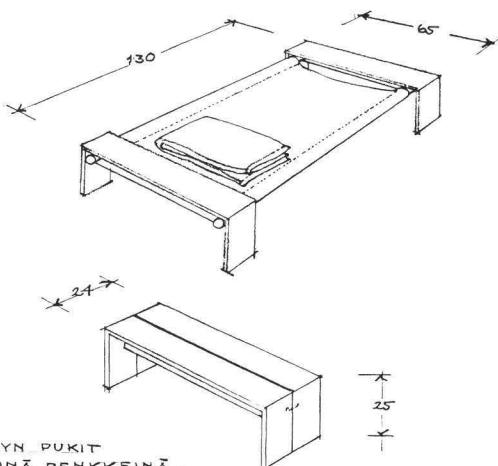
104. Nursery furniture by Aino Marsio-Aalto (1927-28). Drawings for shelves, a mirror, upholstered chairs, a table and a bed. SRM.

signed individual furnishings, standards, and complete interior schemes for kindergartens and maternity centres. She developed a cheerful red children's version of an early chair model by Alvar Aalto that could be stacked.¹⁶⁶ There were also junior versions of tables with Aalto legs. These semi-circular and rectangular tables could be com-

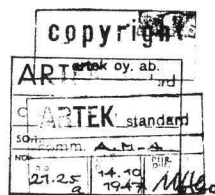


105. The nursery of the Aaltos' home in Turku in the late 1920s. Aino Marsio-Aalto and her children. SRM.

artek
 LASTENTARHAN
 PUKKISÄNKY
 NO, 21.25a.
 NO, 737



6ÄNGYN PUKIT
 PIENINÄ PENKKEINÄ,
 PARITTAIN HADILLA
 YHDISTETTYINÄ.



106. Artek bed for a kindergarten. Standard no. 737, 1938. Designed by Aino Marsio-Aalto, drawn by Maija Heikinheimo 14.10.1947. Artek.

bined to form large, uniform surfaces. Like their early prototypes in Turku, these tables were covered with linoleum.¹⁶⁷ Marsio-Aalto created several models for children's beds; one of the most original ones was a bunk-bed for three from 1945.¹⁶⁸

In the Aaltos' commissions, interior design was often Aino's responsibility, as in the design of Villa Mairea, and in other works for the Gullichsens and the Ahlström company. The interior of the Savoy Restaurant in Helsinki was jointly designed by Alvar and Aino Aalto, and Artek played an active part in these projects. Interior designs did not always use ready-made, standard products; individual furnishings were often drawn for specific projects. Some of these designs were later to become standard products.

Less-known interior designs by Aino Marsio-Aalto are a furnishing scheme from 1936 for the municipal hospital of Varkaus, the restaurant of the Ahlström company's machinery plant, also in Varkaus (1943), and the company's club building from 1945. Of Marsio-Aalto's interior designs for private homes, the most varied one was for the dining-room of Mr and Mrs Higgs in Stockholm, which was commissioned in 1945.¹⁶⁹

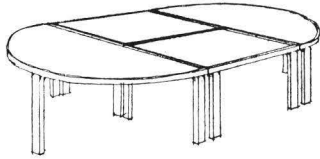
Aino Marsio-Aalto specialized in exhibition design, for which she had received an award at the Milan Triennial in 1936. The Aaltos' way of designing exhibitions greatly differed from traditional, cut-and-dried displays with 'everything in rows', and were not always popular.¹⁷⁰ At the *Vi bor i friluftstaden* (Living in an open-air city) housing exhibition in Malmö in the summer of 1944, Artek introduced several new models, despite war-time restrictions. This was important for the firm, which was

artek

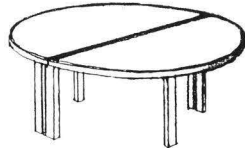
LÄSTENPÖYTÄÖNITÄ 905

4-6 ERILLISTÄ PÖYTÄÄ:
2 KPL Ø 120 CM
2-4 " 60 X 80 "

KOKONKSIHITTA
200 X 120 CM,



2-4 KPL, 60 X 80 CM



2 KPL, Ø 120 CM.



107. Artek nursery tables, standard no. 905. Designed by Aino Marsio-Aalto, drawn by Maija Heikinheimo. Artek.

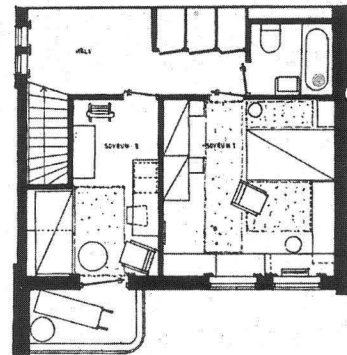
now set on expanding its markets into other Nordic countries, especially Sweden.¹⁷¹

For the Malmö exhibition, Aino Marsio-Aalto designed new models for a sofa, a bed, a desk, and a cupboard.¹⁷² Older Aalto models by Artek were also on display. The cupboard, with sliding doors painted white, was made of birch and the doors were of birch veneer. The desk was light, with only one set of drawers on one side. The desk-top was elm, and the other parts were of birch. Also the bed was of birch, which was left unpainted. The sofa model consisted of three separate elements, one of which had no hand-rests, and the two others had one hand-rest each, permitting them to be joined at right angles.

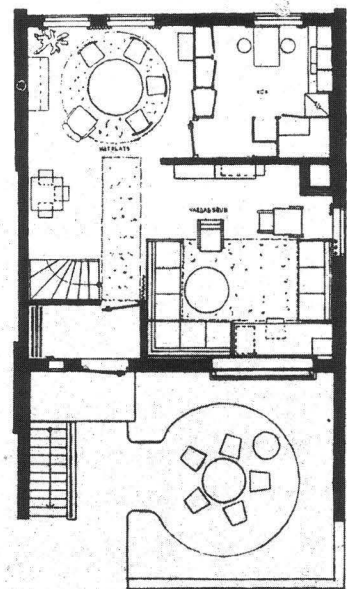
Artek suffered from the war-time shortage of materials in the furniture industry. The production of curved wooden parts had to be interrupted from time to time when no glue was available. The new models on show in Malmö suggest a certain rectilinearity which may have been partly dictated by the shortage of materials. In the autumn of 1944, after the exhibition, Aino Marsio-Aalto developed a sofa-bed version of the Malmö sofa.¹⁷³ This slightly rustic design contained a fairly complex mechanism, with a bed on rollers stored under the sofa. There was also room for a separate mattress under the bed.



108. Living-room on display at Artek's department at the 'Vi bo i friluftstaden' exhibition in Malmö, 1944. Malmö sofas and a desk designed by Aino Marsio-Aalto. Aalto 1944, p. 114.

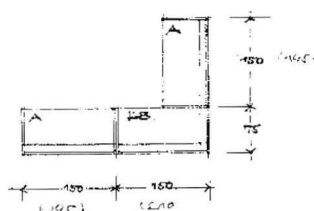
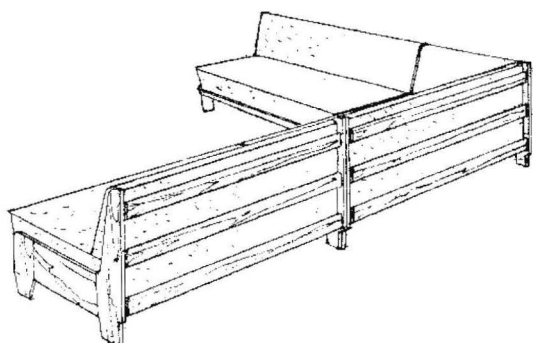
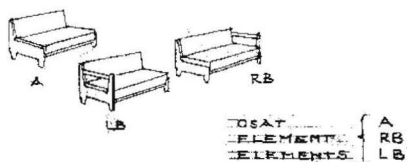


1 : 200



109. Plans of the upper and lower floors of Artek's department at the Malmö exhibition. Aalto 1944, p. 115.

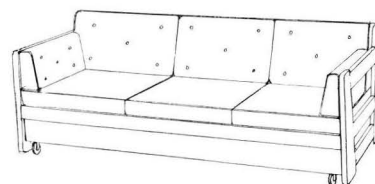
artek
SOHVA
SOFFA
SOFA



110. Malmö sofa by Artek, 1944. Designed by Aino Marsio-Aalto, drawn by Maija Heikinheimo 14.11.1947. Artek.

The war changed the nature of Artek, which had just begun to develop at this stage. Personnel had to be laid off, and Maija Heikinheimo entered the employ of the Schauman company for a brief period.¹⁷⁴ Despite shortages of materials, Artek tried to keep production going as long as possible, and paper substitutes were used for textiles. Artek's range of products in the 1940s is characterized by a large number of household articles and other small objects for the home, which were made with available materials. There were several models of baskets of willow or stripped withes, some of which were to be made by Soviet prisoners-of-war in camps in Eastern Karelia, now occupied by Finnish troops.¹⁷⁵ Also introduced were coasters of birch-bark and straw, and small boxes and containers.¹⁷⁶ Artek had produced similar articles even before the war, e.g. rattan furniture. Nils-Gustav Hahl died on the Hanko front in 1941. In the spring of 1942 Aino Marsio-Aalto became the managing director of Artek, and she probably had many plans for the company after the austerity of the war years. She was not, however, able to carry them out. In 1946, she was diagnosed as suffering from cancer, for which there was no treatment at the time.¹⁷⁷ She was operated on, but her condition deteriorated in 1948, and she died in early 1949. Throughout her illness, Aino Marsio-Aalto

Artek
VUODESOHVA pil. 196
Jstuiin irtonainen resooripaati
sohvan alla alasänky pyörien varassa
jonka alla tila parjalle



111. Sofa-bed by Artek, 1944. Designed and drawn by Aino Marsio-Aalto 25.1.1945. Artek.

worked almost without interruption at Artek, and was even responsible for an exhibition of works by herself and Alvar Aalto which was held in Copenhagen in 1948.

3.3.2. Aino Marsio-Aalto and Villa Mairea

Villa Mairea, in Noormarkku near Pori, is one of the best-preserved residential houses designed by Alvar Aalto. It is rated by both Finnish and international experts as one of this century's most significant single-family houses, along with Le Corbusier's Villa Savoye and Frank Lloyd Wright's Kauffman Villa. In Finland, it has been seen as the architectural symbol of its own time, comparable to the Hvitträsk studio-villa by Gesellius, Lindgren and Saarinen from the turn of the century.¹⁷⁸ Villa Mairea, however, has never been studied in detail, although Göran Schildt's monograph on Alvar Aalto gives some information on its early stages.¹⁷⁹

Villa Mairea was more than just a pearl of Finnish Modernist architecture; it was originally the home of a family with children, and it has undergone a series of interesting processes of change in its use as a dwelling. The following analysis addresses slightly different aspects of Villa Mairea, mainly focusing on the design and arrangement of rooms and space for habitation and family life. These aspects are especially important in assessing Aino Marsio-Aalto's contributions to the project.

The villa was designed as the home and residence of the head of the Ahlström company and his family. Harry Gullichsen married the daughter of Walter Ahlström in 1928, and when Villa Mairea began to be planned there were already three children in the family.¹⁸⁰ The Aaltos had made the acquaintance of Maire and Harry Gullichsen in 1935 in connection with the founding of Artek. Their friendship provided Alvar Aalto with important commissions for the various factories and plant areas of the Ahlström company. In 1936 the Aaltos were com-



112. Villa Mairea at Noormarkku was built in 1938-1939. Alvar and Aino Aalto. SRM.

missioned for the interior design and decoration of the Gullichsens' residence in Helsinki.

The head office of the Ahlström company was for many years in Noormarkku in the area of an iron foundry and saw-mill, originally purchased in 1870 by Antti Ahlström, the company's founder and Maire Gullichsen's grandfather.¹⁸¹ Antti Ahlström went into business in the 1850s, and his enterprise soon grew into one of Finland's leading concerns in the lumber industry. He built a small community at Noormarkku around an old iron foundry, with his own house (*Isotalo*) as its centre. His family lived there, and the house was also the head office of the company.

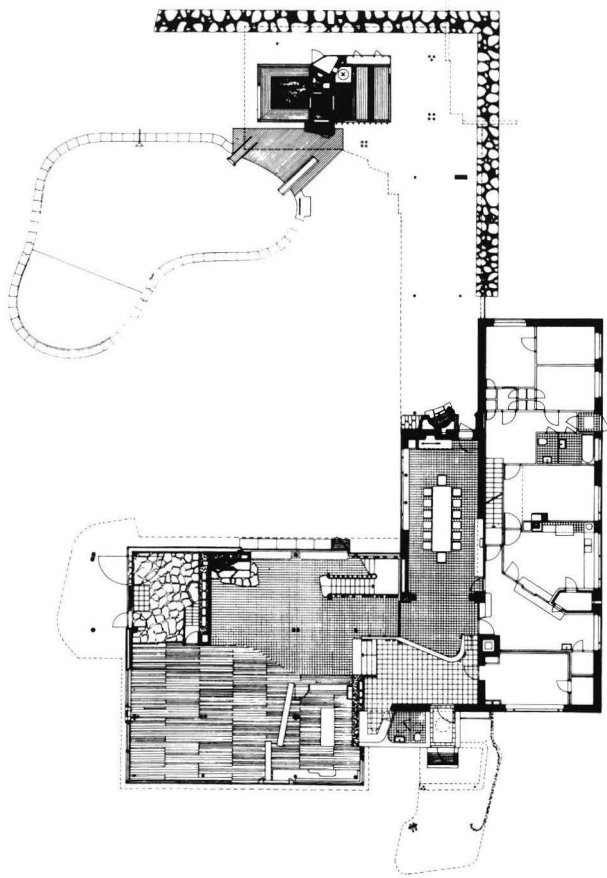
In the early 1900s, Antti Ahlström's son Walter succeeded his mother as head of the firm, and a new head-office building was built on the south bank of the river flowing through the area, near Antti Ahlström's original house. Walter Ahlström built himself a large, romantic English-type house (*Havulinna*) at nearby Myyrymäki on a hill in a stand of pines with a view of the river further away. This was Maire Gullichsen's childhood home, and the Gullichsens' Villa Mairea was built close to it, almost in its grounds.¹⁸²

Villa Mairea was designed in 1937-38, and its arrangement of rooms and space has often been analysed and described as a synthesis of Alvar Aalto's works and as a 'laboratory for different materials', as Aalto himself called it.¹⁸³ It has also been described as a statement by the architects and their clients for a more egalitarian and open society. The Gullichsens' aims and their role at the head of the Ahlström company were in many ways rad-

ical for their time, but to call Villa Mairea a symbol of an envisioned classless society is contradictory, to say the least.¹⁸⁴ This was the residence of the managing director and part-owner of a major industrial concern, and also a bourgeois dwelling, and the underlying concepts of social hierarchy cannot be ignored.

In his significant study on Aalto from 1982, Demetri Porphyrios pointed to the conflicting features of Villa Mairea: the flexible arrangement of space favoured by Modernism was achieved only in the hall and living-room on the ground floor. The arrangement of the rest of the ground floor and the private apartments upstairs follow the traditional use of bearing wall structures.¹⁸⁵ This does not detract from Villa Mairea's architectural value, but I feel that the different functions and uses of this house must be considered if we are to attempt a better approximation of the original situation.

Porphyrios has stressed how Villa Mairea was perhaps the best example of Aalto's ability to use the 'historical conception of the type'. The L-shaped plan, where the areas for official functions and household work are in a separate wing, derives from the aristocratic residences of the Nordic countries.¹⁸⁶ Their model of habitation was in turn adopted in the middle-class villas of the 20th century. In Finland, villas were not limited to the new middle class, but were also part of the culture of the upper classes. In the Finnish context, the term 'villa', as in the Gullichsens' residence, carries a variety of meanings referring to both the past and the future. It has often been linked with works such as Le Corbusier's Villa Savoye and the creations of Modernism, i.e. the future. In its

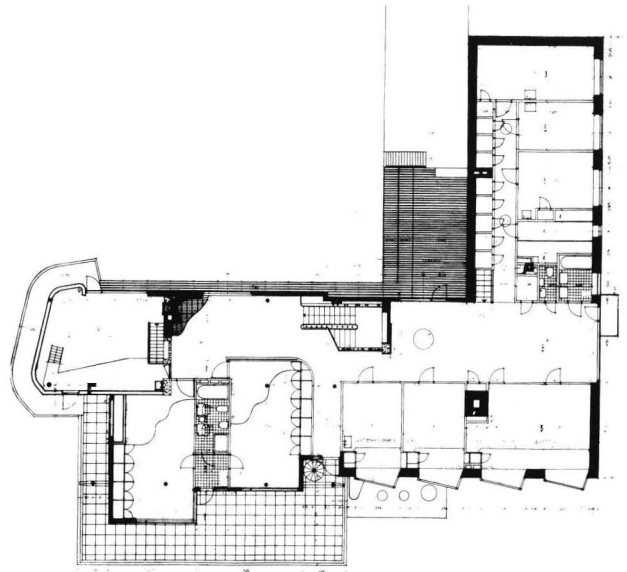


113. The final floor plans of Villa Mairea were completed in the spring of 1938. Lower floor. SRM.

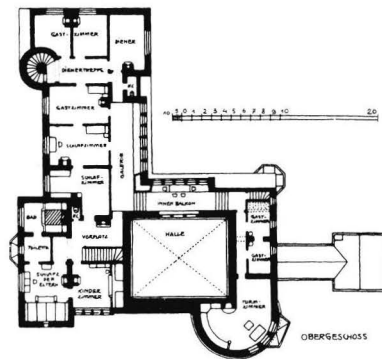
very name, however, Villa Mairea has definite links with the past.

A villa as the dwelling of a single family differed from other forms of housing in size and in the social status of its inhabitants. Around the turn of the century, villas had become a kind of ideal form of housing among the middle class and the intelligentsia. Although Functionalism changed the principles of housing design and planning, it still kept to the idea of the family as the basis of housing and society in general.¹⁸⁷

Dwellings can be seen as reflecting the social relations of their inhabitants. The arrangement of rooms and space in Villa Mairea had nothing to do with a modern idea of a new, classless society. The design of this house followed the concepts of a bourgeois home, established around the turn of the century, with specific rooms and space for entertaining guests, private areas for the family itself, and rooms and quarters for servants. In this scheme or tradition, the upper floor is for private use with bedrooms, the children's rooms, and bathrooms. The servants had their own rooms, usually in connection with the kitchen, possibly with access to the nursery or children's rooms. The stairways were also grouped according to social function. The main staircase, usually in a central location, led to an upstairs hall, and



114. Plan of the upper floor of Villa Mairea. SRM.



115. Floor plans of the main building of the Suur-Merijoki manor, 1901-1903. Architects Gesellius, Lindgren, Saarinen. Hausen et al. 1990, figs. 16-17.

the servants used other stairs further away. In the ideology of villa communities, the verandahs and balconies of villas were links between the interior and the exterior, i.e. between nature and culture.¹⁸⁸

The arrangement of space in Villa Mairea does not follow a modern model of habitation, nor does it refer back

to old agrarian traditions. The combined hall and living-room on the ground floor forms an undivided space with a centrally located fire-place. Although this has been readily interpreted as reminiscent of the *tupa* (the multi-purpose main room of a farmhouse) in vernacular architecture, it has nothing to do with this tradition.¹⁸⁹ In peasant and farmer culture, the *tupa* was a space for work and leisure, private and public life, and men and women. The open hall and living-room in Villa Mairea is clearly a bourgeois home's area for public representation - no one was expected to sleep or work there.

The private part of the villa, on the upper floor, was markedly the area of the children and the wife. It also housed the studio of Gullichsen's artist-wife. The Gullichsens' children each had their own rooms, and a separate hall to play in. The children's part could be isolated with a sliding partition, and the ground floor could be reached via the staircase to the service wing. This area became the domain of the children and their nurse. 'Children operated along an axis between the kitchen and the playing hall.'¹⁹⁰

The design of the service areas and the kitchen clearly reflects the new home-economics concepts of the 1920s and '30s. Although this part of the house was not ruled by the wife, but by the servants, its design mainly followed new, rational principles. Furniture, fixtures and storage space in the kitchen met the modern requirements of hygiene and the scientific management of the home. The kitchen of Villa Mairea is not a single, large room, but an ensemble of three kitchen areas.

Like all other homes, Villa Mairea has passed through different stages in its interior decoration - from the initial furnishing of the empty, new rooms to the cautious, but inevitable, renewal of furniture. A small part of the furnishings were originally fixed, such as the desk in the



116. The dining-room of Villa Mairea in 1939. The chairs around the dining-room table were from the Gullichsens' home in Helsinki. AAA.

study, the glass case in the dining-room, and the kitchen cupboards.¹⁹¹ Artek's files of drawings and designs contain some of the original furniture designs for Villa Mairea. Together with Aalto's designs for the house, this material shows in broad detail how the interior decoration changed after the villa was completed.

Marked in the final floor plans from 1938 are the locations of some of the main pieces of furniture, e.g. a large dining-room table with its chairs, and the tables and



117. The hall of Villa Mairea, 1939. In the corner by the fireplace are a sofa and a cow-hide upholstered bench by Aino Marsio-Aalto. AAA.



118. The music room at Villa Mairea, 1939. In the background are benches without backrests, designed by Aino Marsio-Aalto. AAA.

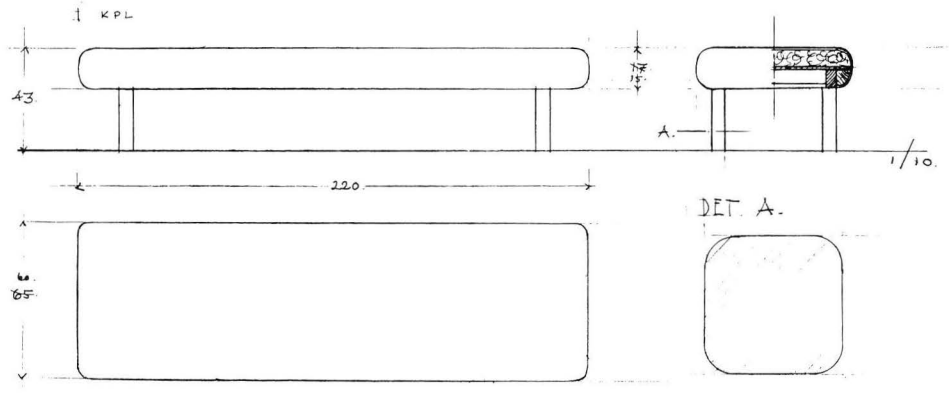
desks of the study. The furnishing of the rooms for holding functions and receiving guests did not rely on Artek's standard products, which may have been regarded as more suitable for public spaces than a private home. All the moveable furniture was designed in what appears to have been close co-operation with the clients, but Aino Marsio-Aalto bore the main responsibility for the scheme.¹⁹² In the early days of Villa Mairea, the Gullichsens had brought articles of furniture there from their Helsinki residence, apparently because the new furniture was not yet ready. Aino and Alvar Aalto had also designed unique pieces of furniture for the Helsinki residence, including large dining-room tables, sofas, and a few large armchairs.¹⁹³

The main features of the large and open hall and living-room space were benches without backrests, designed by Marsio-Aalto in 1939.¹⁹⁴ The hard bench, covered with cowhide, was placed among other furniture in a group around the large, open fireplace. Two other benches of this kind were under the large windows on the other side of the room, in what was called the music room. Marsio-Aalto's original design of the sofa model for Villa Mairea has not been preserved, but later drawings are available.¹⁹⁵ It was based on a cubic sofa model often used by the designer, e.g. in the Gullichsens'

Helsinki residence, but now executed in larger size. The interior of Villa Mairea is accentuated by several wickerwork chairs, which belonged to the original interior design. Their origin is not completely known. In the 1930s and '40s Artek carried rattan and basketwork chairs designed by Marsio-Aalto, but furniture of this kind was also imported.

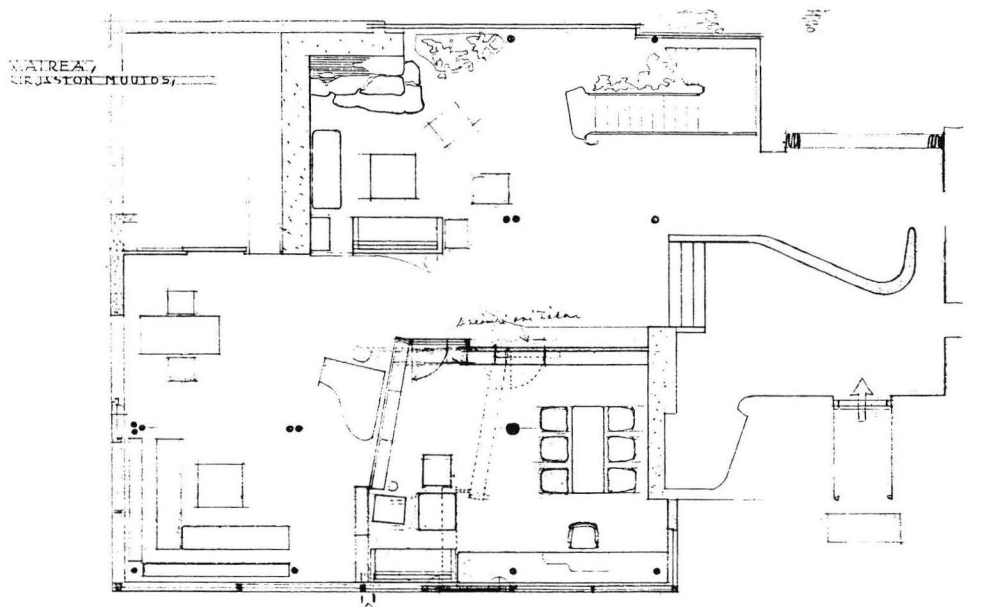
The study of Villa Mairea was originally separated from the hall and living-room area by low, movable partitions, and was quite small. There are no original drawings of the table designed for the study, and the rest of the furniture appear to have been standard Artek models. A chair model designed by Marsio-Aalto for the Savoy Restaurant in Helsinki was used in the study, and was upholstered with brown leather. The open space of the study caused problems when consultations were held there, and a solution had to be found to sound-proof the area.¹⁹⁶ In 1941 Aino Marsio-Aalto drafted an interior design for altering the study at Villa Mairea.¹⁹⁷ The preserved drawings show how the study was enlarged by moving the partitions towards the music room by over two metres. The partition formed by the book-cases was topped by a transparent screen of glass and wood reaching up to the ceiling, and sound-proofing the study from the surrounding area.

PENKKI
 JALAT *kuusi tai kyll. koivua*
 KOVA PEHMUSTUS
 NAHKAPÄÄLYSTE



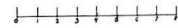
119. Leather-upholstered bench by Artek for Villa Mairea, 1939. Designed by Aino Marsio-Aalto, drawn by Maija Heikinheimo, 3.3.1939. Artek.

A. M-A
 20.7.39, 3.3.39. *Maija*



120. Alterations to the study at Villa Mairea, Aino Marsio-Aalto 13.11.1941. AAA.

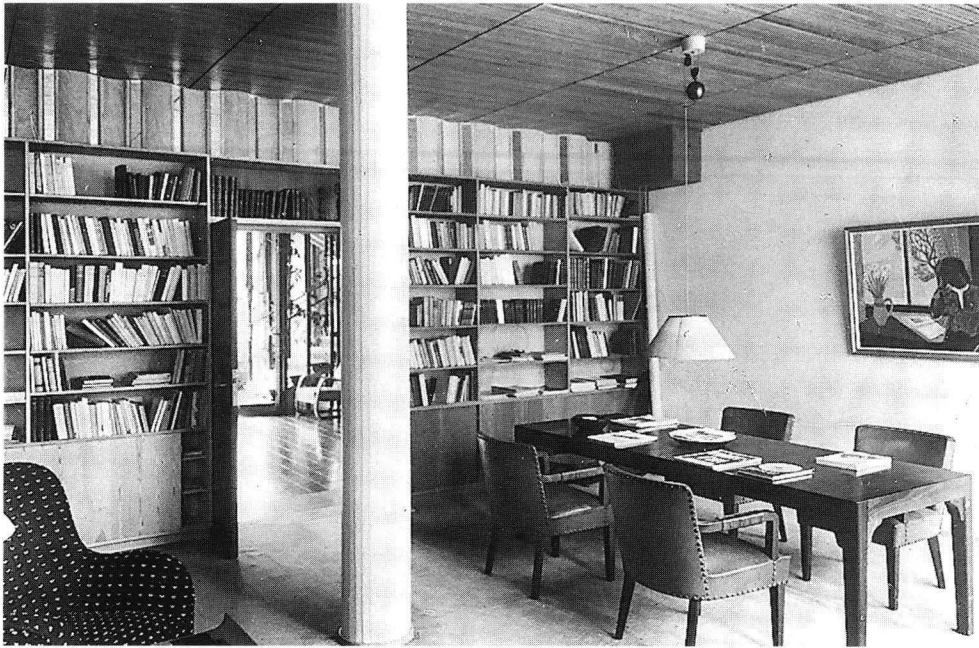
ARTEKIN TUOTOINNIETO
 AINO MARSIO-AALTO
 13.11.1941



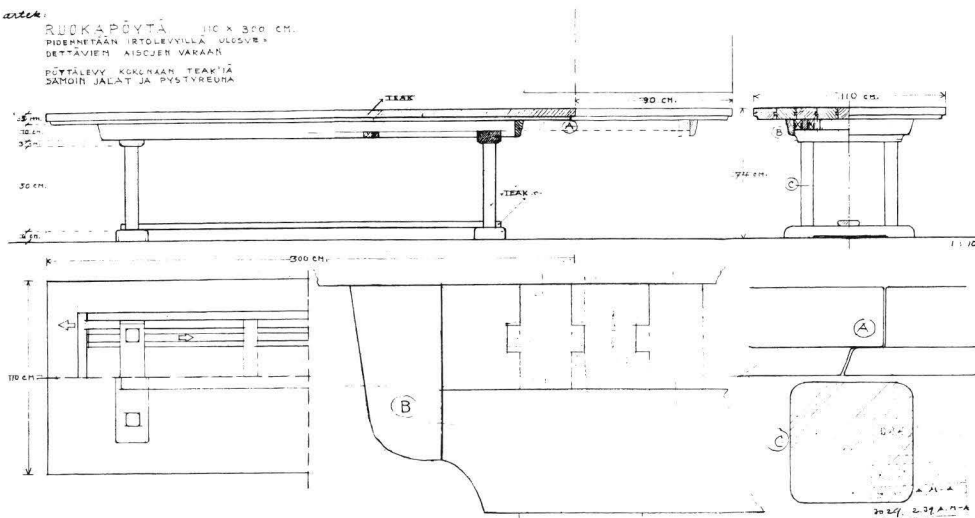
1:100 A.M. Aalto

The large dining-room with its sparse and simple decor is perhaps one of the most beautiful spaces in Villa Mairea. Unlike the large table, the original designs of the slender spindle-backed chairs have not been preserved.¹⁹⁸ The top and legs of the table were of teak, and it could be extended with separate parts to a full length of almost four metres. The dining-room also had a large white lamp hung from the ceiling.¹⁹⁹ There were also other lamp models by the Aaltos, e.g. an adjustable floor lamp model from 1937 with a metal shade.²⁰⁰

The kitchen was mainly furnished with fixed cupboards and table-tops. Kitchen interiors had been Aino Marsio-Aalto's speciality at least by the time of an exhibition on the rationalization of small apartments, held in 1930. At this exhibition, a point of special interest was a kitchen designed by her, with chests of drawers and tables on rollers.²⁰¹ The Gullichsens' home in Kaivopuisto in Helsinki also had a modern kitchen and serving room, with interior design by Aino Marsio-Aalto.²⁰² The arrangement of the kitchen in Mairea into three



121. The study at Villa Mairea after alterations and repairs in the 1940s. The chairs follow Aino Marsio-Aalto's design for a model for the Savoy Restaurant in Helsinki. AAA.



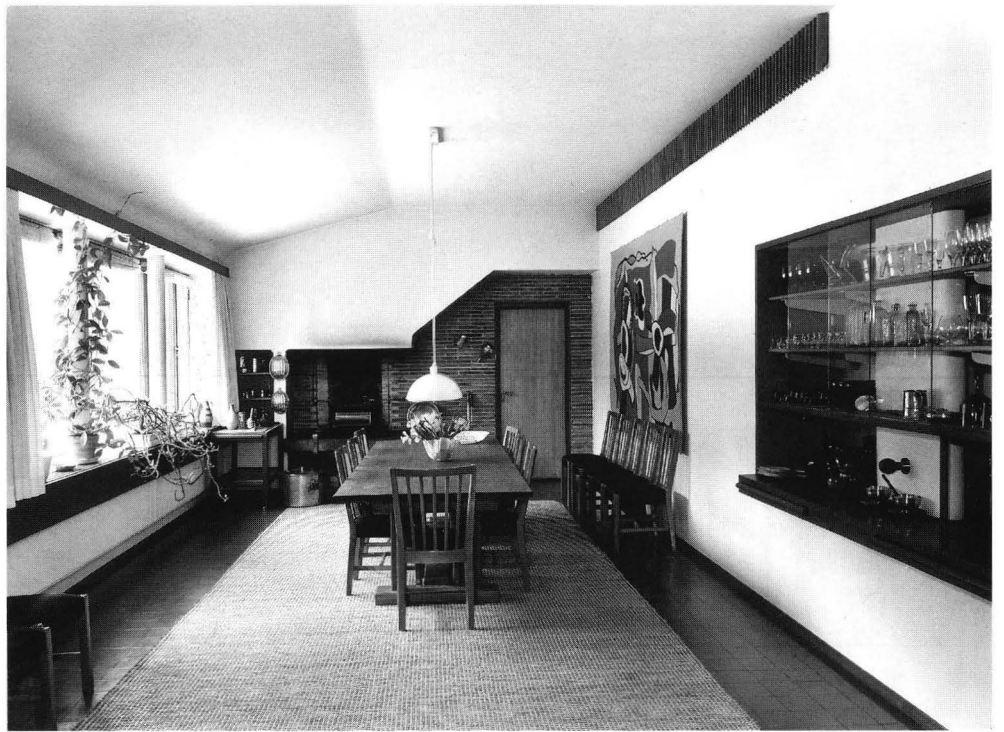
122. An extendable dining-room table of teak for Villa Mairea, 1939. Designed and drawn by Aino Marsio-Aalto in February 1939. Artek.

areas emerged early in the planning process.²⁰³ Next to the actual kitchen was a separate serving room, which could be seen from the kitchen through a cupboard with glass walls. Behind the kitchen was the servants' dining area. This arrangement contains features of both modern kitchens and older traditions. The relatively small size of the kitchen, and the glass wall separating the serving room reflect the Functionalist kitchen designs which began to emerge at the end of the 1920s.²⁰⁴ The serving room, in turn, was a traditional part of bourgeois dwellings, where it separated the kitchen from the dining room.

All in all, the dimensions of the kitchen of Villa Mairea were not successful. The other parts of the villa did not follow minimal concepts of habitation, but using the small kitchen to arrange food and drinks for functions

was a problem from the very beginning. This clearly suggests some degree of conflict at the design and planning stage. It has been suggested that Aino Marsio-Aalto was not responsible for the kitchen, at least in the initial stage.²⁰⁵ On the other hand, the special solutions of the kitchen fixtures point to Aino Marsio-Aalto's contributions. For example, the mechanisms used in the waste-bin cupboard and the ironing board, and the design of the storage cupboards are familiar from her kitchen at the rationalization exhibition.²⁰⁶

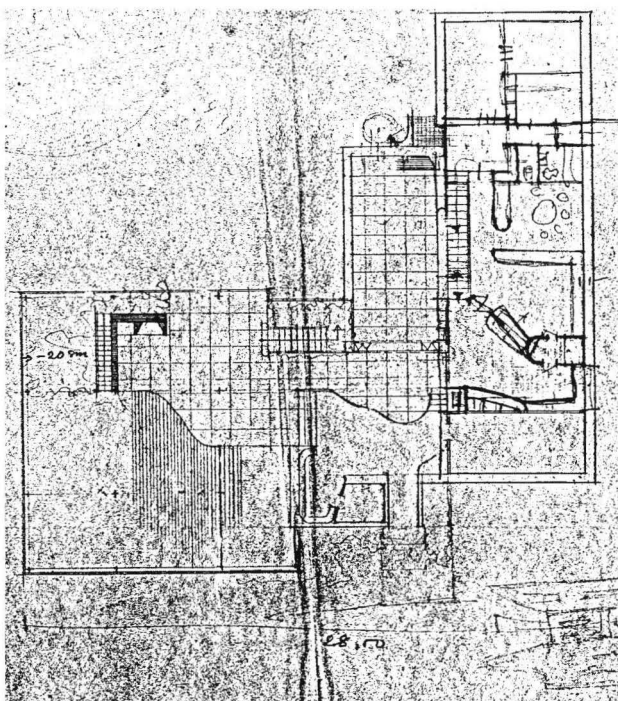
A number of unique pieces were also designed for the private premises on the upper floor, although normal Artek products were partly used. The children's hall had Artek's nursery chairs and tables with Aalto legs. Each of the children's bedrooms had a small Artek table and a chest of drawers on wheels. The children were also



123. The interior of the dining-room at Villa Mairea as completed. Photograph by H. Havas, SRM.

taken into account in the design of various fixtures. One of the bathrooms was designed for the children, with two wash-basins, a higher and a lower one.²⁰⁷ Work continued, and during the war, Maire Gullichsen's studio was designed with fixed cupboards.²⁰⁸ The cupboards and shelves were intended for the artist-owner's

paintings, materials and art magazines. In the 1940s Aino Marsio-Aalto designed a few other unique pieces for Villa Mairea, e.g. a cupboard with a folding table for the dining-room.²⁰⁹ This cupboard was then produced by Artek for a few years. The unique and individual furnishings designed by Aino



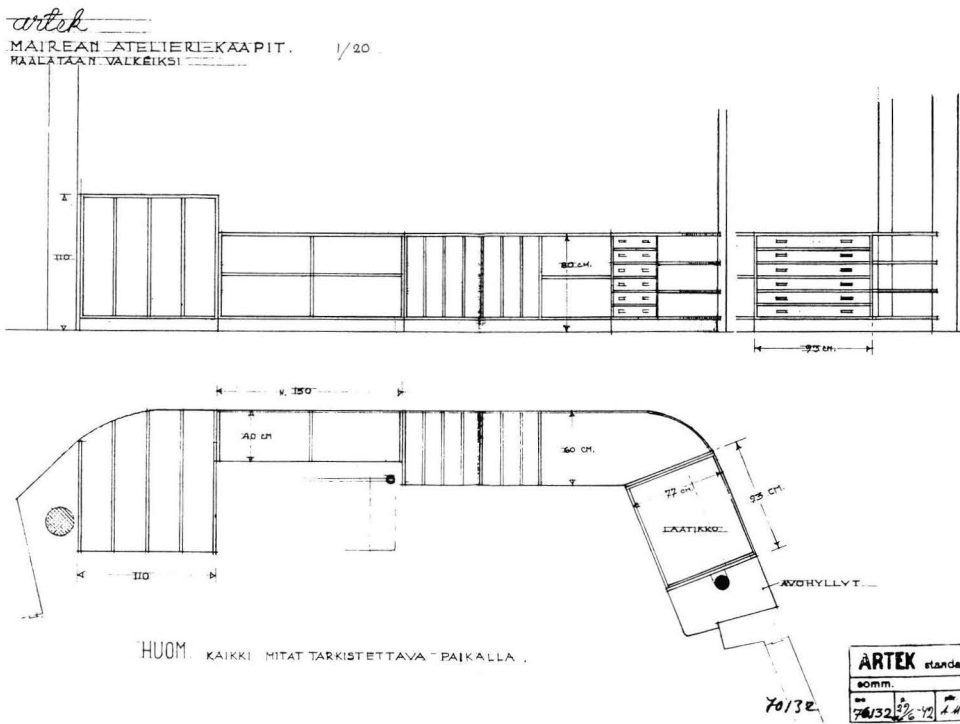
124. Sketch for the ground plan of Villa Mairea, 1938. Shown in the drawing is the arrangement of the kitchen. AAA.



125. The kitchen of Villa Mairea in its original state, 1939. AAA.



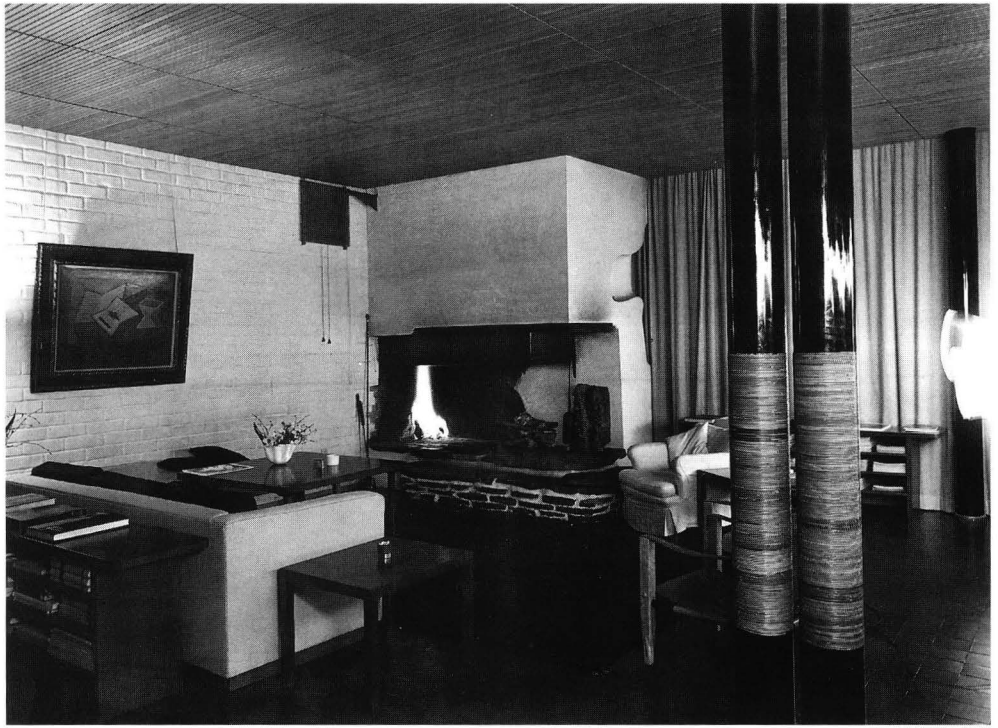
126. The nursery hall of Villa Mairea, 1939. AAA.



127. Cupboards by Artek for the studio on the upper floor of Villa Mairea, 1942. Designed and drawn by Aino Marsio-Aalto 29. 6. 1942. Artek.

Marsio-Aalto created the character of Villa Mairea. This outwardly modern building was decorated in a flexible upper-middle class spirit. Alvar Aalto's famous chairs for public spaces were used sparingly, although they were present at Mairea from the very beginning. Despite the war, the interior decoration was carried out in a studied and artistic manner.²¹⁰ However, the war inevitably affected the role of this building in its own social field. Villa Mairea was never used for its original planned purpose. Post-war Finland was socially and in other respects a completely different society to that of the late 1930s.

The Gullichsens' situation had also changed. Some of their children had been sent to Sweden to study, and the Ahlström company had suffered major financial losses when Finland had to cede territories to the Soviet Union.²¹¹ The company now concentrated most of its work in Helsinki, which meant that Villa Mairea, the managing director's residence, was in the 'wrong place'²¹² and in the wrong scale, or in the words of Kristian Gullichsen: 'After the war, the house was like a shoe five sizes too big.'²¹³



128. The fireplace in the hall of Villa Mairea. Photograph by H. Havas, SRM.

4. THE IDENTITY OF WOMEN ARCHITECTS

The following analysis of the careers of artist-architects, their introduction into professional life, and the ways they became defined as artists follows a theoretical approach in which art is given a basically collective nature. As a separate area, art has been discussed under various labels and from the perspectives of different disciplines. Sociological theories view art as intersubjective activity, with artists belonging to networks of interactive relations. In aesthetics, the idea of an 'artworld' has been developed in 'institutional art theory'. Neither the collective view of sociology nor the institutional approach of aesthetics can satisfactorily serve a perspective based on the individual, his or her creative work, and position in the field. They are, however, important means for studying the leading role of institutions, and the ways artists are produced. Pierre Bourdieu has observed how artists alone cannot make themselves artists; their existence depends on the field and how it is constituted.¹

What then were the leading institutions of Finnish architecture, whose systems of rules and norms guided the processes of becoming an architect and operating as one? Education and training, as discussed in Chapter 2, were important, and were soon paralleled by professional associations. These organizations not only controlled their members, but as architectural competitions came under increasing control by the profession and criticism developed in the trade journals, this sector began to supervise the profession as a whole. The Board of Public Works and Buildings (later the National Board of Construction) also took on the role of a dominating institu-

tion. Although the Board's authority began to wane in the early 1900s, it remained a controlling mechanism with its supervisory functions and job opportunities for architects.

4.1. Perspectives on Women's Choices

It is often claimed that the crucial moment for gaining entry into the social field of the arts, i.e. the artworld, is when the newly trained artist first steps into this area. This moment is also defined by the contemporary generation of artists, which is by no means identical with biological generations. Entering the field has been seen as a decisive stage where individual and social factors interact.² An artist's career, much less an architect's, does not necessarily begin after one's training is completed, and graduation does not pave the way to professional practice. Students of architecture have traditionally been required to undergo practical training. The brief trainee period included in the degree programme did not usually give a clear image of the profession and its different aspects, and most graduates worked in the offices and studios of older colleagues, sometimes for years. This carried on a kind of master-apprentice relationship, in which the younger architect was able to acquire the self-confidence and credibility necessary for his or her future career.

Graduates in architecture usually found their first employment in the architect's offices of their teachers. Both Gustaf Nyström and Onni Tarjanne employed former students, and minor positions at the Board of Public Works and Buildings were also open to graduates. The latter alternative was quite common around the turn of the century, and its appeal was partly due to the official status



129. Ines Holming (later Törnvall) and Signe Lagerborg (Lagerborg-Stenius), the first women architects at the Board of Public Works and Buildings, with colleagues in the 1890s. Profiles 1983, p. 15.

and recognition of government service.³ Also women graduates in architecture began their careers along these routes. For them, a professional role entailed different individual choices and aims, but, as a group, they experienced similar problems in trying to combine careers with family life, and in professional competence, acceptance, and recognition. It is difficult to outline any general image of their professional aims, although their entry into working life reflects the importance of education and training for all of them.

One of the first personal choices faced by young women architects concerned combining one's career with family life. Of the eighteen women architects who began their studies at the Polytechnic Institute in Helsinki, thirteen eventually married.⁴ Eight of these marriages were with a fellow architect or an engineer, and only three women completely gave up work after marriage. Marriage had a clear influence on careers. Most of the ten women architects who entered government service immediately after graduating gave up work after marriage. Those who had married architects or engineers usually continued in tasks more or less corresponding to their training. At least Signe Lagerborg-Stenius and Ines Törnvall (née Holming) are known to have had joint offices or partnerships with their husbands, and Elsa Richardtson (née Hindström) assisted her husband in his architect's office. Of these early women architects, only Wivi Lönn, who never married, had her own office from the beginning of her career.

Among the 24 women architects who studied at the University of Technology before 1917, family relations developed as follows. Eighteen married, but only three left working life completely, and two entered other fields without ever practising in architecture.⁵ Marriage with a fellow architect, civil engineer, artist, or student in one's own course became even more common, with fourteen women choosing these alternatives. By this time, there were more varied opportunities for entering working life. Nine were employed by the state or a municipality, but almost all had their own offices at some stage, or assisted their husbands in their offices. However, none of the women of this period established her own office at the very beginning of her career, and Wivi Lönn remained a unique example of an independent career.

Very few women architects felt a need to give up their careers completely. The earlier women, however, had fewer opportunities to combine different ways of working, and were mostly left without alternatives. By virtue of their numbers, the younger women architects of the 1930s and '40s could work in changed conditions. By the early 1940s, over a hundred women had graduated as architects, and over half of them were active in the profession.⁶ Many were able to establish their own architect's or interior designer's offices, while still working for the state or the local municipality. Initially, most of them worked for an older architect, or - especially among the younger generation - at the Board of Public Works and Buildings. This underlines the role of the

state as an employer of women architects. The importance of the state for the whole profession dates back to the 19th century, but it offered clearly different prospects for men and women.

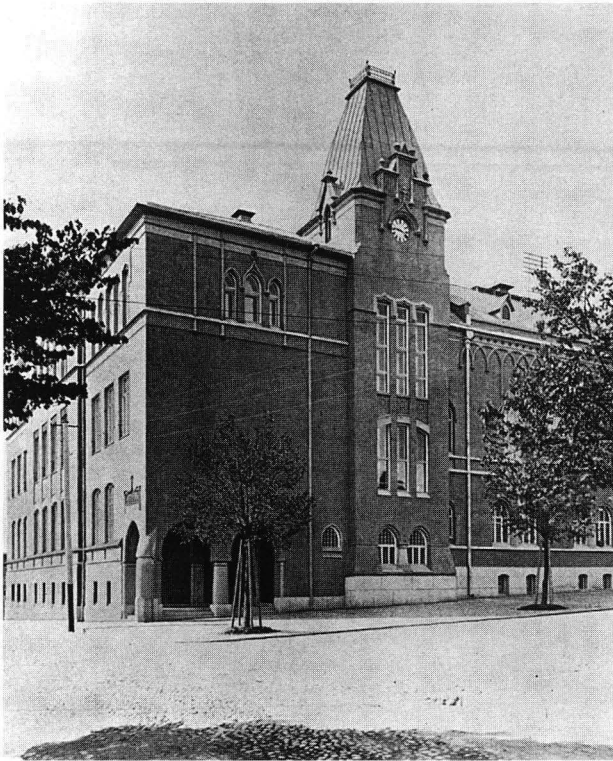
My review of professional objectives focuses on two factors: the formation of professional competence and the emergence of values of identity required in the profession. By following the rules and norms of their field, architects also outlined their own positions, and influenced the creation of their 'names'.⁷ In other words, an architect had to make a public debut if he or she was to become an independent designer and planner recognized in the world of architecture.⁸ Works prepared in the service of other architects or in government administration were hardly attributed to the architect concerned. Architecture differed from the visual arts; the works of architects had to have a client and could only be realized through collective effort. This process both increases an understanding of the responsibility of architects and detracts from the idea that a building sprang solely from the hand of a creative artist-architect.

Unlike the visual arts, architecture did not have a medium of public exposure such as exhibitions. This meant that commissions became an important means of creating a name for oneself in architecture. One's first major commission was the debut marking one's entry onto the scene, and into one's own generation of fellow-artists.

The following section reviews the individual choices of women architects, their double roles between career and family life, and their strategies for achieving acceptance. Reference is again made to Wivi Lönn, Salme Setälä, and Aino Marsio-Aalto, and their choices and opportunities. I shall attempt an understanding of how they developed in their careers, and the ways the 'names' of these women found their place in the field of architecture.

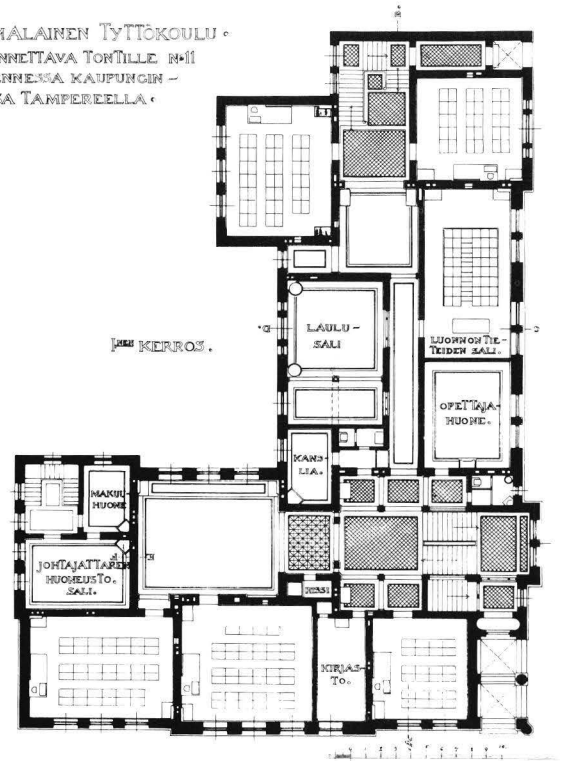
Wivi Lönn

Wivi Lönn began her career in the offices of two former teachers.⁹ She went to work for Onni Tarjanne before graduating, and was employed by Gustaf Nyström from the summer of 1896 to the autumn of 1897. While still at Nyström's office, she received a major commission from her hometown of Tampere. She once pointed out in an interview that, despite requests, she did not wish to work for the Board of Public Works and Buildings. She mentioned having received commissions of her own, which permitted her to choose private practice.¹⁰ Lönn's debut was the design of the Finnish Girls' School of Tampere. She was one of the school's first pupils, and her father, Emanuel Wilhelm Lönn, was one of its founders.¹¹ This commission gave the young Lönn an opportunity to design a large institution building as her first independent project. She took on the task with admirable thoroughness. She received a special travel grant, permitting a visit in the summer of 1898 to England,



130. The Finnish Girls' School of Tampere designed by Wivi Lönn and completed in 1902. Wasastjerna 1904.

•SUOMALAINEN TYTTÖKOULU •
 RAKENNETTAVA TORILLE N:II
 KUUDENNESSA KAUPUNGIN -
 OSASSA TAMPEREELLA •



131. Wivi Lönn, ground plan of the Finnish Girls' School of Tampere, 1899. SRM.

Scotland and Continental Europe to study granite and brick architecture, and the design of school buildings.¹² Lönn sought solutions for school design and the use of undressed stone which was perhaps the main problem of materials that interested Finnish architects at the time.¹³ One of her destinations was Aberdeen in Scotland, whose tradition of granite architecture interested architects throughout the Nordic countries. The choice of Aberdeen may have been suggested by a visit there a couple of years earlier by Gustaf Nyström's brother Alexander, who was also an architect. According to available information, Lönn was the third Finnish architect to study this type of architecture in its original location.¹⁴ Lönn also studied general features of British school architecture. The local authorities had given her permission to freely visit all schools in the Aberdeen area, and she recorded her impressions in her travel report.¹⁵ For her own work, Lönn adopted a number of principles of British school design which she found positive. Of these, hygiene, cleanliness, and plans focusing on halls were used in her later school projects. The objectives of improved hygiene and ventilation were not alien to Finland, but were not consistently followed in the 1890s.¹⁶ Soon after the Tampere girls' school project, Lönn had another opportunity to test her skills in this area of architecture. The town of Tampere was rapidly growing at the time, and in the early years of the 1900s a new primary school had to be built. In February 1903 the mu-

nicipal authorities declared a design competition for the school. Entries were limited to architects active in Tampere.¹⁷ Wivi Lönn's project, under the pseudonym *Koe*, received first prize, which finally marked her entry into the profession.¹⁸ Such an event has often been given major importance in art-historical and architectural studies. It has even been suggested it was a decisive stage in the artist-architect's career, with a clear influence on later developments. In this sense, debuts can be seen as datum points for comparisons with later situations.¹⁹ This appears to have been the case in Wivi Lönn's career; she made her professional debut with two school projects, one of which fulfilled the main criterion of public exposure, i.e. first prize in a competition. She had put her own work up for public scrutiny and criticism, establishing in this way her own standing as a professional architect. In later years, Lönn's 'name' became specifically associated with the design of schools. During her almost fifty years of active professional life, Lönn designed a total of thirty schools in different parts of the country.²⁰ Most of these were co-educational secondary schools in towns and cities, followed by primary schools. In the early years of the 20th century, Lönn's reputation as a skilled designer of large school buildings and a winner of many competitions ensured a stream of commissions for other institution buildings. The school projects made her work known to the Board of Public Works and Buildings and also to the Board of Educa-

tion, which was officially responsible for building primary schools.²¹ In her own professional ambitions, she clearly preferred commissions of this kind, at least in the first decade of the 20th century. She also received a large number of private commissions for villas, but in later years she mentioned that her time was taken up by too many of these 'minor jobs'.²²

Even in institutional architecture, a network of personal contacts was essential to Lönn's relations with her clientele. She had many acquaintances, and as a recognized and economical architect, she appealed to organizations and bodies that wished to use the services of women architects. In other countries, organizations such as the YWCA preferred women architects in their projects.²³ One of the earliest projects in this sector was a home economics school in Tampere, which was commissioned from Lönn in 1902 soon after the girls' school project. This, too, was a specialized institution for girls, although as a boarding school, it required a different approach.²⁴ Over the following years, Lönn received many commissions of this kind. In 1906 she designed the Ebeneser kindergarten teachers' institute in Helsinki; in 1907 a home economics school in Karjaa; and in 1911 a crafts and home economics school in Naantali. Even as late as the 1920s, Lönn's contacts brought her one of her largest commissions: the YWCA building in Helsinki ('Hotel Helka'). The planning of this building began in 1922, and the designs were completed in 1927.²⁵

An important part of Wivi Lönn's network of personal contacts was her friendship with Hanna Parviainen, which began in Jyväskylä in 1910. Parviainen was the daughter of a wealthy industrialist. Her ties with Lönn deepened over the years, and her family began to use Lönn's services. In the 1920s Hanna Parviainen became the managing director of the family's industrial concern, which launched a new stage in Wivi Lönn's career. She planned and designed most of the microstructure of the Parviainens' industrial community at Säynätsalo, including housing units, a kindergarten, a primary school, an old-age pensioners' home, and a plan for an adjacent area of single-family houses in Muuratsalo.²⁶ Not only a friend, Hanna Parviainen was also Lönn's patron. Even though this relationship required much of Wivi Lönn's time from the 1920s onwards, it brought her definite financial rewards.²⁷

Wivi Lönn had begun to travel abroad around the turn of the century, mostly on combined holiday and working trips. She visited exhibitions and projects related to her work, often spending time in Switzerland with Stina Östman, a friend from her student days.²⁸ From the 1910s, if not earlier, these trips were also undertaken for reasons of health. Lönn's knees had begun to suffer from her habit of working in a standing position. The spas of Central Europe, especially Wiesbaden, became her yearly destinations.²⁹

These journeys may also have been Wivi Lönn's way of enjoying her personal freedom. Her attitude regarding work was so all-encompassing that it excluded any



132. The YWCA building in Helsinki, designed by Wivi Lönn, after completion in 1928. Photograph by Eric Sundström, HKM

consideration of having a family. In her old age she once observed, 'I have been so interested in my work that I haven't had time for anything else.'³⁰ Her relationship with Armas Lindgren, for example, was professional and collegial from the very beginning.³¹ Lönn did not like being ordered about, and probably never considered marriage seriously.³² These were, however, aspects of her life, on which she preferred to remain silent.

Wivi Lönn had close ties with other women architects, and she employed Stina Östman until the latter's marriage. Even in later years, her office employed women colleagues, of whom Aili Salli Ahde was given a more independent role in the 1920s in the YWCA project.³³ Her own example notwithstanding, Lönn was not an outspoken champion of women's emancipation, but she was warmly disposed towards *Architecta*, an association of younger women architects founded in 1942.

Professional organizations did not especially interest Lönn. Since her student days, she had been familiar with Finland's now leading architects: Eliel Saarinen, Herman Gesellius, Armas Lindgren, and Lars Sonck. Around the turn of the century she had close ties with the office of Gesellius-Lindgren-Saarinen, which she sometimes assisted in rushed projects. She was familiar with the Architects' Club of the Engineering Society, although there is no specific information on her membership. In her interviews, she only referred to balls arranged by the club, and to Gustaf Nyström's participation in its activities.³⁴

Successes in competitions made Wivi Lönn a recognized 'name'. She was relied upon as an architect, as shown by the fact that in two significant competitions Armas Lindgren specifically wished to collaborate with her.



133. *Hanna Parviainen (left) and Wivi Lönn on a motoring tour of Spain in 1927. Oulu University Library.*

However, it is difficult to establish a connection between Wivi Lönn as an individual and her role as an artist-architect. She did not reveal much of her private life, and was even reticent in professional matters, preferring to remain outside the organizations responsible for decisions concerning the field. By reinforcing its own status, the name of an artist-architect plays an important role in the story of art, permitting a review of the artist's 'texts' or works in relation to the achievements of others.³⁵ Wivi Lönn's name as an architect of institutions, and thus of the existing order, was for many decades absent from the written history of Finnish architecture. This is all the more interesting as Lönn specialized in an important area of architecture and introduced a number of significant innovations.

Salme Setälä

After graduating in 1917, Salme Setälä found her first employment at the architect's office of Gösta Juslén. She was dismissed after only three months, and her former employer next advertised for 'an experienced male architect'.³⁶ This young woman architect, only 23 at the time, had her first encounter with discrimination against her gender in her very first place of employment. In her memoirs, Setälä mentions that Juslén later confessed that he had fallen in love with her, which placed his marriage in jeopardy.

Setälä was nevertheless able to find other work from time to time. She had been Otto-I. Meurman's assistant in 1917 in arranging Finland's first exhibition of housing architecture.³⁷ After her unsuccessful period in Juslén's employ, she participated in the Finnish Civil War on the side of the Whites, and was imprisoned by the Reds.³⁸ After the war, she found employment for six months with

the architect Yrjö Sadeniemi, a family friend. In 1919, she again found work for six months at the office of Borg, Sirén and Åberg. One of the partners, Kaarlo Borg was the brother of Elsi Borg, with whom Setälä had studied.³⁹ In October 1919 Salme Setälä married the journalist Frithiof Cornér.⁴⁰

Despite the unfortunate dismissal by Juslén, Setälä's entry into working life followed a fairly normal pattern. She also worked for a former teacher, Yrjö Sadeniemi. Before her marriage, she had not, however, made any binding decisions concerning her career. The birth of her children tied her to the home, which had a decisive effect on her future work.

Remaining at home with her children did not lead to a normal housewife's existence for Setälä. From her mother, Helmi Krohn, she had inherited literary skills and an ability to translate. She was able to do this work at home, especially after employing a nurse following the birth of her second child.⁴¹ Between 1919 to 1929, her years at home, she translated several books. This, along with her own family background, guided her into literary areas. In the 1920s Salme Setälä published seven literary works, some of which were books for young people, as well as an interior-decoration guide in 1929.⁴²

Writing may be described as having rivalled Setälä's architectural interests. These areas clearly complemented each other; Setälä could not yet work full-time outside the home, but she was still able to take on architectural work. In 1919 she had won a furniture-design competition arranged by the Kotiteollisuusyhtiö Pirtti firm. Interior decoration interested her to such a degree that in 1925 she established the AC interior-decoration firm together with Aili Salli Ahde.⁴³

Throughout the 1920s, Salme Setälä combined the roles of a mother, architect, and author. While encroaching



134. This book written by Salme Setälä in 1924 for young readers was illustrated by the architect Elsi Borg.



135. Salme Setälä and her children in the late 1920s. Helmi-riitta Honkanen collection.

upon each other, these roles were also complementary. Setälä's entry into the world of architecture does not present a clear picture. Despite early successes in the design of furniture and glass objects, she had not found recognition, and diverted part of her creativity into writing. She acquired a 'name' as an artist already in the 1920s, but in literature and not in architecture. This dichotomy followed her until retirement, and she alternately directed her efforts into architecture and writing. Setälä was divorced at the time of the Depression, and she felt that her new status required work with a regular salary. This was the main reason for her seeking employment at the Board of Public Works and Buildings. It was only in 1937, when she became Otto-I. Meurman's assistant in planning work, that Setälä can be seen as having set herself definite professional aims. She was no longer satisfied with her role as an un-independent secretary to Meurman, and wanted to learn something new.⁴⁴ Planning was not new to Setälä alone; this specific field and its legislation were only now being developed. Setälä won Meurman's trust, and through him received private commissions in planning projects.⁴⁵

She developed as a planner and desired recognition mainly in an official capacity. Finnish women had been granted access to most civil-service positions in 1926, but there were still restrictions.⁴⁶ Setälä was officially employed as a supernumerary draughtswoman until 1939, when she was made supernumerary architect for one year.⁴⁷ This was the recognition she had sought - 'approval' by her superiors.⁴⁸ During the war, reductions in salary were introduced, and Setälä was again a supernumerary draughtswoman. The supernumerary architect's position was given to Erkki Hyhkö, who had graduated as an architect in 1937, and 'women applicants were ignored in the time-honoured fashion'.⁴⁹ In 1944, when a higher architect's position was again given to Hyhkö, Setälä applied for the town-planning architect's post of the City of Helsinki. She was not given a recommendation by her own superior, Erkki Huttunen who was then head of the Board, although she was warmly recommended by Otto-I. Meurman and the Board's senior architect Eino Siira. Setälä was not appointed to the position.⁵⁰ Poor pay led civil-service architects to seek other positions, and some even resigned from government service because of low salaries. In this respect, the Board of Public Works and Buildings lagged behind the Board of Roads and Waterways, as its architects were assumed to generate considerable additional income from their private commissions.⁵¹ On the other hand, architects in town

planning had a low status even among their colleagues at the Board, and many of the women architects moved to Sweden to find work.⁵² In order to cope, Setälä adopted a strategy based on threats. She was aware of her capabilities as a skilled and productive civil-service architect, and when she did not receive a position for which she had applied, she threatened to seek employment elsewhere. This, however, led to only temporary benefits.⁵³ Salme Setälä's various official capacities in the 1930s and '40s and her goal of securing a permanent position in her organization reflected her belief that a good worker will, and should, be rewarded for his or her work. Despite her awareness of blatant discrimination against women in nominations and pay at the Board of Public Works and Buildings and its successor, the National Board of Construction, she never lost faith that there were still opportunities for advancing in her career. This attitude and its resulting behaviour are often described as typical reactions of women pioneers in professions. They had unswerving faith in a kind of meritocratic ideal or belief, which led them to assume that if they were good enough, sufficiently educated, and devoted enough to their work, their efforts would be rewarded. Even the prejudice they encountered could not shake their belief in meritocracy and their own careers.⁵⁴ Setälä's career as a civil servant involved the less-val-

ued tasks of a clearly male-dominated area. Women were cheap labour, seeking work corresponding to their own training.

This way of thinking clearly emerged in Salme Setälä's career in the 1950s. By that time, she was one of Finland's most experienced planners of rural communities, but she still did not have a permanent position in her organization. This point should be kept in mind regarding her role in a dispute that arose between the National Board of Construction and the Finnish Association of Architects. The conflict concerned the new head of the Board, and evolved into one of the most heated disputes in Finnish architecture in the 1950s.

The architect Jussi Lappi-Seppälä had been nominated in late 1953 as the new head of the National Board of Construction. This decision was vociferously opposed by the Finnish Association of Architects, and the dispute reached the stage where the Association prohibited its members from applying for new positions opening at the Board.⁵⁵ During the boycott, Setälä's position was made permanent following a reorganization of the Board. In order to keep her 'own' post, she had to apply for it, and in doing so she had to disobey the ban imposed by her own union. Setälä explained that she was entitled to seek the position, as the application was not for a new post.⁵⁶ When Salme Setälä was named to the now permanent architect's position in May 1954, she was immediately expelled from the Finnish Association of Architects.⁵⁷ An offshoot of the above course of events was that Setälä and Annikki Virtanen, who had also disobeyed the boycott, were dismissed for a year from *Architecta*, the association of women architects. Setälä had been one of the charter members of *Architecta* in 1942.⁵⁸ These events left their mark on Salme Setälä, and even two decades later she still criticized the actions of the Association of Architects and *Architecta*.

Even after these experiences, Setälä still believed in meritocracy and her own career opportunities. In 1957 she became acting province architect in Kouvola.⁵⁹ When this position became officially vacant the following year, Setälä and two male colleagues were the only applicants. The experts of the National Board of Construction gave her second place, after Reino Hämäläinen, a younger applicant. Dissatisfied with this ruling, she appealed to the Council of State (i.e. the cabinet), describing extensively her own professional experience and her temporary work in the position for which she had now applied. In its official reply, the National Board of Construction pointed out that Setälä was given the temporary post, as 'no other substitutes could be found'. Her merits were given as only in planning experience, which was regarded as limited for the post in question. Province architects were responsible for the supervision of state-funded construction work and repairs to government buildings in their regions. Unlike the other applicants, Setälä was not regarded as having sufficient experience in these areas. Her managerial capabilities were criticized, and she was found wanting in discipline and orderliness.⁶⁰

Salme Setälä

**SANGEN TAVALLISIA
VIRKANAISIA**



W S O Y 39

136. Cover of a novel by Salme Setälä, 1937.

This situation was interesting insofar as the post was not filled, even though after her appeal Setälä was now officially regarded as the only qualified applicant. Prior to this, the official ruling concerning her substitute position had been cancelled. The head of the Board, Jussi Lappi-Seppälä, obviously did not wish to have Setälä promoted, nor leave the service of the Board. In later years, Setälä did not recall ever having appealed about the nomination. She suspected background motives of a political nature, and in her memoirs she mentions how she was depressed and disheartened by the way she was treated.⁶¹

The work of a civil-service architect did not completely suppress Setälä's literary activities. In 1937 her novel *Sangen tavallisia virkanaisia* received a purchase prize in a competition arranged by the Werner Söderström publishing house. From the 1930s to around 1960 Setälä published eighteen books.⁶² Writing never lost its importance for her, and she also kept up her interest in interior design, which dated back to the 1920s. It did not, however, become as prominent for her as writing. Setälä also had her own planning office, where she worked on private commissions.⁶³ The anonymity of her official work and the lack of broader interest in planning explain why Setälä never became widely known as an architect. In the arts she was, and still is, more recognized as a writer.

Aino Marsio-Aalto

Aino Marsio-Aalto graduated in 1920 and was one of the first architects to be taught by others than Professor Gustaf Nyström. Her early years as a student were around the end of Nyström's term, and by the diploma stage she had already made the acquaintance of Armas Lindgren, the new holder of the Chair of Architecture at the University of Technology.⁶⁴ There was no actual generation gap between Marsio and Setälä. They studied at the same time, and later moved in the same circles.

Of more interest, however, is Aino Marsio's early orientation towards interior design. For her student trainee period, she chose a carpentry firm instead of the customary building site, which was a more common choice among her fellow students.⁶⁵ In 1919, while still a student, Aino Marsio found her first employment at the office of Bengt Schalin, a landscape architect.⁶⁶ Her debut was in 1922, when the Finnish Crafts Association commissioned a set of dining-room furniture from her as the first prize in a lottery. The furniture was also on display at an exhibition arranged by the Crafts Association in 1922.⁶⁷

An important stage in Aino Marsio's career began in 1923 when she decided to move to Jyväskylä in Central Finland to work at the office of the architect Gunnar A. Wahlroos. The specific reasons for this move are not known.⁶⁸ In the late winter of 1924 she began work in the small office of Alvar Aalto, with whom she had

studied, and they were married in the autumn of the same year.⁶⁹ Alvar Aalto's completely different character, open-mindedness, and creativity probably influenced her decision. She had had another male companion, but she decided upon Aalto.⁷⁰

As discussed above (see Chapter 4.1.), Aino Marsio's choice was quite typical among women architects of the period, most of whom married either colleagues or civil engineers. But the Aaltos were not typical in any other respects. Alvar Aalto's personality, both as an architect and an individual, placed clear limits on Aino Marsio-Aalto's professional development and career opportunities.⁷¹ Alvar Aalto's wealth of ideas and energy easily overshadowed other designers and architects around him. Through her marriage, Aino Marsio had to take on a dual role in which her profession and the concerns of the family often clashed.

The Aaltos' years in Jyväskylä (1924-27) familiarized Aino Marsio-Aalto with the routine tasks of interior design. As pointed out by Igor Herler,⁷² both spouses concentrated on furniture design at the time, which may partly be due to the fact that Alvar Aalto had not yet achieved recognition as an architect. In 1924 and 1925, before the birth of their first child, Aino Marsio-Aalto participated in the couple's commissions and competition projects. She independently designed the decor of the women's lounge of the Häme Student Corporation building in Helsinki,⁷³ and she may also have designed other furniture and fixtures for the building.

Aino Marsio-Aalto's career as a building architect began in 1926, when the Aaltos built a summer house, Villa Flora, at Alajärvi.⁷⁴ There were two designs for the house, of which a less classical one with a sod roof was realized.⁷⁵ After the villa was completed, photographs and plans of it were published in the journal *Arkkitehti* as the work of Aino Marsio-Aalto, and there is little doubt that she was the author of the design.⁷⁶

In the early 1930s Aino Marsio-Aalto enjoyed one of the main successes of her career thus far. In 1932 Karhula Oy and Iittala glassworks declared a glass-design competition in which Marsio-Aalto's entry *Bölgeblick* received second prize.⁷⁷ This competition was influenced by the forthcoming 1936 Milan Triennial, where Aino Marsio-Aalto was to receive the gold medal for her glass objects and exhibition design.⁷⁸ By this stage at the latest, Marsio-Aalto was included among the leading names of Finnish design; these achievements were all before she actually re-entered working life in 1935 with the founding of the Artek firm.⁷⁹ From then on, her 'name' as an artist came to be associated more with industrial art and interior decoration than architecture.

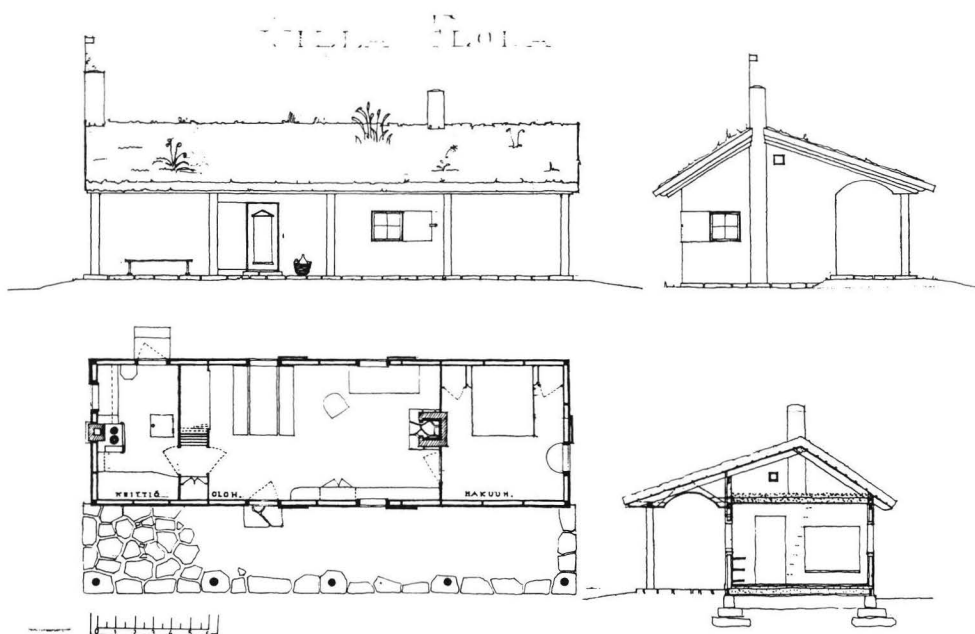
Artek became Aino Marsio-Aalto's domain, where she was able to project on a wider and more complete scale the principles that she and Alvar Aalto had followed in their earlier architecture and glass designs. These were considerations of practicality, multipurpose use, serial production, minimal requirements, and the creation of 'more beautiful everyday objects'.



137. Alvar Aalto and Aino Marsio-Aalto in Vienna on their honeymoon in 1924. AAA.

Aino Marsio-Aalto kept abreast of design trends in Europe and the Nordic countries.⁸⁰ European contacts were no doubt influenced by Alvar Aalto's wide and often famous acquaintances, dating back to his early years. In 1935 Aino Marsio-Aalto, was given a state travel grant to study industrial art in Central Europe.⁸¹ In an interview from that time, she pointed to the breakthrough of non-European influences and ideas on the Continent.⁸² Neither Artek nor the Aaltos were the only ones to im-

port these influences into Finland, although, as a business venture, Artek was able to promote them. North-African textiles and crafts especially interested young architects and textile designers of the period. This involved a circle of young artists, who had met since the 1920s to share ideas and influences. Aino Marsio had belonged to the *Tumstocken* club founded by women students of technology in 1919, many of whose members continued to meet informally in a circle including Elsi



138. Aino Marsio-Aalto, drawings of the executed version of Villa Flora, 1926. AAA.



139. Villa Flora after completion. Photograph by Aino Marsio-Aalto. AAA.



140. 'Bölgeblick' glassware by Aino Marsio-Aalto, 1932. SRM.

Borg, Elsa Arokallio, Aili Salli Ahde, and Maija and Heikki Kansanen.⁸³ These young women artist-architects were especially drawn to the ceramics and textiles of Northern Africa.

The joint works of Aino Marsio-Aalto and Alvar Aalto and their close collaboration from their first years together present a number of difficulties for study. Attributing works is ultimately based on the viewer's own concepts and preferences, and the Aalto name poses problems. Even the attribution of furniture designs begs the question of what is really meant by Aalto furniture. Are they only chairs and tables based on Alvar Aalto's aesthetics of bent and curved wood? We know that Aino Marsio-Aalto herself designed some of these models. However, these articles of furniture have been described as Aino Marsio-Aalto's variations and applications of Alvar Aalto's bold, experimental designs 'as if they were her own'.⁸⁴ The fact remains that they were Aino Marsio-Aalto's own achievements based on her rational and practical skills as an artist. No one has ever questioned Alvar Aalto's undeniable talent or creativity, although, for example, it is known that he developed the basic model of his famous Savoy glass vase from pieces made by the Orrefors glassworks of Sweden.⁸⁵

The emergence of Aino Marsio-Aalto's name as an artist relied on her ability to make herself credible, and to demonstrate her own competence alongside Alvar Aalto. Design competitions and the work of the Artek firm gave her this opportunity. Despite this, art critics or researchers have not always been convinced of her competence. Her work in industrial art was always seen in relation to Alvar Aalto's achievements in architecture. The interior design of important projects, as part of the architect's work and one of its most demanding and best-paid areas,⁸⁶ had changed by the 1920s and '30s in all countries. The teachings of the *Bauhaus* and other authorities underlined the value of industrial design, while arts and crafts were regarded as amateurish, and were attacked by Walter Gropius and others.⁸⁷ The historical tradition of Finnish architecture, viewing buildings as

total works of art, stressed architectonic achievements and gave interior design an accompanying or supporting role. Although Artek design achieved great significance in Finland, its scale of chairs, lamps and textiles could never outrank the major architectural monuments of the nation. These areas spoke in different tongues.

4.2. Architectural Competitions - the 'Democratization' of Design and Planning

Working as an architect has always depended on commissions. In Finland, this involved a relationship with the state at almost all levels, e.g. in the form of official building supervision. Even in the first decades of the 20th century, the planned façades of buildings still had to be approved by the Board of Public Works and Buildings or the governor of the local province.⁸⁸ As a profession, architects were not a completely uniform group. Apart from a division into Finnish and Swedish-speakers, there was also a conflict between younger architects and the older generation. This situation was not limited to architecture, and similar struggles over leading positions occurred in many other professions.⁸⁹

This conflict of interests between generations was clearly visible in the project for the House of the Estates in Helsinki. Ville Lukkarinen has shown how in the late 1880s, before the Architects' Club officially existed, part of the profession disapproved of giving the commission directly to Gustaf Nyström.⁹⁰ They felt that, in a project of this magnitude, the state should declare a competition among invited entrants, which would be a more democratic alternative. Lukkarinen suggests that this dispute over a major state building project created an acute need to officially organize the profession.⁹¹

The Architects' Club (Sw. *Fack-klubb för arkitektur*), founded in 1892, expressed its interest in professional

supervision by drawing up codes of rules and regulations. At its first official meeting, the club made public a number of recommendations concerning building contracts.⁹² These were followed by rules for architectural competitions the following year.⁹³ The rules stipulated that competition juries should have a majority of professional members, i.e. architects, which clearly showed the profession's desire to exclude non-experts from important decisions. Competitions made it possible to acquire a significant position, a 'name', and also a degree of public exposure, because the rules recommended exhibiting the entries.⁹⁴ The profession supervised the organizing of competitions and through representation in juries and panels it also controlled the artistic standards of architecture. The competition system took on clearly monopolistic aims by demonstrating the unique competence of the architects and by excluding outsiders.⁹⁵ In this system, only architects were entitled to assess the standards and quality of competition entries.

The leading technical journals were also the organs of professional organizations, which kept the public exposure of architecture and its professional criticism within a relatively small circle. Finland's oldest and most reputable technological journal, *Tekniska föreningens i Finland förhandlingar*, had been published by the Engineering Society since its foundation. In 1903 the Architects' Club began to publish *Arkitekten*, mainly intended for architects. This journal specifically strove to guard the interests of the profession by refraining from comments on conflicts, generation disputes, or the language issue among architects.⁹⁶

The elite of the profession expressed their views in different journals, and were active in various organizations, which often included the same individuals. The activities of the elite generally followed a strategy of exclusion aiming at establishing a professional monopoly. Although the overall raising of architectural standards was welcomed, and many wished to extend discussion among a broader public, the professional journals helped develop the underlying concepts and thus influence the development of architecture in general.⁹⁷ Publicizing architectural competitions and their winning entries was one of the most effective ways of creating a status for the winners.

It was still felt that the architects of monumental state projects should be selected by a democratic process, although it was also pointed out that competitions should be limited to those architects who understood the importance of the task. In this sense, the profession depended on the co-operation of the state bureaucracy. On the other hand, the Board of Public Works and Buildings had to comply to the architects' demands in its competitions for nationally significant monuments. Even before the House of the Estates project, the Board had lost prestige in a number of situations, including the planning and design of the Bank of Finland building.⁹⁸

Architects gained control over the competition system, but this monopoly was not achieved without conflicts.⁹⁹

In public competitions, open to all Finnish architects, entries were submitted under pseudonyms. They competed on an equal basis, following the principle that only quality and the best solution to the competition programme should win. The system, however, permitted non-architects to participate, and even win competitions. It soon led to heated debate among architects concerning what should be designed and by whom.

Around the turn of the century, master-builders had begun to benefit from their improved training and soon became prominent designers especially in large housing projects. They were able to design apartment buildings and take on their contracts at less cost than architects.¹⁰⁰ The successes of master-builders in architectural competitions raised discussion among the members of the Architects' Club.¹⁰¹ A general meeting of the club ruled, after a vote, that only architects should be permitted to participate in 'public' architectural competitions, i.e. those intended for architects.¹⁰² Competitions with invited entrants were, however, more liberal in this respect.¹⁰³

The profession thus attempted to exclude other groups and strove to demonstrate and emphasize its own competence, especially in the artistic aspects of building.¹⁰⁴ The idea of a 'democratic architecture' met with disapproval; there was no desire to introduce universal suffrage in architecture.¹⁰⁵ It was even suggested that architects should be protected under a special licensing act, as in the United States. Such legislation would guard the interests of architects, and maintain professional standards.¹⁰⁶

Finnish architecture was an almost completely male domain in the early years of the 20th century. The few women architects of the period found employment in less independent situations. The only exception was Wivi Lönn, who is known to have turned down the security of a civil-service position, preferring to remain in private practice.¹⁰⁷ From its earliest stages, Lönn's career had been accelerated by her successes in competitions. It is difficult to estimate in retrospect how many competitions Lönn actually entered as there is little information on unplaced entries.¹⁰⁸ She won prizes in six competitions, in addition to prize-winning entries in collaboration with Armas Lindgren.¹⁰⁹

Interestingly, Lönn herself found architectural competitions challenging and informative. Although they required much work, she recalls having drafted her entries with little delay; she was more interested in the actual projects than in winning prizes.¹¹⁰ On the other hand, Lönn is not known to have entered any public architectural competitions, apart from her collaboration with Lindgren. She participated independently only in competitions with invited entrants, for which the Architects' Club had passed a separate ruling. The club did not prohibit its members from participating in these competitions, although they often included non-architects.¹¹¹

This shows that in restricted competitions master-builders could still compete with architects.¹¹² Lönn's profes-

ATLAS PANKKI O.Y.

kutsuu läten

Herroja Arkkitehtejä kilpailuun

luonnosten laatimiseksi rakennusta varten tontille N:o 5 Hallituskadun ja Mikonkadun kulmassa, osoite Mikonkatu N:o 9 Helsingin kaupungissa.

Siinä tapauksessa että vähintään viisi kilpailuun hyväksyttävää ehdotusta saapuu, jaetaan seuraavat palkinnot:

I palkinto Smk. 40.000.—
II » » 25.000.—
III » » 15.000.—

Sitäpaitsi varataan kahden ehdotuksen mahdollista lunastamista varten Smk. 20.000.—

Palkintolautakunnalle päätetään oikeus jakaa palkintosumma muulle tavoin sekä tehdä päätös siitä, josko jonkun palkitsematta jääneen ehdotuksen lunastus tulee kysymykseen.

Palkintoutumareiksi on valittu arkkitehdit Harald Andersin, Sigurd Frosterus, Kaarlo Borg sekä pankinjohtajat Kaarlo Fröjdman ja Olof Hamberg, ja heidän varajäseniksi arkkitehti V. Vähäkallio ja pankinjohtaja Magnus Rydman.

Piirustusehdotukset ovat viimeistään 9 p:nä huhtikuuta 1927 klo 4 i.p. jätettävät ATLAS PANKKI O.Y:n konttorin talossa N:o 9 Mikonkadun varrella Helsingin kaupungissa tahi ennen mainittua ajankohtaa jätettävät johonkin maamme postikonttoreista.

Ohjelmia ja lähempiä tietoja saadaan ATLAS PANKKI O.Y:n konttorista Helsingissä, pankinjohtaja Magnus Rydmanilta.

Helsingissä, 17 p:nä helmikuuta 1927.

ATLAS PANKKI O.Y.

141. In 1927 the Atlas Bank of Helsinki invited 'Messrs. architects' to participate in a design competition for their head office. Arkitekten 2/1927.

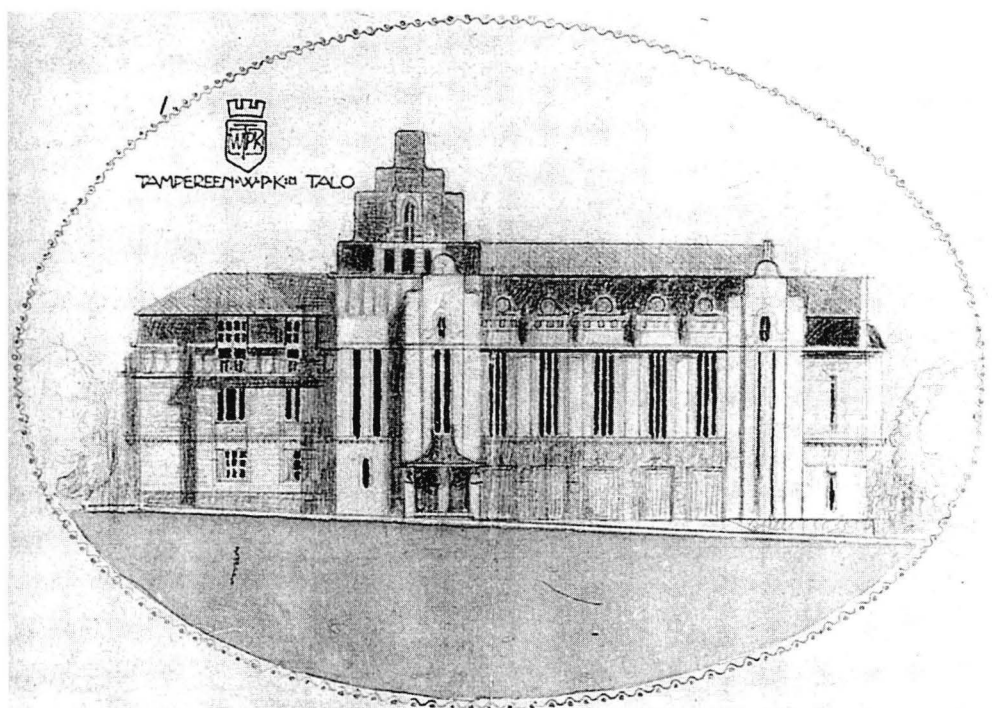
sional activities at this time indicate that, since she was not a member of the Architects' Club, she did not wish to participate independently in competitions restricted to 'Finnish architects'. This is partly due to the procedures for declaring competitions. As late as the 1920s, the official call for entries was often addressed to 'Messrs. architects'.¹¹³ This view of the profession effectively excluded from competitions groups definable according to sex or training.

Wivi Lönn's career also reveals the attitudes of her colleagues and clients regarding her prize-winning designs. In the restricted competition in 1903 for the Alexander Primary School in Tampere, Lönn's entry was publicly

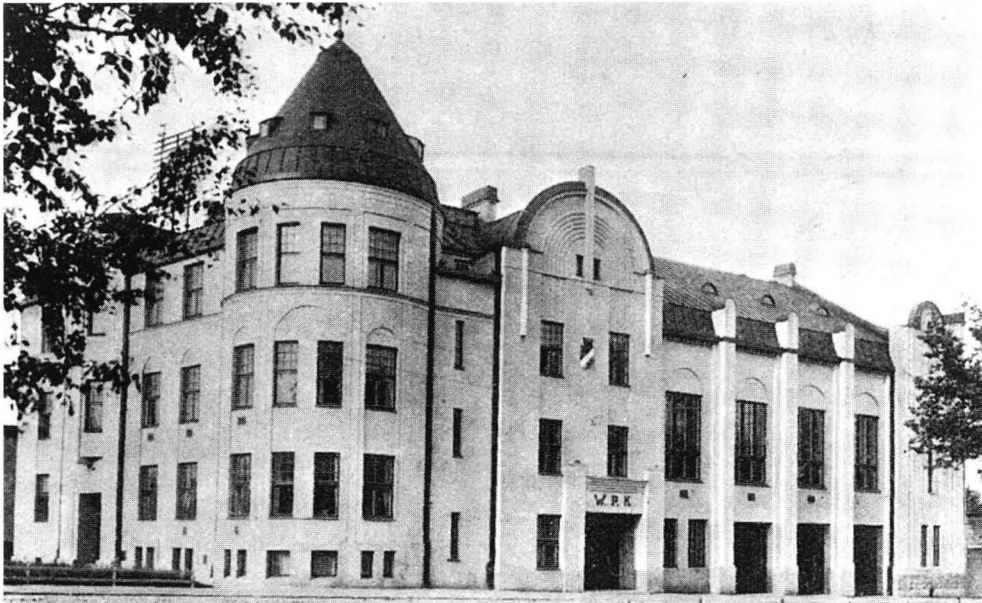
reviewed and criticized.¹¹⁴ August Krook and Lambert Pettersson, local architects who had also participated, officially complained to the Tampere City Council that the winning entry did not follow the instructions and programme of the competition. They also expressed their concern that this might affect future competitions. Upon the initiative of Pettersson and the Architects' Club, the architects Valter Thomé and Bertel Jung were asked to review the entries. Thomé and Jung came to the conclusion that almost all of them differed from the instructions. The only entry that followed them was in all other respects the least successful one. The question was whether entries contrary to the programme should be remunerated by the organizers. Krook and Pettersson finally admitted that the winning entry might lead to good results, especially if its architect took into account the suggestions of the judges and the entries of other competitors!¹¹⁵

In this first major success of Lönn's career, her elder colleagues publicly questioned her professional competence. The result was, however, positive for Lönn, as the jury, including the architect Birger Federley, supported her entry throughout the appeal process.¹¹⁶ Even in later years, Lönn's prize-winning entries aroused debate. In 1905 she won the competition for the Tampere fire station project. The entries were on display at a meeting of the Tampere Technological Society, where colleagues began to criticize both the judges and the artistic merits of Lönn's works.¹¹⁷

These attitudes regarding Lönn's architecture culminated in 1908 in a restricted competition for the building of the Tampere voluntary fire brigade. Lönn was again placed first, but the fire brigade could not finance the



142. Wivi Lönn's prize-winning entry for the Tampere Voluntary Fire Brigade Building, 1908. SRM.



143. *The Tampere Voluntary Fire Brigade Building, designed by the master-builder Heikki Tiitola in 1910. Rakennustaito 7/1912, p. 91.*

project, and had to commission an altered version from her. Available documents do not tell why these new designs were not realized, or why the commission was finally given to the master-builder Heikki Tiitola in 1910.¹¹⁸ Lönn was obviously hard put to accept this decision, in which she had been outranked by a designer from outside her profession, albeit an experienced one. Recalling these events in a later interview, Lönn said that she lost the commission because of her sex, and regarded the decision as unfair.¹¹⁹

The reactions of contemporaries to Armas Lindgren's and Lönn's joint successes in competitions are discussed in Chapter 3.1. These works were almost solely attributed to Lindgren, and criticism concerned only him. Contemporary reviews and articles did not even raise the question of Lönn's contribution as a possibility.

Wivi Lönn left Tampere in the early 1910s. Her decision to move was prompted by an increasing load of extra work, and the negative attitudes of her colleagues.¹²⁰ With sufficient work and commissions, she ceased to participate in competitions. None of the following generation of women architects had the same success in the competitive market as Wivi Lönn. Also the political turmoil of the 1910s led to considerable difficulties for the building industry. The rising generation of young, enthusiastic women who studied architecture in the late 1910s found new orientations in architecture and its social field of action.

The architecture of housing and dwellings, which had interested few around the turn of the century, now began to have an increasing appeal to the profession. There were fewer competitions for the design of national monuments, while socially oriented housing projects created opportunities for developing new town plans and types of houses.¹²¹ Interest in interior decoration and design was part of the rise of housing architecture, and in-

creasing numbers of furniture-design competitions were arranged, often for small apartments and less-affluent homes.¹²² Industrial design, for which the *Ornamo* association had been founded in 1911, also interested architects. In 1922 *Ornamo* arranged a competition at a fair in Tampere for the furniture and textiles of a small-farmer's home.¹²³ Many women architects who graduated in the late 1910s and early '20s devoted much of their efforts to interior design.¹²⁴ The special problems of dwellings were more a private than public area of design. Of this generation of women, only Aino Marsio-Aalto designed interiors for public spaces and buildings, and even then in collaboration with her husband.

A few young women were, however, successful in architectural competitions in the 1920s. In 1928 Eva Kuhlefelt-Ekelund won a restricted competition for a private Swedish-language girls' school in Helsinki. In the same year, Elsi Borg became the first woman to win a church-design competition with her entry for the Lutheran church of the Rural Parish of Jyväskylä.¹²⁵ Competitions and commissions, however, did not allow any of these women to concentrate solely on private practice, and economic pressures forced them to take on different kinds of work in government service.¹²⁶

The system of architectural competitions turned out to be only relatively democratic. When the system was first developed, it was generally accepted that nationally or otherwise significant projects should not involve open or public competitions.¹²⁷ This meant that the 'democratic' process was already limited to a small and highly select group. The degree of professionalization was in turn reflected by early demands for excluding master-builders and civil engineers from artistically demanding projects.

Collegial criticism of the 'hero architects' who had risen to fame in competitions around the turn of the cen-

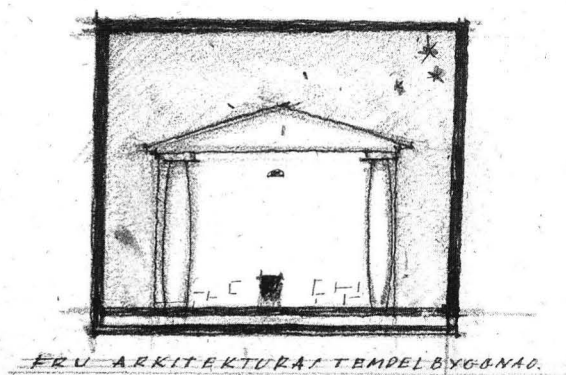
tury never found its way into the profession's own journals. Critical comments were almost always voiced in general terms, without mentioning names.¹²⁸ The professional status of the leading figures of the new Finnish architecture was never threatened by criticism; their works were already classed as innovative. Success in competitions reinforced a kind of pyramid structure, where only a few at a time could reach the summit. The competition system also created a compelling image of significant works of architecture, which were usually monuments in ideological terms or in sheer size and volume. As late as the 1920s, the design of housing and dwellings was still outranked by the major works of architecture, such as the Parliament building in Helsinki, churches, and business edifices.

Wivi Lönn's example shows that despite successes in competitions with her contemporaries, a woman architect from outside the capital did not merit the same attention as others. The silence of contemporary critics tells as much of her role as any possible discussion in the trade press. Successful male colleagues, such as Birger Federley and Uno Ullberg who also worked outside the Helsinki region, never had to experience a similar invisibility.

4.3. Independence for Women - the *Architecta* Association

'The purpose of *Tumstocken* is to lay a foundation stone for the Temple of Lady Architects. This stone does not have to be large or shiny, but it must be genuine, honest, and good. - Our work requires strength and courage, which our members should find in our common respect for each Lady. This shall also make each member a Human Being, able to both give and take criticism.'
From the minutes of the 1919 charter meeting of the *Tumstocken* club.¹²⁹

Women students of architecture at the University of Technology began to be a numerically prominent group in the 1910s. There is not much information on their participation in the normal extra-curricular activities of technology students, and only one woman is known to have been active in the university's students' union.¹³⁰ The union operated in a male spirit, and most women did not identify with it.¹³¹ Many of the students also enrolled in the student corporations of the University of Helsinki.¹³² Women architecture students, however, felt a need to meet on an informal basis to support each other and to express their common bonds. These meetings began in late 1919 in the form of a club called *Tumstocken*.¹³³ Monthly meetings were planned, with special presentations, talks, debates, or informal competitions. The charter meeting was attended by almost all the women who had begun their studies between 1910 and 1913.¹³⁴ This group formed a close-knit circle, often meeting outside the functions of the club. The first chairperson was Eva Kuhlefelt. The club met until 1924, when it finally dis-



144. An illustration to the minutes of the charter meeting of the *Tumstocken* club, 1919. 'The Temple of Lady Architects'. Archives of the *Architecta* association, SRM.

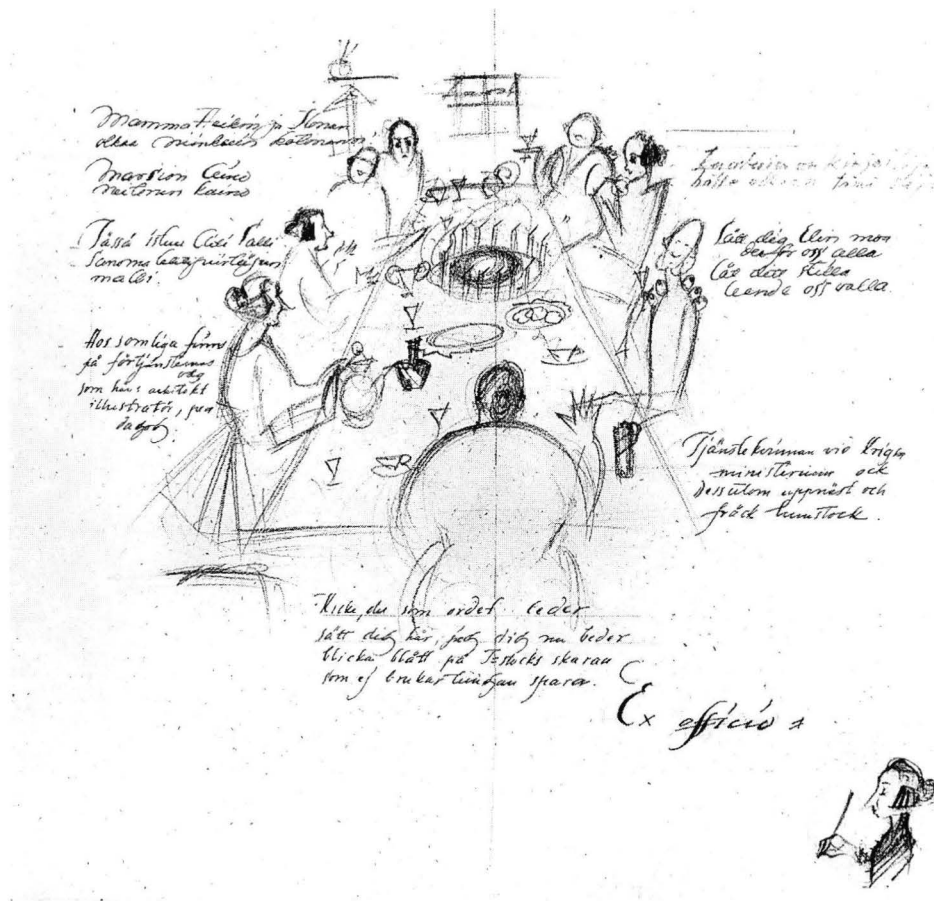
banded. By this time, many members had already moved away from Helsinki.¹³⁵

Tumstocken did not originally focus on professional issues alone, and camaraderie appears to have been its most appealing feature. It was, however, important insofar as its circle was later active in developing activities for women architects on a much broader basis.

A background factor in founding the women students' club was the role of the Architects' Club as a body of professional gentlemen, whose active members controlled and criticized the works of the whole profession through its journal and the competition system. The Architects' Club did not include all architects in Finland,¹³⁶ and as late as the 1910s it apparently had no women members. Women members are first mentioned in 1917, when Eva Kuhlefelt and Margareta Lindqvist were admitted.¹³⁷ Even later, only a few women applied for membership in the Finnish Association of Architects, established in 1919 as the successor of the Architects' Club. It was not until the late 1920s that larger numbers of women became members, and by 1930 twenty-one of the seventy-five members of the Association were women.¹³⁸ Women represented almost 30% of the membership, but even in this union they did not participate in decision-making until much later.

Wivi Lönn's 70th birthday was the occasion for launching a scheme for organizing women architects. In May 1942 forty-six women met at Elsi Borg's and Anton Lindfors's studio-apartment at the Lallukka Artists' Home in Helsinki to honour the 'Grand Old Lady of Finnish Architecture'.¹³⁹ Inspired by the event, a number of the participants began to plan an association for women architects. Six of these had already been active in *Tumstocken*.¹⁴⁰ The first meeting of the new association, which still lacked a name, was held on 3 November, 1942 at the Seurahuone restaurant in Helsinki, with 41 women architects participating.

At a meeting held in 1943 it was unanimously decided



145. Christmas party arranged by the Tumstocken club, 1921. Elsi Borg's illustration for the club's minutes. Archives of the Architecta association, SRM.

to name the association *Architecta*.¹⁴¹ The relationship of this new body to the Finnish Association of Architects, the national organization of the profession, remained unclear. *Architecta* defined its tasks as assembling its members, providing and developing professional support, guarding the interests of women architects, and arranging recreational activities. In April 1943 the draft rules of *Architecta* were sent for approval to the board of the Finnish Association of Architects, together with an application for membership. '...Since women architects wish to operate in agreement with the Association of Architects, we request the Association to grant membership to our club as a whole, and to make the necessary alterations to its rules'.¹⁴²

The women architects' association was not unanimously accepted in the national organization. The main problem was the status of members who did not belong to the Association of Architects, their proper union. These women were in turn an important group in view of the principles of *Architecta*. By the early 1940s, 102 Finnish women had graduated as architects, but only 57 of them belonged to the national association. Eighty-two belonged to *Architecta*, of whom 32 were not members of the national organization. The membership of *Architecta* included over 80 % of all women graduates in architecture.¹⁴³

Architecta took a principled position regarding members who were not in the national organization. The club of-

fered these women professional and collegial contacts, although they were not actively working at the time. *Architecta* did not wish to acquire a similar legal position as, for example, the Urban Planning Club, which was a chapter of the Finnish Association of Architects. The clubs operating under the auspices of the Association were not allowed to own property, and for this reason *Architecta* preferred the status of a member body with separate legal rights.¹⁴⁴

Strivings for independence among women architects did not receive much sympathy from the Finnish Association of Architects. It was willing to grant *Architecta* the same status as other clubs under its control. These problems were, however, postponed, because the board of the Association was not willing to recognize the aims of *Architecta*.¹⁴⁵ *Architecta* finally chose to become a club under the authority of the Association, when it was faced with no alternatives in the matter.¹⁴⁶

The draft rules of *Architecta* did not, however, mention any special relationship with the national organization. Its position vis-à-vis the Association of Architects had to be endorsed with a verbal assurance that it would remain loyal to the national organization under all conditions.¹⁴⁷ There were no problems between *Architecta* and the Association of Architects under normal conditions, but these unrecorded responsibilities were called upon in the 1950s, when the whole profession found itself embroiled in a difficult dispute.



146. In May 1942 *Architecta* celebrated Wivi Lönn's 70th birthday. Lönn is by the wall at the back, flanked by her oldest colleagues, Bertha Enwald and Signe Lagerborg-Stenius. Archives of the *Architecta* association, SRM.

As discussed above in connection with Salme Setälä's career (Chapter 4.1.), the dispute concerned the boycott laid down in 1953 by the Finnish Association of Architects on positions at the National Board of Construction.¹⁴⁸ In addition to Setälä, Annikki Virtanen, also a member of *Architecta*, had applied for boycotted positions, and both were expelled from the Association.¹⁴⁹ This led some of *Architecta*'s charter members to raise the question of its relationship with the national organization. At a general meeting of *Architecta*, Aili Salli Ahde-Kjälldman described the founding of the club, and how the charter members had 'promised to support the Finnish Association of Architects in all matters, respecting its authority, and remaining loyal to it'. She also expressed the wish that a relationship of trust could be maintained with the Association.¹⁵⁰ The Association of Architects did not officially require *Architecta* to express solidarity, but on an unofficial level its chairman, Alvar Aalto, may well have influenced his family friend Ahde-Kjälldman to raise the issue.

Architecta observed that its rules were unclear in this matter. Setälä was quite aware of this, as she had participated in drafting them.¹⁵¹ The board of *Architecta* tried to initiate a discussion with Setälä and Virtanen, and induce them to resign voluntarily. This duty was entrusted to a few members of the club, including Elli Ruuth and Kerstin Holmberg-Palmqvist, who were Setälä's friends from her student days.¹⁵² Apparently

owing to these old ties, neither wished to take on the task. It was not possible to launch any discussion, as Salme Setälä unequivocally stated that she had not broken any rules. After this, the board of *Architecta* felt compelled to expel both Setälä and Virtanen for one year.¹⁵³

The women architects' club thus proved its solidarity with the Association of Architects by expelling a charter member before the necessary changes could be made to its rules. The board responsible for this action felt that it, too, should resign so that it would not impede the future work of the club.¹⁵⁴ These decisions appeared to be unanimous, but they clearly raised questions among the members. In 1958 *Architecta* again discussed its relationship with the Association of Architects, and a completely independent association was now proposed.¹⁵⁵ Establishing *Architecta* in the 1940s and the background of these events show that women architects saw themselves as a separate group within their profession. The Finnish Association of Architects had achieved a strong role as a collective-bargaining organization, fiercely guarding its own interests. Throughout the history of the Association, women had been a marginal, and almost unseen, group. 'Women architects had become accustomed to working on equal terms with their male colleagues, but when they joined the Association of Architects they soon discovered that equality existed only in theory, and that the Association was a league of men.'¹⁵⁶

The architectural profession has sometimes been described as almost as male as the Roman-Catholic clergy,¹⁵⁷ and this traditional image still persisted in Finland in the 1940s, although over a hundred Finnish women had graduated as architects by that time.¹⁵⁸

The founding of *Architecta*, the first national organization of women architects in the world,¹⁵⁹ expressed a strategy of guarding interests by which women architects could establish their own level of consciousness. Relations with the male-dominated Finnish Association of Architects revealed, however, that women architects mostly saw themselves as part of a male professional culture, which is understandable in view of their opportunities. The Association of Architects both demonstrated and wielded its institutional power vis-à-vis the women architects' club. Although this club may have enhanced the Association's image, both among its members and in the eyes of the public, there was no desire to alter the rules for the benefit of only one 'interested circle'.¹⁶⁰

The core group of *Architecta* consisted of women of almost the same age who had studied together and had partly similar ideas about architecture and women's opportunities in the field. The emergence of *Architecta* signified a separate 'women's space' in the field, from where they - albeit gradually - could seek other role alternatives.¹⁶¹

4.4. Design and the Woman's Place

'But it's no use now,' thought poor Alice, 'to pretend to be two people! Why, there's hardly enough of me left to make *one* respectable person!'

Lewis Carroll, *Alice's Adventures in Wonderland* (1865)¹⁶²

'I cannot be so many things. I cannot be something for everyone... Woman, beautiful, artist, wife, housekeeper, cook, saleslady, all these things. I cannot be myself or know what I am.'

From the diary of the artist Eva Hesse, 1964.¹⁶³

The historian Joan W. Scott has suggested that the problem of the woman's place should be approached with reference to the meaning of women's work and activities in concrete relations of social interaction. According to her, we must take into account both the individual subject and the surrounding social organization in order to understand the influence of gender in seeking these meanings. For Scott, gender is an analytical category, in which 'man' and 'woman' are historically and culturally defined concepts, both completely void and overflowing with meaning at the same time.¹⁶⁴

In order to advance in their careers, women architects had to adopt the prevailing rules and norms and concentrate on creating an acceptable identity. In viewing the relationship of women with this world of architecture, we must keep in mind their identification with the prevailing professional role. This is based on the view that the 'sexed' nature of art or works of art and the gender of artists affect the ways art is seen and discussed.¹⁶⁵ In

discussing the professional identification of women architects, we must also address contemporary views of femininity, which may have led to conflicts for women who had entered a profession clearly defined as male. The role conflicts of women in technological fields often revolved around the tensions between the expectations of the outside world and their own consciousness and choices.

Technical training institutes in Finland had not been prepared for the influx of women.¹⁶⁶ Like other more or less totalitarian institutions, these schools and institutes made their pupils and students conform to discipline, hierarchical control and supervision, thus 'normalizing' the pupils and making them resemble each other. There was no desire to reinforce the student's own identity; on the contrary, he or she was shaped to resemble fellow-students in all ways. These practices created a strong bond among students and feelings of solidarity and loyalty, mainly expressed by excluding of outsiders.¹⁶⁷ In the Finnish system of training architects, a main feature of socialization into the profession was a created image of professional identity and its ethical foundations.

The identification of women with the professional role of an architect involved a complex process, in which socialization was not a homogeneous chain of events. Individual differences were matched by chronological differences. Women students in these institutes had to adopt the role model created by the majority. The results of the identification process were not identical for men and women. Studies of identity development among modern students have shown that the nature of studies is one of the main reasons for the negative development of women students' identities.¹⁶⁸

Conflicts and contradictions have existed, and still remain, between the image of women students and the approved professional identity of architects. Equality was not the only issue; women students did not necessarily experience discrimination in their studies, nor did all women feel that they had special problems. However, each individual and the institution itself regarded men and women in a special way: 'Young ladies, I must say you're such upstanding men'.¹⁶⁹ At issue here was a definite historical and cultural definition of femininity and masculinity.

Stereotypes of femininity were common among students of technology, both male and female, but men and women saw them from different perspectives.¹⁷⁰ Women in technical fields have often found it difficult to relate to their femininity: 'You can't be soft, you have to be forceful'.¹⁷¹ The definitions of femininity must be seen in historical perspective, i.e. as the actual ideas and views of people on this subject. Outside expectations influenced women's decisions and their definitions of themselves. Earlier women students of technology often had to face a considerable degree of incredulity concerning their studies among friends and relatives.¹⁷²

There is no easy way out of the social and symbolic order, or any area outside it, in the development of the sub-

ject in relation to gender. Being a man or woman is the ontological prerequisite for developing into a subject.¹⁷³ In turn-of-the-century Finland, femininity was defined by the 19th-century family ideal, which came to stress the woman's role as a mother and in raising her children, but did not exclude the tasks of a spouse and housewife. Here, the main issues were 'real family life' and being a 'real woman'. According to the prevailing view, stepping into public life would primarily endanger women themselves, and the worst effects would be felt by their children.¹⁷⁴

It is important to note that the women's movement at that time consisted of organizations in diverse fields (e.g. the temperance movement, the Martta Association of housewives, the YWCA, and other women's organizations). Their identity for women focused on an active and socially oriented brand of motherhood. It made them, in essence, the opposites of men, and these 'real women' were bound to a restricted, private sphere of life. This emancipated private area was not limited to the home; the feminine sphere was seen as extending into all areas of society, albeit with a clear respect for the hierarchies of class. The new ideology of motherhood and the home gradually disrupted the community of men's and women's worlds that had existed in traditional agrarian society. The civic ideals of bourgeois democracy were dichotomized with respect to gender, the legitimization of public and private spheres of life, and the respective essences of the masculine and the feminine.¹⁷⁵

Women studying architecture were both within and outside the culture of technological training, as non-males in a male-defined community. But they also differed from the general concept of femininity, i.e. from other women who did not enter professions or occupations regarded as typically male. They acquired formal professional competence and identified themselves with the professional role provided by their training, but were not necessarily representatives of any 'soft' values in the 'hard' world of technology. However, they had to choose between being recognized either as women or as experts in their chosen field. Even those who took on a double role had to give more weight to either one of these alternatives, to the inevitable exclusion of the other.¹⁷⁶

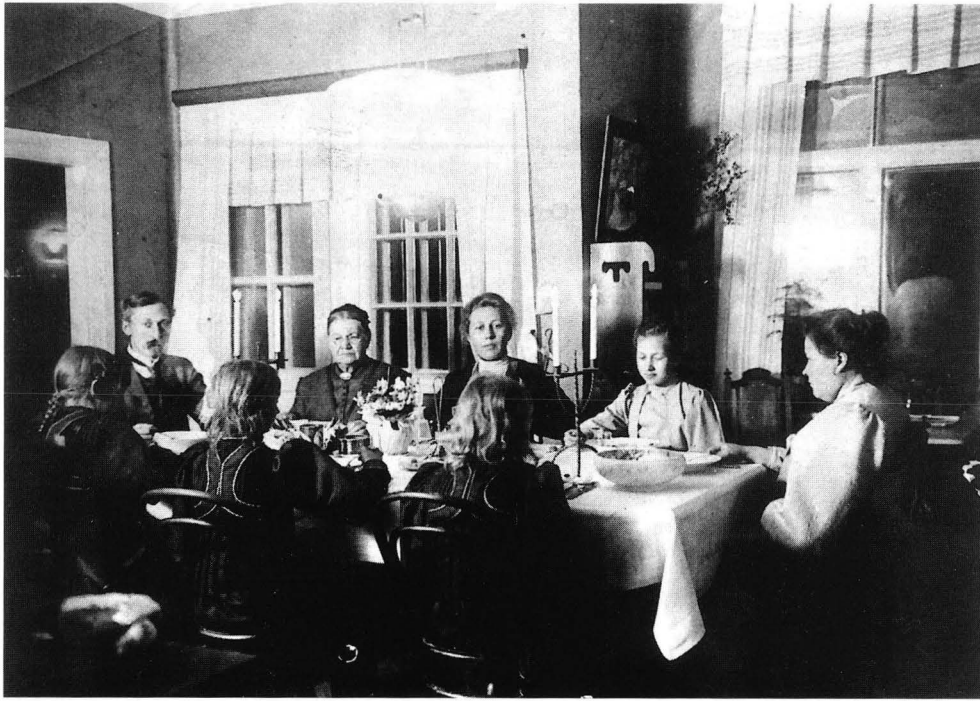
The following section discusses the ways women architects were able to 'speak' (create or design) in a culture relegating them to the private and feminine sphere. Reference is made to points raised by the American art-historian Gwendolyn Wright concerning alternative acceptable roles by which women could follow their professions. These considerations are followed in an analysis of the means of professional survival adopted by women architects in Finland.¹⁷⁷

Wright defines four ways for women to survive in working life, i.e. four acceptable variations of their roles which they used in solving the conflicts generated by professional identity. These are the roles of the exceptional woman, the anonymous designer, the adjunct or assistant, and the outside reformer.



147. Architecture students in 1915. From the left: Elsi Borg, Sylvi Nyysönen (later Erikson), Thure Erikson, Elsa Arokallio, Kerstin Holmberg (later Holmberg-Palmqvist), Kosti Palmqvist, and Niilo Niemi. Photograph by Salme Setälä, SRM.

Exceptional women strove to succeed in the same way as men, or even surpass them. They were totally devoted to their work, and were at all times more decisive and more productive than others, sacrificing everything else for their professional role. The role of an anonymous designer was, however, a more common choice. To acquire and keep their work, these women accepted the discrimination and patronizing attitudes of officials and firms. The role of an adjunct could imply working in the margins of the profession, or alternatively as a source of support to one's spouse. Reformers operating outside the profession devoted their efforts to legal or social reform, but in the early stages of the profession this alternative was not chosen by women architects in Finland.¹⁷⁸ Of the early women architects, only Wivi Lönn fits the role of the exceptional woman. Her life and career reveal the image of an individual totally devoted to her work. Lönn's output was considerable by any standards, and her professional commitment was clearly related to the fact that she felt she had no time for anything else. Had she founded a family, the conditions of the time would have made private life and its expectations overshadow her career.



148. Wivi Lönn with her family in the early 1900s. On the left is her brother Wilhelm next to Mrs Matilda Lönn, their mother. National Board of Antiquities, Pictorial Archives.

Of importance here is the professional responsibility implied by Lönn's commissions, school projects, and designs for institutions. The larger the project, the more complex was the role of the architect responsible for it. Even amidst the specialized requirements of building projects, the architect was solely responsible for the overall planning and design, both legally and in relation to his or her clients. This point is relevant in the case of Wivi Lönn, since at the time only men and unmarried women could meet the above legal requirements of responsibility.

Although Finnish women had been elected to Parliament and participated in passing legislation in the early 1900s, they still lacked full equality under the law. The restrictions on the rights of married women were not repealed until 1929, and women's eligibility for civil-service positions was not expanded until 1926.¹⁷⁹ Wivi Lönn's choice to remain unmarried was obviously not based on pragmatic reasons alone, but existing legislation nevertheless had a strong influence on the architectural profession. Only a man or an unmarried woman could be fully responsible for his or her own property, cash, or debts.

Charlotte Perkins Gilman's novel *What Diantha Did* (1909-1910), translated into many languages, presents an interesting picture of a woman entrepreneur in early 20th-century America:¹⁸⁰

'Although she dealt with the public, she lost no social respectability, for her mother was her chaperone.'

Respectability was important to Gilman's heroine. One can detect a similar caution in Wivi Lönn's dealings, for example, with her male subordinates on building sites.

Lönn was very shy as a young woman. On building sites she was expected to participate in functions such as roof-wetting parties, where the architect usually gave a speech. In her first years in the profession, Lönn asked her mother to deliver the roof-wetting speech.¹⁸¹ Mother and daughter were in many respects close, and for most of her active working life Lönn lived with her mother - 'My mother is my guardian angel.'¹⁸² These aspects of Lönn's behaviour reflect the cultural role of Finnish women of the period. In the 19th century, virtue and respectability were important and positive values, and the family was regarded as synonymous with these ideals.¹⁸³ Even the 'new image' of women maintained that they were basically pure and virtuous. This image carried such weight that the whole justification of women's existence and their assumed abilities as citizens were based on it.¹⁸⁴ Despite having achieved some degree of independence, Wivi Lönn still belonged to this private sphere defined for women, where her relations with the outside world were socially sanctioned by her widowed mother. Despite her tasks and responsibilities, Lönn was not professionally associated with the state or municipal authorities.¹⁸⁵

From its early stages, Wivi Lönn's work as a privately practising architect was characterized by her rational attitude to floor plans. Her school designs were at the time something completely new in Finland, where the English hall system had not yet been used. By Finnish standards, Lönn's school projects were innovative, with well-lit halls, cloakrooms providing clean air and orderliness, and the general lack of narrow corridors. She was also able to design other public spaces to obtain maximum benefit, e.g. in the Estonia theatre in Tallinn. This as-

149. Staff of the town-planning department of the National Board of Construction in the 1940s. From the left: draughtswoman Helvi Salla and the architects Inga Söderlund and Salme Setälä. SRM.



pect of Lönn's architecture clearly reflects an ideal proclaimed by Gustaf Nyström: 'An architect is above all a composer of plans'.¹⁸⁶

Lönn developed floor-plan design into an innovative practice. Establishment architecture usually accorded its (male) authors a place in history. The profession upheld stereotypes of professionals and the ways of evaluating their success, and Lönn's gender may have been one reason why the field remained silent even about her successes in competitions.¹⁸⁷

'Ignoring' Lönn's achievements may also have been due to the strong emphasis on style in the architectural discourse of the turn of the century. Even in the history of architecture, originality and creativity were not only descriptive terms, but also had overtones of evaluation.¹⁸⁸ Although technological development in Finnish architecture has been discussed as a series of innovations, it is equally true that artistic evaluations almost always revolved around innovations of style.¹⁸⁹

Anonymity was the most common course for Finland's early women architects. Regardless of their possibly active roles, e.g. in government service, women architects are not widely known. The role of a civil-service architect became common for women at an early stage, and remained important over the years despite other alternatives. Salme Setälä's career in official building administration had many features typical of women's opportunities.

Civil-service architects did not have a high status in Finland, and employees in building administration received a considerably lower rate of pay than in other government departments. Furthermore, the Board of Public Works and Buildings and its successor kept part of its

positions on a supernumerary basis, which meant weaker job-security for many of its workers.¹⁹⁰ For most of her career, Setälä worked in supernumerary positions, first as a draughtswoman and later as an architect. She acquired her own official architect's position for only her last seven years at the Board, and even then after considerable difficulties.

My review of Salme Setälä's career was facilitated by her literary works, in which she describes many of her own experiences and her views on her work. Her memoirs *Epäasiallinen kronikka viiden pääjohtajan ajalta* (1973) prominently mention experiences of discrimination in applying for positions. She was outranked more than once by junior male architects, who were often classed ahead of many other female applicants. By specializing in urban and regional planning under Otto-I. Meurman, Setälä achieved a specialist competence rare among architects at the time.¹⁹¹ She was not rewarded for this, either by being appointed to new positions or in other ways. On the contrary, her colleagues wondered why she bothered to apply, since she was never appointed anyway.¹⁹²

This attitude reflects a conflict of roles, brought on by the expectations of outsiders, and the incompatibility of professional life with femininity.¹⁹³ Salme Setälä had faith in meritocracy, and the ultimate reward for work well done. When, despite serious efforts, her career did not seem to lead anywhere, she could easily begin to blame herself. Faith in meritocracy implied that if one did not succeed, one was simply not good or dedicated enough.¹⁹⁴

Salme Setälä made a major contribution to rural community planning in Finland. She worked in an area which

had interested few architects and was not even taught. Planning became Setälä's area of specialist competence, where she could rely on her own cultural background and concepts in creating the often subtle and delicate planning solutions required by old rural communities. These skills and her professional competence in general were finally challenged and denied when she applied for a position for which she could not be considered under any circumstances.

In the 1950s women were able to work as temporary or acting province architects, but men were still preferred for the permanent posts. These were among the leading positions of government building administration and carried considerable political weight. Province architects were responsible for large sums of public funds, and their managerial skills were a subject of special concern. '...Discipline and order [must] be maintained in the building bureaus of the provinces... In this respect, Setälä's record as an acting province architect leaves much to be desired, and it has been seen that she is not sufficiently suited to the managerial tasks of this office.'¹⁹⁵ Although the process of nomination involved both positive and negative reviews of all applicants, the above statement also reflects a stereotype view of women as unable to lead subordinates, especially men.¹⁹⁶

Salme Setälä's childhood gave her a solid, bourgeois outlook on life. Her mother, who devoted herself to the home and her family for many years alongside her own literary activities, had a strong influence on Salme Setälä's future decisions.¹⁹⁷ This can be seen in Setälä's literary work, her interest in home interiors, and in the ways in which she combined these areas. Work, however, became her main concern. Although she remained at home with her children during her marriage, she still maintained contacts with professional life, albeit with its marginal area of interior decoration. Her relationship with writing, though, appears to have been especially important throughout her life.

Setälä's character prevented her from complying to the prevailing ideals of feminine softness and resilience.¹⁹⁸ She was a determined, strong-willed, and energetic woman. Her decisions may not always have been in the best interests of her family, but her experiences were somewhat more severe than those of other mothers. Her second child was born mentally disabled, and caring for him led to a radical change in her life.¹⁹⁹ As I have not analysed Setälä's literary works as such, it is difficult to relate their content to her other activities. I have, however, surveyed her autobiographical works with reference to the tensions and conflicts reflected in them.

Writing clearly emerges as the main factor influencing Salme Setälä's lifework and her artistic 'name'. Literary interests, including translation work, were part of the legacy of her childhood. Writing played a special role in the everyday life of this professionally active architect, and she took leaves of absence from time to time to concentrate on her literary works. The importance of these achievements to herself is shown by the fact that

she mentioned her 1937 novel prize (see Ch. 4.1.) as her main achievement in an album donated by women architects to Wivi Lönn in 1942.²⁰⁰

Writing also offered Setälä an escape from the field of architecture, where her skills were not appreciated and her progress in her career was impeded in many ways. It has been suggested that writing can mean the creation of a second identity for oneself.²⁰¹ At least for Salme Setälä, it became a way of emerging as an artist. She was a recognized Finnish author of books for youth, and also her autobiographical works have received acclaim.²⁰² Of these works, especially *Kirjoitan pojalleni* (Writing to My Son, 1971) contains a strong element of personal drama, as the author recalls her feelings towards her son who died in childhood many decades earlier. She was 77 when the book was published.

There are parallels between Salme Setälä's literary and architectural interests. In neither field were her works classed as 'great art'. Most of her books were for children or the young, and her architectural work was in the marginal areas of rural planning and the private world of interior decoration.

After retirement, Setälä commented on her relationship with her profession by pointing out that she no longer wished to struggle for work and commissions in 'this men's world'. On the other hand, she admitted that she had always dreamed of a career as a writer, and that she had chosen otherwise against her will.²⁰³ This was the voice of an embittered woman, who in her youth had defied her father and her relatives by enthusiastically applying to study at the University of Technology. 'When I finally told my father that I had graduated, he did not congratulate me. All he said was: "Was it difficult for you?" - I suppose I was quite happy to answer that of our group of twenty-five the first two had now graduated, and I was one of them. I wonder if I had yet begun to ponder the fact that there will always be difficulties in one's career, in one form or another - but mostly after one's student days...'²⁰⁴

Salme Setälä's conflicts between her professional role and femininity may have been sharpened by falling out with the *Tumstocken* group of fellow women students. *Tumstocken*, which had formed in the 1910s and partly re-emerged as *Architecta* in the 1940s, apparently played a major role in the consciousness of its members. Through *Architecta*, women architects had finally established a group where gender was openly recognized as a dividing factor. *Architecta*'s unity was disrupted in the 1950s, when the Finnish Association of Architects came into conflict with the National Board of Construction. This situation revealed that not all women architects were prepared to defend or support each other against the professional control of the male-run national organization.

The role of an adjunct, either in the margins or as an assistant to one's spouse, was a typical choice for women architects in Finland. Architects often married each other, and many women were at least partly drawn to interior



150. Alvar Aalto and Aino Marsio-Aalto during the Second World War. National Board of Antiquities, Pictorial Archives.

design, which was regarded as suited to their efforts. The dichotomy of public and private, with the latter designated to women, lent support to the idea that especially the interior decoration of homes, and certain areas of industrial art, should be regarded as feminine areas. Aino Marsio-Aalto fitted this role in a number of ways.

Aino Marsio-Aalto has been described in several connections, and especially in her obituary, as 'truly feminine', 'matriarchal', and even as a *Schutzmantelmadonna*.²⁰⁵ These descriptions were partly based on her personality, but also on the fact that she mainly worked in interior design, an area classed as feminine. This classification also finds support in accounts where she was readily seen as Alvar Aalto's muse, the silent partner in his work.

The status of Aino Marsio-Aalto's works is one of the best indications of how her gender was read into her output. On the other hand, they have continually been compared with Alvar Aalto's creations. This situation finds parallels on the international level. The joint works of Robert Venturi and his wife, Denise Scott Brown, have been stereotypically evaluated in a very similar way: 'I watched as he was manufactured into an architectural guru before my eyes and, to some extent, on the basis of our joint work and the work of our firm'.²⁰⁶ The study of art has constructed and maintained stereotype roles of this kind in its recurring processes of asserting the originality and universality of (men's) art.²⁰⁷

Modern architectural aesthetics adopted an entrenched ideal of a universal 'pure' architecture, unrestricted by time or place. In the theories of 20th-century architecture, Modernism became almost synonymous with an enlightened Positivism. Demetri Porphyrios has pointed out

that a main point in reviewing and surveying modern architecture is that 'it should be fully realized that both positivism and *Lebensphilosophie* run parallel to each other, and the first was consciously chosen as the privileged cult of representing reality, while the second, reified and set in abstract opposition to reality, was to be tolerated only as the rare mark of individuality and genius'.²⁰⁸ According to Porphyrios, Alvar Aalto can be placed in the context of this individualistic myth with its leading themes of individual 'free will' and 'gifted genius', and a conception of the hero-architect as an expression of heroic masculinity.²⁰⁹

As a professionally trained architect and designer, Aino Marsio-Aalto found her adjunct's role on two levels. It is extremely difficult to analyse her contribution to what has come to be called Aalto architecture. She was, however, accorded a place in history as Alvar Aalto's most reliable and closest supporter.²¹⁰ Her achievements in industrial art have not been denied, but they have never been given the same importance as architecture. Marsio-Aalto's competence as a designer at Artek is well known, but even this recognition has been eroded by analyses of her works as partly the applications and variations of Alvar Aalto's ideas.²¹¹ These evaluations are specifically supported by the practice of viewing art objects solely as results, the projections of their authors' expression. Porphyrios has criticized approaches where a search for the initially assumed semantic values of art objects and works of architecture stresses their homogeneity while neglecting their existing inner contradictions.²¹²

Aino Marsio-Aalto's works and designs for Artek between 1935 and 1948 reveal a different aspect, based on

the actual process of design and the ideas and concepts behind it. The ideology of Artek was only partly inspired by Functionalism. In the background were a number of other considerations: the Aaltos' interest in human dimensions in design which dated back to the 1920s; a commitment to the aesthetics of everyday objects; and boldness in combining diverse elements.²¹³

This background is important, since Artek has remained an isolated phenomenon in Finnish interior design, although it was preceded and paralleled by similar firms, and Finnish design as a whole was influenced by many sources.²¹⁴ Aalto furniture owes much of its 'radical' nature to Alvar Aalto's almost engineering spirit of experimental play with constructions. On the other hand, Aino Marsio-Aalto's contribution may well have been, more than is readily acknowledged, a concern that the function of furniture, as its essential use, is thought out and improved throughout the design process.²¹⁵

Artek's early models of the 1930s and '40s reflect Aino Marsio-Aalto's untiring efforts to create a total range of everyday objects for the home. These were not individual or radical products as such, but a stream of different and continually improved sets of furniture, whose design and development required solid expertise and clear overall concepts. This was Aino Marsio-Aalto's special area of competence, which had interested her from the beginning of her career. Her emphasis on industrial art also implies a search for an area specifically her own, where her work could be attributed to her.

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The artworld has often been divided into central areas and margins.²¹⁶ The place of women in architecture, however, does not have such clear boundaries. Through their training and professional experience, women were legitimate professionals of the central area, but they did not dominate. Belonging to the profession through organizations was at first rare among women, and in this sense they were also in the margins. Furthermore, they could remain in this marginal state for years, even throughout their careers.

The imbalance between the expectations raised by the training system and actual opportunities meant more disappointments than rewards for most women. The collective solidarity usually achieved by professional groups through organization did not extend to minorities. The experiences of women in the architectural profession were marked by their small numbers. The threat of a feminization of the field and its results would have led to a 'devalorization of social standards'.²¹⁷ Working in hierarchically lower and less-valued areas of design meant lower pay and fewer advancements for women. At a later stage, opportunities opened only where the position and status of women did not change.

Early professional women usually found that their success did not ensure an easier path for the following generation of women.²¹⁸ Wivi Lönn is a case in point. Al-

though the younger generation of women saw her as a model, with whom one's own achievements were often compared, she was not a leading figure in architecture. She had no influence on the main areas of decision-making, and outside her own office she had no say in how other women advanced in their careers.

Average talent and normal competence were not enough in women's careers. To succeed, a woman had to prove herself perfect on the scale of prevailing (men's) values. Modernist art history and criticism insist on the autonomy of art and on the formalist procedures of the critical text. Objects are removed from the conflict of history, from their specific conditions of existence in social relations and institutions, and inserted into a narrative of stylistic innovation premised on the authority of individual artists.²¹⁹ In his critiques of architectural history in Finland, Henrik Lilius has also pointed to the autonomy given to form, which dissociates its history from the interaction of architecture and society.²²⁰ Feminist art history has stressed that the category of art is not given, but produced. In a search for the history of women's creative production it is crucial to examine the effect of a whole history of divisions that had marked off the aesthetic field and guarded its boundaries. When art history can identify the particular history of artistic practice in the west as one specially privileged instance of cultural activity, we have a chance of examining the particular affordances for women in different and hierarchically ordered forms of cultural production. If we only produce more names of women artists and flirt with the possibility of a 'feminine' input into existing categories of genre and style, women will remain in the margins.²²¹ Since the study of art also uses gender as a theoretical category and analytical tool, the division of social experience along gender issues tends to give men and women different conceptions of themselves.²²²

The criteria of artistic competence and the significance of art objects centre on the concepts of novelty and originality. As descriptive terms, they are never completely absent or fully present in any work, but always mixed with a varying degree of unoriginality and imitation.²²³ These concepts and the metaphors of the language of art historians echo the dichotomies of Western philosophy, where the logic of binary oppositions plays on the subordination of terms with their opposites.²²⁴ In art, we find the subordination of tradition by the avant-garde; of the everyday by innovation; and of copies by originality. There is also the opposition of public and private. The work of women as architects and designers has been placed on an axis defined in terms such as tradition, everyday, copy, and private. Art history has traditionally given weight to originality, innovation and the avant-garde, despite the fact that originality is no guarantee of excellence, and no art can be created without a prior tradition.

The historical and cultural categories of culture and nature, masculine and feminine, and public and private are never clearly defined but always a function of existing



151. Villa Mairea in 1939. Maire Gullichsen is standing at the left; Aino Marsio-Aalto is sitting. AAA.

knowledge, thinking, and specific interests.²²⁵ In exploring the relationships of women, femininity and gender with cultural actions and the state of existing in a culture, art history should take into account Michel Foucault's definitions of truth: "There is (in our society) a battle 'for truth', or at least 'around truth' - it being understood once again that by truth I do not mean

'the ensemble of truths which are to be discovered and accepted', but rather 'the ensemble of rules according to which the true and the false are separated and specific effects of power attached to the true...'²²⁶ This process entails a desire to reject a belief in a unified theory and the practice of speaking for others and defining them.

5. NOTES

1. INTRODUCTION

1. Hannula 1930, p. 124.
2. Kalenteri Suomen naisten työstä 1894, p. 229.
3. Four of this group of five women who studied at the Polytechnic Institute between 1879 and 1882 were later active as artists: Ida Meller, Helene Schjerfbeck, Elin Danielson, and Helmi Sjöstrand.
4. Matrikkeli 1899; see Viljo 1984, pp. 79-81.
5. Suominen-Kokkonen 1989, *passim*; see Hautala-Kajos 1986.
6. From the end of the 1880s women began to train as master-builders. Only few of them graduated, and their career opportunities cannot be directly compared with those of women architects, see Suominen-Kokkonen 1987.
7. See Rothschild 1983; Sørensen & Berg 1987, pp. 151-171; Lagerspetz 1990.
8. Scott 1989, pp. 93-118.
9. Bourdieu 1985, pp. 131-132.
10. Hermerén 1986, pp. 142-162; see Säätelä 1988.
11. Lagerspetz 1990, pp. 114-119; Häggman 1991, pp. 145-150; Martin 1986, pp. 2-19.
12. Scott 1987, pp. 1053-1075; Scott 1989, pp. 93-118; Braidotti 1989, pp. 89-105.
13. Feminist theory critical of the 'French' interpretations of Freudian psychoanalysis proposed by Jacques Lacan has recently been discussed in Finland, see Saarikangas 1990; Saarikangas 1989; Ahokas 1988.
14. This dichotomy has been criticized in recent years. In the Finnish context, Saarikangas 1989 and other authors have pointed to the linguistic problems of this division.
15. Scott 1987.
16. Rosaldo & Lamphere 1974, pp. 3-39.
17. *Ibid.*, pp. 28-29.
18. Ardener 1975; see Nenola 1986.
19. Lundequist 1984, pp. 77-78; Cf. Saint 1983, pp. 5-6.
20. Trachtenberg 1988, pp. 208-209.
21. *Ibid.*, pp. 211-214.
22. Porphyrios 1981, pp. 98-99.
23. Kostof 1977, p. vii.
24. Porphyrios 1981, pp. 98.
25. Foucault 1984b, p. 106.
26. *Ibid.*, p. 106.
27. See Wolff 1981, pp. 121-123.
28. Foucault 1984b, pp. 118-119.
29. E.g. Drexler 1977; Kostof 1977; Saint 1983b; In Finland, Henrik Lilius has focused on these problems in his critiques of traditional, 'aesthetic-characterizing' histories of style and their dissociation from social issues, Lilius 1980.
30. Wolff 1981, pp. 41-43, 118-119.
31. Bourdieu 1985, pp. 105-107, 170-171; See Lepistö 1991, pp. 23-28.
32. For Bourdieu, 'creative work' is activity through which the artist brings about a work and, following the requirements of the field, produces himself as a unique artist, Bourdieu 1985, pp. 178-180.
33. See Witz 1992.
34. Konttinen 1991, pp. 12-15.
35. *Ibid.*; See Burrage & Torstendahl 1991.
36. Viljo 1985; Korvenmaa 1991.
37. Lukkarinen 1989.
38. Wäre 1991.
39. Nikula 1988b, p. 92.
40. Pierre Macherey quoted in Wolff 1981, pp. 65-66.
41. Wolff 1981, p. 124.
42. Setälä 1988, pp. 139-140, 143.
43. Alpers 1977, pp. 1-13.
44. Alpers 1987, p. 161.
45. Carrier 1989, pp. 337-338.
46. Baldwin & Harrison & Ramsden 1981, pp. 434-435.
47. *Ibid.*, pp. 451-452.
48. Carrier 1988, p. 193.
49. Carrier 1989, p. 337.
50. Harding 1986, pp. 27-29; Harding 1987a, pp. 10-14.
51. Tickner 1988, p. 93.
52. Pollock 1988, p. 22.
53. Nochlin 1971, pp. 22-39.
54. Gouma-Peterson & Mathews 1987 present an overview and general assessment of feminist critiques of art history.
55. Parker & Pollock 1981.
56. Nikula 1988b.
57. Pollock 1988; Tickner 1988.
58. Pollock 1988, p. 56.
59. *Ibid.*, p. 27.
60. Tickner 1988, pp. 112-113.
61. Pollock 1988, p. 55.
62. Pollock discusses in broader perspective the insufficient conceptualization of gender, wishing to link pejorative views of women as artists with factors such as their place in working life and its gender-based divisions. Pollock 1988, p. 21; See Harding 1986, pp. 52-55.
63. The ethics of radical feminism are discussed in Braidotti 1989, pp. 89-104; Braidotti 1991.
64. On the epistemological interests of hermeneutics and the relationships of theory and empirical fact in the discipline of history, see e.g. Helenius 1990.
65. On the role of metaphor in scientific explanation, see Harding 1986, pp. 112-135; Roszika Parker and Griselda Pollock have analysed stereotypes of femininity in art and art history, Parker & Pollock 1981.
66. Molander 1990, pp. 7-22.
67. Term from Jameson 1985.
68. Braidotti 1989, pp. 89-104.
69. This discussion follows a feminist reading of Lacanian psychoanalytical theory, further linked with Luce Irigaray's definitions of the ethics of sexual difference, see Brennan 1989.
70. Irigaray's writings on sexual difference are analysed e.g. in Braidotti 1991, pp. 248-263.
71. On this concept of 'multiple identifications', already discussed by Freud, see e.g. Brennan 1989, pp. 9-11.
72. Konttinen 1991, pp. 26, 50-51, 69, 121-122; Lagerspetz 1990; Larson 1983, pp. 59-62.

2. ARCHITECTS IN FINLAND

1. See Siegrist 1990, pp. 178-179.
2. Burrage & Jarausch & Siegrist 1990, pp. 204, 223.
3. Konttinen 1991, pp. 15-17, 102-104.
4. On relations between social strata and classes in Finland, see Alapuro 1985, pp. 36-40.
5. Konttinen 1991, pp. 105-106, 122.
6. The Technical Institute was founded in 1828 and the school of the same name in 1832. See Wuolle 1949, p. 7.
7. Myllyntaus 1980, pp. 357-358.
8. The diverse effects of legislation on Finnish towns and their architecture has been studied by Henrik Lilius. See Lilius 1989, pp. 13-26.
9. On the early formation processes of technical teaching, see Wuolle 1949.
10. Särkikoski 1987, p. 85; Konttinen 1991, pp. 248-250.
11. Lahti 1970, p. 41.
12. Alapuro 1985, p. 60.
13. Restrictions on the rights of unmarried women under civil law were repealed in 1864, and full rights were accorded to married women in 1929. See Huhtanen 1983, p. 98.

14. Konttinen 1991, p. 171.
15. Sinisalo 1988, p. 20
16. On the efforts of the building administration to develop its own corps of officials, see Sinisalo 1988.
17. Sinisalo 1988, pp. 84-87.
18. Lilius 1989, pp. 22-27.
19. Heikkinen & Hoffman 1982, pp. 52-82; Alapuro 1985, pp. 43, 60.
20. Status professions based their privileges on the role of a leading class, while occupational professions aimed at creating specialist services that could be marketed effectively. See Konttinen 1991, pp. 16, 23.
21. Alapuro & Stenius 1987, pp. 14-17, 34; see Klinge 1977.
22. Alapuro & Stenius 1987, pp. 34-35; Konttinen 1991, pp. 186-188, 207-208; Wilkama 1938, pp. 63-67.
23. Alapuro & Stenius 1987, pp. 34-35; Konttinen 186-188.
24. Maunula 1989, p. 184-186.
25. On the founding and construction of the Ateneum in Helsinki, see Viljo 1984b; Viljo 1985; Viljo 1989; Maunula 1989; On Estlander's role in developing lower-level technical education in Finland, see Suominen-Kokkonen 1989.
26. Quoted in Runeby 1976, p. 233; see Klinge 1977, pp. 149-154.
27. The case of the artist Helena Westermarck was perhaps the most important instance of Estlander's influence on individual artists. See Konttinen, R. 1991.
28. Author's italics. Letter from C.G. Estlander to Professor Fredrik Wilhelm Scholander, 20.12.1878. KB, I p.11:4:58.
29. Nyström's lectures: Föreläsningar i arkitektur, Folder IX, 'Öfverblick af de stilperioder, som föregå nya tidens konst' ('Review of Periods of Style Preceding the Art of Modern Times'), SRM.
30. Östnäs 1984, p. 97; Jadelius 1982, pp. 222-233.
31. Wuolle 1949, pp. 32-40.
32. Burrage & Jarausch & Siegrist 1990, pp. 204-206.
33. Ibid., pp. 205-207.
34. Konttinen 1991, p. 29.
35. Sociologists have viewed the situation in Finland from the perspective of Weber's ideal types of bureaucratic control. See Konttinen 1991, pp. 71, 217.
36. Lundequist 1984, pp. 10-11; 24-25, 42-43.
37. Konttinen 1991, pp. 25-28; Salokannel 1990, pp. 7, 14; Larson 1983, pp. 60-61.
38. Berner 1981, p. 205.
39. Torstendahl 1975.
40. Siegrist 1990, pp. 186, 196-197; Konttinen 1991, p. 250.
41. Berner 1982, p. 26; Sundin 1981, pp. 61, 83-84; Konttinen 1991, p. 252.
42. Salokannel 1990, p. 84; see Viljo 1986, pp. 89-95.
43. Salokannel 1990, pp. 64,70.
44. Östnäs 1984, p. 103.
45. Kuoppamäki-Kalkkinen 1984, pp. 139-140, 205; Juntto 1990, pp. 38-39.
46. Alapuro & Stenius 1987, pp. 18-19.
47. Konttinen 1991, p. 219.
48. Alapuro & Stenius 1987, pp. 30, 35.
49. Even a few years before 1880 architects had discussed founding an association which would also have included civil engineers. This was one of the reasons for the general term 'Technological Society' (Sw. *Teknisk förening*). See letter from Frans A. Sjöström to Gustaf Nyström, 18.12.1878. Gustaf Nyström Collection, SRM; Tallqvist 1930, pp. 8-9.
50. The rolls of the Engineering Society for 1889 and 1893. New members required the support of two-thirds of the vote at a meeting of the society. See Tallqvist 1930, p. 23.
51. Kocka 1990, p. 69.
52. Witz 1992, pp. 47, 60-61.
53. Huhtanen 1983.
54. Konttinen 1991, pp. 257-258.
55. A few years before the founding of the professional clubs architects had formed their own 'Free Society of Architects, which was organized under the auspices of the Engineering Society. Tallqvist 1930, pp. 55, 58; af Schultén 1963, p. 1; Fackklubbens för arkitektur möte 22.10.1892. Tekniska föreningen 2-3/1892, pp. 109-112; Öfversikt af Tekniska föreningens verksamhet 1895. Tekniska föreningen 4/1895, p. 196. On the organization of architects, see Viljo 1985, p. 12.
56. Teknikern 48/1892, p. 260.
57. The competition regulations were not immediately adopted, and in individual cases architects could participate in competitions contrary to the rules, e.g. for the Karelian Students' Corporation building in Helsinki, see Suominen-Kokkonen 1989, pp. 165-166.
58. Wäre 1989, p. 116.
59. Suominen-Kokkonen 1989, pp. 164-167.
60. Östnäs 1984, pp. 105-106.
61. Suominen-Kokkonen 1989, p. 167.
62. Arkitektklubbens sammanträde 28.9.1907. Arkitekten 7/1907, pp. 115-116.
63. Konttinen 1991, p. 212.
64. Lilius 1980, p. 45.
65. Gustaf Nyström's lectures: FIA, Folder I; 'Om arkitekturundervisningen' ('On the Teaching of Architecture'), 1912, rewritten in 1916. Irrallisia muistiinpanoja ja käsikirjoitus (Notes and manuscript), p. 20, SRM.
66. Viljo 1985, pp. 194-195.
67. Korvenmaa 1991, pp. 25-26.
68. The Architects' Club did not keep a reliable roll of members, but, for example, a published list of members from 1914 did not include any women. Arkitekten 1/1914, pp. 11-12.
69. Suominen-Kokkonen 1989, pp. 169-176.
70. Östnäs & Svensson 1986, p. 13.
71. Konttinen 1991, p. 27.
72. Berner 1981, pp. 207-208.
73. See Juntto 1990, pp. 24-25, 132, 174-175.
74. Egbert 1980 is one of the best available descriptions of the Beaux-Arts tradition and its development.
75. On the general history of polytechnic education, see Artz 1966, and Egbert 1980 on the teaching of industrial and applied art.
76. '...that the three principal components of that whole theory (of beauty) into which we inquire are number (numerus), what we might call outline (finito), and position (collocatio)', Alberti 1988, pp. 303, 422; on the principles of the classical theory, see Wittkower 1974.
77. Egbert 1980, p. 13.
78. Cret 1941, p. 11.
79. Chafee 1977, pp. 89-95.
80. Cret 1941, p. 12.
81. Artz 1966, pp. 153-160; Chafee 1977, pp. 72-73.
82. Chafee 1977, pp. 72-73.
83. Artz 1966, pp. 231-240.
84. Schnabel 1925, pp. 17-19.
85. Konttinen 1991, pp. 61-63.
86. Schnabel 1925, pp. 17-19; see also Zucker 1942, pp. 7-9.
87. Lexis 1904, p. 30.
88. Konttinen 1991, pp. 66-67.
89. Torstendahl 1975, p. 26; Anderberg 1921, pp. 52-57.
90. Both Nyström and Scholander had studied at the atelier of Hippolyte le Bas, a faculty member at the Ecole des Beaux-Arts. See Lindahl 1986, pp. 220-226; Grandien 1979, pp. 25-30.
91. Lindahl 1986, pp. 227-228, 253.
92. Ibid., pp. 253-257; Runeby 1976, pp. 209, 216-218.
93. Konttinen 1991, pp. 251-253.
94. Wuolle 1949, pp. 80-84, 95-98; Nyström 1899a, pp. 96-97.
95. Nyström 1899b, pp. 163-175.
96. As a foreigner, Sjöström was not eligible for the Swedish government's travel grant for a stay in Rome, and Scholander instructed him to apply to the Academy of Arts in St. Petersburg; Nyström 1899b, pp. 164-165; letter from F.W. Scholander to P.A. Säve, 1.5.1876. KB, I p. 11:2:30.

97. Nyström 1899a, pp. 100-101.
98. Lower-level technical training was reorganized in 1878, see Anderberg 1921, pp. 69-70.
99. Letter from C.G. Estlander to Fr.W. Scholander, I.4.1876. KB, I p. 11:5:58.
100. Ibid.
101. See Hjelmmann 1905, pp. 3-7.
102. Qvist 1899, pp. 30-31, 44-46; Wuolle 1949, pp. 124-126.
103. Letter from F. A. Sjöström to C.G. Nyström, 18.12.1878. SRM.
104. Nyström 1899a, pp. 101-102; Polytekniska institutets i Finland katalog höstterminen 1879, p. 8.
105. Letter from C.G. Nyström to O. Törnqvist, 15.2.1887. SRM.
106. Qvist 1889, pp. 61-63; Wuolle 1949, pp. 146-147.
107. Nyström's lectures: FIA, Folder I: 'Om arkitektur undervisningen' ('On the Teaching of Architecture'), 1912, rewritten 1916. SRM.
108. Letter from Fr. W. Scholander to P.A. Säve, 1.5.1876. KB, I p 11:2:30.
109. Lukkarinen 1989.
110. Nyström's lectures: FIA, Folder I, 'Jernets inflytande på byggnadskonsten' ('The Influence of Iron on Architecture') from 1912/1916. SRM; Lukkarinen 1989, p. 35.
111. Nyström's lectures: FIA, Folder I, 'Byggnadskonstens grundprinciper', ('Basic Principles of Architecture'), numbered page 23, 1912/1916. SRM.
112. Nyström's lectures: FIA, Folder IX, 'Den moderna arkitekturen och dess nuvarande ställning' ('Modern Architecture and its Present Situation'), SRM.
113. See Egbert 1980, p. 37; Levine 1982, p. 121.
114. Grundström's lectures: Föreläsningar i arkitektur, Folder II, 'Om proportioner i arkitekturverk' ('On Proportion in Works of Architecture'), held in 1911 and 1912, and 'Om proportionerna i antikens arkitekturverk' ('On Proportion in the Architecture of Antiquity'), held in 1902, 1906 and 1909. KA; Kungliga akademien för de fria konsterna katalog 1899-1914. KA; see Lindahl 1982, pp. 6-11.
115. Polytekniska institutets årsberättelser 1900-1907.
116. Suomen teknillisen korkeakoulun vuosikertomukset 1908-1920; Wuolle 1949, pp. 243-250, 317-318.
117. Quoted in Grossman & Reitzes 1989, p. 30.
118. Konttinen 1991, pp. 67-69.
119. Wright 1980, pp. 172, 200-201, 205; See Larson 1983, pp. 66-70.
120. On the development of architecture in the United States, see Bannister 1954 and Boyle 1977.
121. Paine 1977, pp. 55-59, 71; Wright 1977, pp. 290-291.
122. See Cole 1973, p. 75; Barbasch 1989, pp. 15-25; Harris 1978, pp. 98-101.
123. Private schools of architecture openly refused to admit women students. Paine 1977, pp. 55-59, 69-71; Wright 1977, pp. 290-291.
124. Bethune 1891, pp. 20-21. The material on women architects in America is from the Archive of Women in Architecture belonging to the Archives of the American Institute of Architecture.
125. Statistics on Women Members, Archive of Women in Architecture, AIA.
126. Glazer & Slater 1987, p. 239.
127. Seip 1985, pp. 307-309.
128. Ingelman 1982, pp. 29-35; see Grandien 1979, pp. 113-116.
129. Wollin 1951, pp. 68-70.
130. Ibid. p. 362.
131. Tekniska skolans för kvinnliga lärjungar betyg 1879-1913, B5A. KFA.
132. See Suominen-Kokkonen 1987, p. 84.
133. Byggnadsyrkesskolans anmälningsböcker 1879-1911, D1D. KFA.
134. Henriques 1927, pp. 267-268.
135. Ibid.; see Seip 1985, pp. 310-311.
136. Kungliga tekniska högskolans katalog 1915-1924. KTH.
137. Berner 1982, pp. 27-28, 30-31.
138. On the ideology of the family and its Finnish versions, see Häggman 1991; Jallinoja 1982, p. 7; Konttinen 1991, pp. 207-211.
139. Jallinoja 1983, pp. 223-226.
140. Konttinen 1991, p. 122; on the middle class (*Bürgertum*) and education in general, see Kocka 1990, pp. 64-65.
141. Johansson 1987, pp. 5, 19-20, 51-67.
142. Jallinoja 1983, p. 226.
143. Konttinen 1991, pp. 208-209.
144. The statutes of the institute (6.1.1879), Polytekniska institutets program 1882-1883.
145. Wuolle 1949, pp. 128, 141.
146. Of these five women who studied at the institute between 1879-1882 four were later active as artists: Ida Meller, Helene Schjerfbeck, Elin Danielson, and Helmi Sjöstrand. Matrikel 1899, pp. 409-411.
147. Polytekniska institutets kataloger 1879-1908; Matrikel 1899; Heiniö 1917.
148. Suominen-Kokkonen 1987.
149. Interview with Wivi Lönn, Kyllikki Halme 23.10.1958. SRM.
150. Polytekniska institutets årsberättelse 1902-1903, p. 16.
151. Polytekniska institutets årsberättelse 1900-1920.
152. Wuolle 1949, pp. 151-169.
153. Matrikel 1899, pp. 428, 431; Heiniö 1917, pp. 104, 213, 236.
154. Suomen teknillisen korkeakoulun luettelot 1908-1918.
155. Degree requirements of the University of Technology, 25.2.1909, Suomen teknillisen korkeakoulun vuosikertomus 1908-1909.
156. Suomen teknillisen korkeakoulun vuosikertomus 1910-1911.
157. Polytekniska institutets kataloger 1879-1908; Matrikel 1899; Heiniö 1917; Suomen teknillisen korkeakoulun luettelot 1908-1918; Suomen teknillisen korkeakoulun vuosikertomukset 1908-1920; on male students, see Mäkinen 1985.
158. Suomen teknillisen korkeakoulun vuosikertomukset 1915-16.
159. Suomen teknillisen korkeakoulun vuosikertomukset 1905-1906, 1917-1918; see Setälä 1970.
160. Polytekniska institutets kataloger 1879-1908; Matrikel 1899; Heiniö 1917; Suomen teknillisen korkeakoulun luettelot 1908-1921; Suomen teknillisen korkeakoulun vuosikertomukset 1908-1923; see Mäkinen 1985.
161. In addition to Olivia (Wivi) Lönn and Albertina Östman, Sigrid Eklund, Anna Stigzelius and Julia Enroos also studied at the industrial school, see Suominen-Kokkonen 1987.
162. Suomen teknillisen korkeakoulun vuosikertomukset 1913-1914, 1916-1917.
163. Ibid.; Suomen teknillisen korkeakoulun luettelot 1908-1921.
164. Larson 1983, pp. 75-76.
165. Factors influencing change in professions have been analysed in Burrage & Torstendahl 1990, pp. 207-217.
166. Ibid., pp. 209, 215.
167. Konttinen 1991, p. 217.
168. Berner 1982, p. 27.
169. Särkikoski 1987, pp. 92-94.
170. Foucault 1989, pp. 344-387; Foucault 1984a, pp. 71-74; Meadows 1983, pp. 28-31.
171. See Saint 1983, p.58; Berner 1981, p. 206-207.
172. Nyström's lectures, FIA, Folder I, 'Byggnadskonstens grundprinciper' ('Basic Principles of Architecture'). SRM.
173. Nyström's lectures, FIA, Folder IX, 'Den moderna arkitekturen och dess nuvarande ställning' ('Modern Architecture and its Present Situation'). SRM.
174. Östnäs 1984, p. 107; Fack-klubben för arkitektur möte 1.2. 1896, Tekniska Föreningen 1-2/1896, pp. 75-78.
175. Burrage & Torstendahl 1990, pp. 208-209, 215.
176. Egbert 1980, pp. 59-61.
177. Among the students were Gunnar Asplund and Melchior

- Wernsted. Teachers included Ivar Tengbom and Ragnar Östberg, see Linn 1990, p. 69.
178. See Lukkarinen 1989, pp. 73-75; Wäre 1991, pp. 182-183, 186-187.
 179. Lukkarinen 1989, pp. 43-44; Nyström's lectures FIA, Folder I, miscellaneous notes for lectures, SRM.
 180. Nyström's lectures, FIA, Folder IX, notes in connection with the lecture 'Den moderna arkitekturen och dess nuvarande ställning', SRM; see Lukkarinen 1989, p. 77.
 181. Collins 1990, pp. 37-38.
 182. Interview with Wivi Lönn, Kyllikki Halme 12.11.1958. SRM.
 183. Salme Setälä's student projects 1912-1916, diploma project 1917, Salme Setälä Collection. SRM.
 184. Nyström's lectures, FIA, Folders I-XI. SRM; Salme Setälä's lecture notes 1914-1916. SRM.
 185. Professor Gustaf Nyström's Collection: signed test themes and questions, autumn term 1917, see Program för diplomarbeten i arkitektur (Programme for Diploma Projects in Architecture). SRM.
 186. Nyström 1917, pp. 56-57.
 187. Professor Claes Grundström's Collection, Folder I: Program för täflingar i arkitektur vid Akademien (Programme for Architectural Competitions at the Academy), KA.
 188. Professor Gustaf Nyström's Collection : Program för diplomarbeten i arkitektur. SRM.
 189. Suomen teknillisen korkeakoulun vuosikertomus 1909-1910, p. 60.
 190. Polytekniska institutets årsberättelse 1903-1904, pp. 7-8; Nyströmin lectures: FIA, Folder VIII, 'Några framstående personligheter i den nyaste tidens arkitekturhistorien' ('Leading Figures in Recent Architectural History'). SRM.
 191. Suomen teknillisen korkeakoulun vuosikertomus 1919-1920, pp. 31-37.
 192. 'Arkitekturundervisningens omorganisation', Arkitekten 8/1926, pp. 143-151; Arkitekten 4/1927, pp. 45-48; 'Diskussion om arkitektutbildningen', Arkitekten 4/1929, p. 58-61.
 193. See Konttinen 1991, pp. 207-211.
 194. Huhtanen 1983, pp. 94-95.
 195. This is based on information from Wivi Lönn and Salme Setälä concerning their studies, see Kyllikki Halme's interviews with Wivi Lönn, 1958; Setälä 1970. Studies in other countries have also supported these conclusions; see Martin 1986 and Greed 1991.
 196. See Lagerspetz 1990, pp. 16-18, 82-91.
 197. Interview with Wivi Lönn, Kyllikki Halme 12.11.1958. SRM.
 198. Setälä 1970, p. 38.
 199. Minutes of the Tumstocken club 1919-1924, Archives of the *Architecta* association. SRM; see Setälä 1970, pp. 118-119.
 200. Setälä 1970, pp. 161, 184-209; The 'comrades in arms' included the women students Elsi Borg, Verna Maria Eriksson, Sylvi Nyssönen, Toini Ojala, Annikki Paasikivi, Liisa Paloheimo and Salme Setälä, see Salme Setälä Collection, photographs of the Civil War of 1918. SRM.
 201. Burrage & Torstendahl 1990, p. 223.
 202. Interview with Wivi Lönn, Kyllikki Halme 23.10.1958. SRM.
 203. Ibid.
 5. Porphyrios 1981, p. 99.
 6. Tickner 1988, pp. 96-97.
 7. For biographical details, see Kivinen 1982, pp. 33-81; Olivia Lönn began to call herself Wivi as a schoolgirl. The first mention of this name is from 1882; see Wivi Lönn Collection, Oulu University Library; on the training of Finnish women as master-builders, see Suominen-Kokkonen 1987, pp. 70-82.
 8. Hilja Gestrin (née Kainulainen) was one of Lönn's long-term assistants. Stina Östman worked for Lönn for some time, and the office also employed a master-builder for constructions. Interview with Wivi Lönn, Kyllikki Halme 12.11.1958. SRM.
 9. Ibid.
 10. On the general features of Armas Lindgren's architecture, see Nikula 1988a; on the work of the office of Gesellius - Lindgren - Saarinen, see Hausen & Mikkola & Amberg & Valto 1990.
 11. Nikula 1988a, p. 31.
 12. Interview with Wivi Lönn, Kyllikki Halme 12.11.1958. SRM.
 13. Nikula 1988a, p. 33.
 14. Interview with Wivi Lönn, Kyllikki Halme 12.11.1958. SRM; 'Opus Wivi Lönn', Archives of the *Architecta* association, SRM; see also Nikula 1988a and Künnapu 1991, pp. 25-26. The Sakala building is a problematic example of Lönn's and Lindgren's collaboration. Before giving up the work, Lönn had only drafted the façades and the floor plans. It appears that Lindgren followed Lönn's design to such a degree that he wished to attribute the project to both himself and Lönn.
 15. Klinge 1990, pp. 70-102, 151-154, 200. Matti Klinge's studies on the Helsinki University Students' Union discuss its building projects and their background in considerable detail.
 16. Klinge 1990, pp. 200-202; Koskimies 1910, pp. 26-32.
 17. Koskimies 1910, pp. 30-32.
 18. Ibid.; Studenthustävlingen, Arkitekten 5/1908, pp. 57-61.
 19. Koskimies 1910, pp. 34-38; Klinge 1990, pp. 203-207.
 20. Ibid.
 21. Studenthustävlingen, Arkitekten 5/1980, pp. 58-61. Building plans, folder K 12B, Archives of the Helsinki University Students' Union.
 22. Building plans, folder K 1, Archives of the Helsinki University Students' Union. Some of the original drawings were not filed. One of the floor plans was dated December 1908. The elevations and all other drawings appear to have been completed in early 1909 when they were published, see Ritningarna till det nya Studenthuset, Arkitekten 2/1909, pp. 67-71.
 23. Nikula 1988a, pp. 68-71.
 24. Building plans, folder K 12B, Archives of the Helsinki University Students' Union; the competition entry for the Pietinen building is published in Nikula 1988a, p. 64.
 25. Ibid., p. 67.
 26. Koskimies 1910, pp. 42-44; Klinge 1990, pp. 206-209.
 27. Building plans, folder K 1; working plans, folder K1B, Archives of the Helsinki University Students' Union.
 28. Interview with Wivi Lönn, Kyllikki Halme 23.10.1958. SRM; Koskimies 1910, pp. 36,42.
 29. Originals of building plans, Archives A and B, SRM.
 30. Wivi Lönn's travel report, 10.3.1899. Studieberättelser 1896-1914. Archives of the *Konkordiaförbundet* association, VA.
 31. See Kivinen 1982, pp. 47-50.
 32. Täflan om brandstationen. Tammerfors nyheter 9.2.1906.
 33. Gens 1974, pp. 5-6; Raun 1989, p. 121; Nikula 1988a, p. 74.
 34. Peets 1938, p. 41; Gens 1974, pp. 6-14; Veljeskansan luona juhlimassa, Uusi Suometar 9.9.1913.
 35. Gens 1974, p. 14.
 36. Peets 1938, pp. 46-47; Gens 1974, p. 14.
 37. Gens 1974, p. 17.

3. WOMEN IN PLANNING AND DESIGN

1. Bourdieu 1985, pp. 178-181.
2. Parker & Pollock 1981, pp. 44-45; Porphyrios 1981, pp. 98-99.
3. Parker & Pollock 1981, p. 45.
4. Bourdieu 1985, p. 203.

38. Tallinna Eesti teatri "Estonia" ehituse ja ülespidamise osäühituse liikmete nimekiri. Tallinn 1909. ETM; Veljeskansas luona juhlimassa, Uusi Suometar 9.9.1913.
39. Gens 1974, p. 18; Peets 1938, p. 90; Tallinna Eesti teatri "Estonia" ehituse...1915, pp. 25, 35; Veljeskansas luona juhlimassa, Uusi Suometar 9.9.1913.
40. Originals of building plans, Archive A, SRM.
41. On the principles of theatre design, see Koho 1991.
42. Teater och konserthus tävlingen i Reval, Arkitekten 8/1908, pp. 109, 114-117.
43. Originals of building plans, Archive A, SRM.
44. Gens 1974, pp. 17-18.
45. Originals of building plans, Archive A, SRM; Letter from Fr. Akel to Armas Lindgren 9/22.3.1910. SRM.
46. Peets 1938, p. 93; Folder 'Estonia hoone enne 1913 a.' (The Estonia building before 1913).ETM.
47. Preserved correspondence includes telegrams, in which Lönn explains to the Estonia company why the drawings and plans have not been delivered. Folder: 'Teatrimaja ehitusaegne kirjevahetus 1910-1913'. ETM; These problems are also mentioned in published sources, see Peets 1938, p. 84; Tallinna Eesti teatri "Estonia" ehituse ja ülespidamise osäühise majaehitamise aruanne 1909-1914, 1915, p. 36; Letters from K. Mauritz to Armas Lindgren, 23.5.1910, 2/15.6.1910, 26.2.1911. SRM.
48. Gens 1974, p. 18; Peets 1938, p. 90; Tallinna Eesti teatri "Estonia" ehituse... 1915, pp. 25, 35; Veljeskansas luona juhlimassa, Uusi Suometar, 9.9.1913; telegram from Armas Lindgren to K. Mauritz, 10.9.1910. ETM; The committee in charge of the building project wished to have the plans and drawings ready by August 1910, letter from K. Mauritz to Armas Lindgren, 23.5.1910. SRM.
49. Uncatalogued building plans, Archive B, SRM.
50. Letter from K. Mauritz to Armas Lindgren, 13.12.1910. SRM.
51. Gens 1974, pp. 18-20; Tallinna Eesti teatri "Estonia" ehituse... 1915, p. 19.
52. Peets 1938, p. 93; Gens 1974, pp. 18-19; Tallinna Eesti teatri "Estonia" ehituse... 1915, pp. 25-26; The original contract with Kreuger & Toll was signed on the 14th of October, 1911. ETM.
53. Uncatalogued building plans, Archive B, SRM.
54. Letter from Armas Lindgren to K. Mauritz, 12.9.1911. ETM.
55. See Künnapu 1988, pp. 31-34; Künnapu 1991, pp. 26-30.
56. Peets 1938, pp. 101-105; Tallinna Eesti teatri "Estonia" ehituse... 1915, pp. 20, 22, 28-29, 35-36; Veljeskansas luona juhlimassa, Uusi Suometar 9.9.1913; Notiser, Arkitekten 5/1914, pp. 69-70; The theatre was to have been inaugurated in August, but delays in building work apparently led to their being postponed until September.
57. Interview with Wivi Lönn, Kyllikki Halme 12.11.1958. SRM.
58. E.g. Suomen ensimmäinen naisarkkitehti tehnyt työtään 60 vuotta. Kotiliesi 10/1952, pp. 356-357.
59. Interview with Wivi Lönn, Kyllikki Halme 23.10.1958, SRM; Koho 1988, p. 156.
60. Interview with Wivi Lönn, Kyllikki Halme 12.11.1958, SRM.
61. Vanemuine 1925, pp. 55-56, 74, 145, 153.
62. Koho 1988, passim.
63. Interview with the architect Aini Sarsa, Riitta Nikula 11.11.1987. In Nikula's possession; see Nikula 1988a, p. 76.
64. Sulkunen 1987, pp. 157-172.
65. This attitude is not rare even today, e.g. Hausen, Mikkola, Amber & Valto 1990, p. 51.
66. Studenthustävlingen, Arkitekten 5/1908, pp. 57-61.
67. Ritningarna till det nya Studenthuset, Arkitekten 2/1909, pp. 14-19.
68. Frosterus 1910, pp. 121-124.
69. Teater och konserthus tävlingen i Reval, Arkitekten 8/1908, pp. 109-117.
70. Tallinnan Estonia-teatteri, Uusi Suometar 7.9.1913; Veljeskansas luona juhlimassa, Uusi Suometar 9.-10.9.1913; See also Den nya teatern i Reval, Hufvudstadsbladet 7.9.1913 and Estonia-teatterin wikikiäisistä, Helsingin Sanomat 9.9.1913.
71. Öhquist 1912, pp. 578, 595; The New Student House was later mentioned in many general works on Finnish architecture, always as Armas Lindgren's design. There were no references at all to the Estonia theatre. See e.g. Lindberg 1927, p. 244; Okkonen 1955, pp. 638-639.
72. Strengell 1903, p. 96; Öhquist 1912, pp. 602-603; Lindberg 1927, pp. 240-241; af Schulten 1947, p. 279; Wickberg 1959, pp. 82-86; Helander & Rista 1987, pp. 17-18.
73. Heinonen 1986, pp. 4-24; Porphyrios 1982, pp. 110-113.
74. Nikula 1988a, pp. 5, 142.
75. Wäre 1991, passim.
76. Arkitektklubbens sammanträden 4.9. & 28.9.1907. Arkitekten 7/1907, pp. 115-116.
77. Of Salme Setälä's autobiographical works and memoirs, the most important ones for this study are *Polusteekin koulussa* (1970), *Kirjoitan pojalleni* (1971), and *Epäasialinen kronikka viiden pääjohtajan ajalta* (1973). Her book *Levoton veri* (1966) contains passages on her youth. *Sangen tavallisia virkanaisia* (1937) is a novel containing interesting analogies with Setälä's own life and career, but as a work of fiction it was not used as a source in this study.
78. The fourth to begin studying architecture was Ole Gripenberg, Setälä 1970, p. 72.
79. Setälä 1957, pp. 620-621; Setälä 1970, p. 23.
80. Setälä 1957, pp. 606-607; Setälä 1970, p. 74.
81. In 1919 Setälä married the journalist Frithiof Cornér, Setälä 1970, pp. 140, 157-161, 191.
82. Salme Setälä's second child was born mentally retarded, which made it necessary for her to remain at home for a longer than normal period. During her years at home Setälä translated, among other works, Strengell's books *Staden som konstverk* (The City as a Work of Art), *Hemmet som konstverk* (The Home as a Work of Art), and *Byggnaden som konstverk* (Buildings as Works of Art). She also wrote articles on architecture and interior decoration usually under the pseudonym 'Priska' for several newspapers and periodicals, including *Yhteishyvä*, *Iltalehti* and *Uusi Suomi*. Her marriage with Frithiof Cornér ended in divorce in 1930. Salme Setälä's curriculum vitae 1951. SRM; Setälä 1971, pp. 41, 76, 112; Setälä 1973, p. 31.
83. Setälä 1973, p. 185.
84. Salme Setälä's curriculum vitae 1951. SRM; Setälä 1971, pp. 112-113; Setälä, p. 61; Separate newspaper clipping, dated 3.8.1929, on the building of the teachers' training institute in Kajaani, Setälä's collection of newspaper clippings. SRM.
85. Salme Setälä's curriculum vitae 1951. SRM; Setälä 1973, pp. 65, 71-73; Halila 1967, pp. 116-118.
86. Salme Setälä's curriculum vitae 1951. SRM; Setälä 1973, pp. 73, 85-89; Wuolle 1949, p. 597.
87. Peltonen 1982, pp. 98-99; Perälä 1984, pp. 48-50, 66-67; Salokorpi 1984, pp. 294-295.
88. Perälä 1984, pp. 64-66; Saarikangas 1990, pp. 74-77.
89. Perälä 1984, p. 66; Halila 1967, p. 124.
90. Halila 1967, passim.
91. Meurman 1947, passim.
92. Ibid., pp. 412-417, 422-423.
93. Raymond Unwin's reference, dated 13.8.1914. SRM; Setälä 1970, pp. 95-98.
94. Strengell 1923b, p. 110; see Nikula 1990, pp. 100-101.
95. Setälä 1973, pp. 103, 106, 110, 113, 120; Agreement between the Mikkeli province authorities and Salme Setälä concerning a local building plan for the village of Liikala, dated 22.12.1938. SRM.
96. Salme Setälä's curriculum vitae 1951; Setälä 1973, pp. 126, 154-155.
97. Nikula 1981, pp. 101-105, 127-129; Nikula 1990, pp. 103-104.

98. Meurman 1947, p. 17.
99. Local building plan for the Pello area in Turtola, written description dated 17.5.1945. SRM.
100. Written description of roads and streets in the local building plan for Keuruu, dated 5.4.1951. SRM
101. Setälä 1973, p. 144.
102. Nikula 1981, p. 140; Letter from Salme Setälä to the artist Martta Aarnikotka, 24.9.1956. SRM.
103. Nikula 1981, pp. 127-129, 161-162; Nikula 1990, p. 103; Lindberg 1923, pp. 14-15.
104. Copy of the plan for Juppala in Riihimäki 28.2.1946, and its written description 11.3.1946. SRM.
105. Salme Setälä's curriculum vitae 1951; lists of local building plans drawn up by the National Board of Construction from the late 1940s to 1955. SRM; Setälä 1973, passim. Listed here are all planning projects by Setälä that are known to the author; uncertain cases have been omitted.
106. Paulsson 1919; Rudberg 1981, pp. 30-35.
107. Sulkunen 1989, p. 82.
108. Saarikangas 1990, pp 231-232; Ollila 1989, passim.; see Ollila 1991, pp. 127-137.
109. Sulkunen 1989, pp. 93-94.
110. At the furniture-design competitions arranged by the Möbelcentral firm main prizes went to Elsa Arokallio (1927) and Elsi Borg (1930); Arkitekten 2/1928, 7/1930.
111. Paulsson 1919; Paulsson 1916, pp. 140-159; see Andersson 1982, p. 22; Keinänen 1980b; Maunula 1990, pp. 159-162.
112. Brunius 1917, passim.
113. Part of Salme Setälä's library was donated to the Museum of Finnish Architecture.
114. Malmsten's book first appeared in 1924 and was translated into Finnish as *Kaunis koti* (The Home Beautiful) by Esteri Paalanen, Malmsten 1926.
115. Salme Setälä's curriculum vitae 1951. SRM; Setälä 1970, pp. 126-127.
116. Salme Setälä's curriculum vitae 1951; Setälä's album of photographs. SRM; Setälä 1973, pp. 13-14.
117. Setälä 1970, p. 178.
118. The name of the firm was taken from the surnames Ahde and Cornér; Salme Setälä's curriculum vitae 1951. SRM.
119. Many women architects set up commercial and consulting ventures in interior design: in 1929 Kerstin Holmberg-Palmqvist opened a permanent exhibition of interior decoration in Helsinki, and in the 1930s Artek was rivalled by Elna Kiljander's and Maria Strengell's *Koti-Hemmet* interior decoration office. Heminredningsutställning, Arkitekten 5/1929, p. 80; Vepsäläinen 1982, p. 142.
120. Taidelasista, Uusi Suomi 27.9.1925, E.R.; Naisten Ääni 8/1925.
121. Salme Setälä's curriculum vitae 1951. SRM.
122. Setälä 1929; Original material for her books in the collections of the Museum of Finnish Architecture.
123. See Sulkunen 1989, pp. 80-82.
124. In the late 1920s Setälä wrote articles on dwellings for several newspapers and periodicals, e.g. 'Eeva ja Erkki menevät naimisiin. Miten heidän olisi järjestettävä asuntonsa?', Uusi Suomi 25.3.1928; 'Kahden huoneen koti. Nuori pari perustaa kotia.', Kotiliesi 1/1930.
125. Lagerborg-Stenius 1925; Standertskjöld 1991.
126. Rudberg 1981, pp. 49-51; Hurton 1990; Kramer 1989, pp. 160-173.
127. Standertskjöld 1991.
128. Heinonen 1986, pp. 74-76.
129. Ibid., pp. 89-92, Schildt 1985, pp. 68-70.
130. E.g. 'Ihannekoteja. Tukholman Bygge och Bo -näyttelyssä', Aitta July/1927; 'Asuntopakinaa Tukholmasta', Kotiliesi; 1.9. 1930; Salme Setälä's curriculum vitae 1951, SRM.
131. Sulkunen 1989, pp. 93-94.
132. Setälä 1931, pp. 9-10, 13.
133. Setälä 1929, p. 126.
134. Setälä's manuscript material for the interior-decoration courses. SRM.
135. Ibid.
136. Saarikangas 1990, passim.
137. Malmsten 1926, pp. 16, 30.
138. Setälä's archive material for the interior-decoration courses. SRM.
139. Ibid.
140. See Heminredningsutställning, Arkitekten 5/1929.
141. Kyllikki Halme had begun her studies in 1928, and Sirkka Tarumaa (formerly Tuhkunen) in 1934.
142. Setälä's archive material for the interior-decoration courses. SRM.
143. Setälä 1973, pp. 218-219.
144. Setälä's manuscript material for the interior-decoration courses. SRM.
145. Aino Aalto in memoriam, Arkitekten 1-2/1949.
146. Aino Aalto studied at the University of Technology from 1913 to 1920. Information on her decision to marry Alvar Aalto was supplied to me by their daughter, Johanna Alanen (30.9.1991); cf. Schildt 1982, pp. 131-134; similar attributions of joint works by architect couples are known from other countries, e.g. Denise Scott Brown and Robert Venturi, Brown 1989, pp. 237-246.
147. Jaffe 1980, pp. 579-599.
148. Kristeller 1983, pp. 105-113.
149. Ibid.; see Mikkola 1985, pp. 45-49, 54; Frampton 1982, p. 173, Figs. 527, 528.
150. Suhonen 1985.
151. Ibid., pp. 5-6.
152. Schildt 1984, p. 80.
153. See Suhonen 1985, passim; Schildt 1984, pp. 62-89; Schildt 1985, pp. 78-84.
154. Archives of Artek's drawing office, folders of drawings.
155. Aino Marsio-Aalto's designs of the 1920s are presented in Herler 1984. She is also known to have designed nursery furniture in 1927 for the Aaltos' home in Turku and a radical kitchen scheme for an exhibition on the rational design of small apartments.
156. Drawings stamped: 'Arkkitt. Alvar Aalto, sommittelu A. Marsio-Aalto 19.10.1932, piirtänyt AM-A'. (Architect Alvar Aalto, design by Aino Marsio-Aalto 19.10.1932, drawn by AM-A). Artek.
157. Drawings stamped: 'Arkkitt. Alvar Aalto, sommittelu A. Marsio-Aalto 29.4.1932, piirtänyt AM-A (pöytä ja tuolit), 19.10.1932 (kirjoituspöydät)' (Architect Alvar Aalto, design by Aino Marsio-Aalto 29.4.1932, drawn by AM-A [table and chairs], 19.10.1932 [desks]). Artek.
158. E.g. desk standard no. 501, 1937. Artek.
159. Suhonen 1985, pp. 75-79.
160. Paris chaise-longue, design stamped: 'Artek, sommittelu AM-A, piirtänyt MHho (Maija Heikinheimo) 19.8.1938' (Artek, design by AM-A, drawn by MHho [Maija Heikinheimo] 19.8.1938); Rattan outdoor chair, design stamped: 'Artek, sommittelu AM-A, piirtänyt MHho 9.5.1938' (Artek, design by AM-A, drawn by MHho 9.5.1938). Artek.
161. Garden chair, design stamped: 'Artek, sommittelu AM-A, piirtänyt MT 29.3.1957' (Artek, design by AM-A, drawn by MT 29.3.1957). Artek.
162. Author's interview with Johanna Alanen 30.9.1991.
163. Gullichsen 1976, pp. 26-29; Author's interview with Johanna Alanen 30.9.1991.
164. Nursery furniture for the South-West Finnish Farmers' Building in Turku, 1927-1928, photographs SRM.
165. Setälä 1930, pp. 10-11, 29.
166. Lasten tuoli A, maalataan punaiseksi, sign. AM-A, piirtänyt AM-A 19.9.1938. (Children's chair A, to be painted red, sig. AM-A, drawn by AM-A 19.9.1938). Artek.
167. Children's table, standard no. 905. Design stamped: 'Artek, sommittelu AM-A, piirtänyt MHho 27.1.1949' (Artek, design by AM-A, drawn by MHho 27.1.1949). Artek
168. Bunk-bed for three children. Design stamped: 'Artek, sommittelu AM-A, piirtänyt LP 20.6.1945' (Artek, design by AM-A, drawn by LP 20.6.1945). Artek.

169. Five alternative interior schemes (27.11.-20.12.1945) have been preserved. Artek.
170. See Suhonen 1985, pp. 75-79 on controversies relating to the Paris World Fair.
171. *Ibid.*, pp. 107-109.
172. Cupboard with sliding doors for the Malmö exhibition. Design stamped: 'Artek, sommitellut & piirtänyt AM-A 17.5.1944' (Artek, designed and drawn by AM-A 17.5.1944); Desk with drawers for the Malmö exhibition. Design stamped: 'Artek, sommitellut & piirtänyt AM-A 17.5.1944' (Artek, designed and drawn by AM-A 17.5.1944); Bed (wide model) for the Malmö exhibition. Design stamped: 'Artek, sommitellut ja piirtänyt AM-A 16.11.1943' (Artek, designed and drawn by AM-A 16.11.1943). Narrow-model bed. Design stamped: 'Artek, sommitellut & piirtänyt AM-A 16.11.1944' (Artek, drawn and designed by AM-A, 16.11.1943); Sofa with elements. Design stamped: 'Artek, sommitellu AM-A, piirtänyt MHho 14.11.1947' (Artek, design by AM-A, drawn by MHho 14.11.1947). Artek; see Aalto 1944, pp. 114-116.
173. Sofa-bed. Design stamped: 'Artek, sommitellut & piirtänyt AM-A 19.9.1944' (Artek, designed and drawn by AM-A 19.9.1944). Artek.
174. Parko 1984, p. 92.
175. E.g. drawing for a basket of willow withes 27.10.1943, signed AM-A. Artek; see Suhonen 1985, pp. 104-105.
176. E.g. designs for coasters of birch-bark and straw and a willow-withe basket. Design stamped: 'Artek, sommitellut & piirtänyt AM-A 25.-27.10.1943' (Artek, drawn and designed by AM-A 25-27.10.1943). Artek.
177. Author's interview with Johanna Alanen 30.9.1991.
178. See Pallasmaa 1985; Mikkola 1990, pp. 144-145.
179. Schildt 1985, pp. 152-161.
180. Information on the Gullichsen family is based on the author's interview with Kristian Gullichsen 14.11.1991.
181. On the earlier history of the Ahlström company and Antti Ahlström, see e.g. Norrmén (1928); there is no published history of the firm after the 1930s, cf. Tallqvist 1949.
182. E.g. Norrmén (1928), pp. 56-57; Schildt 1985, p. 152.
183. Aalto 1939, pp. 134-137; see Pallasmaa 1987, p. 42-47; Schildt 1982, pp. 4-6; Schildt 1985, pp. 152-161.
184. See Schildt 1985, p. 161; Pallasmaa 1985.
185. Porphyrios 1982, pp. 57-58.
186. *Ibid.*, pp. 36-38.
187. On the genealogies of dwelling practices, see Saarikangas 1990.
188. *Ibid.*, p. 139.
189. Cf. Schildt 1985, p. 161.
190. Author's interview with Johan Gullichsen 29.1.1992.
191. Plans and drawings of Villa Mairea, kitchen 84/500, 84/503, study 84/855. AAA
192. Gullichsen 1976, p. 29.
193. Dining-room table, Gullichsen, drawing 91/36; dining-room table with nickel legs, drawing 91/38; walnut dining-room table, drawing 91/55; sofa with linen upholstery, signed A. Marsio-Aalto, drawing 91/39; 'cow-hide' armchair, drawing 91/46. AAA.
194. Bench, leather upholstery and bench frame, cloth upholstery, design stamped: 'Artek, sommitellut AM-A, piirtänyt MHho 3.3.1939' (Artek, design by AM-A, drawn by MHho 3.3.1939).
195. Artek sofa, Villa Mairea, design stamped: 'Artek, sommitellu AM-A (1939), piirtänyt H.S. 19.12.1947' (Artek, design by AM-A [1939], drawn by H.S. 19.12.1947). Artek.
196. See Schildt 1985, p. 159.
197. Alterations to the study in Villa Mairea, signed aino aalto 13.11.1941, drawing 84/927. AAA.
198. Artek dining-room table, design stamped: 'Artek, sommitellut ja piirtänyt AM-A helmik. 1939' (Artek, designed and drawn by AM-A, February 1939). Artek.
199. Artek ceiling-lamp, metal, design stamped: 'Artek, sommitellut AM-A, piirtänyt MHho 25.1.1939' (Artek, design by AM-A, drawn by MHho 25.1.1939). Artek.
200. Artek floor-lamp, design stamped: 'Artek, sommitellu AM-A, piirtänyt MHho 17.12.1937' (Artek, design by AM-A, drawn by MHho 17.12.1937). Artek.
201. For the kitchen, Aino Marsio-Aalto designed a waste basin, sink, rubbish trolley, cupboard and special drawers for cereals. Pienasunto 1930, pp. 27-31; Standertskjöld 1991, see Schildt 1986, Figs. 28-29.
202. Drawings for tables and cupboards in the kitchen and serving-room in Villa Mairea 91/35, 91/37. AAA.
203. Villa Mairea, drawing 84/276; sections of the kitchen 15.7.1938, drawing 84/500. AAA.
204. Standertskjöld 1991.
205. Author's interview with Johan Gullichsen 29.1.1992.
206. Large cupboard in the serving-room of the kitchen in Villa Mairea, drawing 84/503; waste bin 29.11.1938, drawing 84/527; ironing-board 9.5.1938, drawing 84/843. AAA.
207. Mairea, children's bathroom 22.11.1938, drawing 84/764. AAA.
208. Studio cupboards in Villa Mairea, design stamped: 'Artek, sommitellut ja piirtänyt AM-A 29.6.1942' (Artek, designed and drawn by AM-A 29.6.1942). Artek.
209. Cupboard with folding table for Villa Mairea, design stamped: 'Artek, sommitellut ja piirtänyt AM-A 4.7.1947' (Artek, designed and drawn by AM-A 4.7.1947). Artek
210. Cf. Schildt 1986, pp. 11-12.
211. Author's interview with Kristian Gullichsen 14.11.1991; see Tallqvist 1949, p. 16.
212. Author's interview with Johan Gullichsen 29.1.1992.
213. Author's interview with Kristian Gullichsen 14.11.1991.

4. THE IDENTITY OF WOMEN ARCHITECTS

- Bourdieu 1985, pp. 179-180; On relations between artists and the artworld see Lepistö 1991, pp. 23-32; Karttunen 1988, pp. 15-16.
- Lepistö 1991, pp. 181.
- Viljo 1985, pp. 11-12.
- Matrikel 1899; Heiniö 1918; Archives of the *Architecta* association, SRM; Vepsäläinen 1982; Profiles 1983.
- Suomen teknillisen korkeakoulun luettelot 1908-1918; Archives of the *Architecta* association, SRM; Vepsäläinen 1982; Profiles 1983; Puranen 1967.
- Mäkinen 1985; Aili-Salli Ahde-Kjälman's remarks at a consultation between the boards of the Finnish Association of Architects and *Architecta*, 29.10.1943. Official documents, Archives of the *Architecta* association, SRM.
- This follows Bourdieu's approach regarding the social production of artists. Also taken into account are Foucault's views on the problems of the name of authors/artists. See Bourdieu 1985, pp. 178-181; Foucault 1984, pp. 105-108.
- See Lepistö 1991, p. 29.
- Kivinen 1982, p. 37; Interview with Wivi Lönn, Kyllikki Halme 12.11.1958, SRM.
- 'Professori Wivi Lönn - ammattikunnan vanhin.' *Kaunis Koti* 3/1963, pp. 32-33, 36-37.
- Kivinen 1982, pp. 41, 43; Interview with Wivi Lönn, Kyllikki Halme 12.11.1958, SRM.
- The *Konkordiaförbundet* association awarded the grant to Lönn upon Nyström's recommendation, see Kivinen 1982, p. 37 and footnote 53; Decision concerning grants awarded in 1898, Centralstyrelsens protokoll 1886-1904, Archives of the *Konkordiaförbundet* association, VA.
- See e.g. Ringbom 1987, pp. 39-45, 63-65.
- Ibid.* Following Alexander Nyström's example, Wivi Lönn and Hugo Lindberg, an architect at the Board of Public Works and Buildings, journeyed to Aberdeen in the summer of 1898.

15. Wivi Lönn's travel report 10.3.1899. Studieberättelser 1896-1914. Archives of the *Konkordiaförbundet* association, VA.
16. Lilius 1982, pp. 102-103, 108.
17. The invited entrants were August Krook, Wivi Lönn, Lambert Pettersson, Georg Schreck, and Albertina Östman. Birger Federley did not participate, but served on the competition jury. Kivinen 1982, p. 47.
18. Kivinen 1982, pp. 47-50.
19. See e.g. Lepistö 1991, p. 29.
20. Lönn graduated in 1896. One of her last major works was an astronomical observatory in Sodankylä which was designed in 1944-45. Originals of building plans and designs, SRM.
21. Lilius 1982, p. 103.
22. Interview with Wivi Lönn, Kyllikki Halme 12.11.1958, SRM.
23. Ylioja 1986, p. 4; In the United States Julia Morgan designed a large number of buildings for the YWCA, see Boutelle 1988, pp. 87-106.
24. See Kivinen 1982, pp. 50-53.
25. Originals of building plans and designs, SRM; Ylioja 1986.
26. Originals of building plans and designs, SRM; Mäkelä 1980, pp. 9-23.
27. From 1921 Lönn travelled abroad with Hanna Parviainen for several months each year. Kyllikki Halme's interviews with Wivi Lönn in 1958, SRM.
28. Albertina Östman had married the Swiss architect Emil Beutinger. Kyllikki Halme's interviews with Wivi Lönn in 1958, SRM.
29. Ibid.
30. Ibid.
31. On her first journey to Central Europe in 1898 Lönn stayed in Paris with Lindgren. Both made sure that this could not be interpreted as anything else than friendship. Interview with Wivi Lönn, Kyllikki Halme 12.11.1958, SRM.
32. It has been claimed that Wivi Lönn was secretly engaged after graduating, but we do not know with whom. The engagement was broken off. See Haapio 1982, p. 49.
33. From the first versions, the original drawings bear the signatures of both architects, SRM.
34. Interview with Wivi Lönn, Kyllikki Halme 23.10.1958, SRM; The Architects' Club did not keep reliable rolls, and the names of all early members are not known. Lönn is not mentioned in any of the published lists of members.
35. Foucault 1984, pp. 106-107.
36. Setälä 1970, p. 180; Setälä 1973, pp. 10-11; Salme Setälä's curriculum vitae 1951, SRM.
37. Setälä 1970, p. 178.
38. Ibid., pp. 188-209.
39. Salme Setälä's curriculum vitae 1951, SRM.
40. Salme Setälä began to use the surname Setälä-Cornér. After her divorce in 1930 she reverted to her former name, which was also given to her and Cornér's children. Author's interview with Helmiiritta Honkanen 8.2.1991.
41. Setälä 1971.
42. Kuivasmäki 1979, pp. 8-11.
43. Salme Setälä's curriculum vitae 1951, SRM.
44. Setälä 1973, pp. 85-88.
45. Ibid., p. 103.
46. Huhtanen 183, pp. 93-96.
47. On the appointments, see Salme Setälä's curriculum vitae 1951, SRM.
48. Setälä 1973, p. 108.
49. Ibid., p. 136.
50. Ibid., pp. 185, 193; Senior architect Eino Siira's recommendation (15.5.1945) and Professor Otto-I. Meurman's recommendation (14.5.1945), SRM.
51. Halila 1967, pp. 101-102.
52. Setälä 1973, p. 212.
53. Ibid., p. 213; Certificate issued by General Director Erkki Huttunen concerning Salme Setälä's work at the National Board of Construction (18.3.1947), SRM.
54. Glazer & Slater 1987, pp. 22, 85, 92.
55. Setälä 1973, pp. 276-277, 285-286; af Schultén 1963, p. 7.
56. Setälä 1973, pp. 286-287.
57. Ibid. As chairman of the Finnish Association of Architects, Alvar Aalto warned Setälä and asked her to withdraw her application.
58. The founding meeting of *Architecta* was held on the 3rd of November, 1942; Minutes of *Architecta*'s board meetings 13.10., 25.10., and 2.11.1954; Letter of dismissal from *Architecta* to Salme Setälä 15.11.1954. Official documents, Archives of the *Architecta* association, SRM; Setälä 1973, pp. 290-291.
59. Setälä 1973, p. 333.
60. Copies of official documents concerning Setälä's application and her appeal: Nomination issued by the Ministry of Communications and Public Works, 24.11.1958; Salme Setälä's appeal to the Council of State, 13.10.1958; Official reply from the National Board of Construction concerning Setälä's appeal, 28.10.1958, SRM; Setälä 1973, pp. 356, 360-361.
61. Copies of official documents concerning Setälä's application and her appeal: Ruling of the Ministry of Communications and Public Works concerning the nomination to the province architect's position in Kymi, 13.11.1958; Setälä 1973, pp. 360-361.
62. Salme Setälä's curriculum vitae 1951, SRM; Kuivasniemi 1979, pp. 10-11.
63. She did not have a private planning office until the 1950s. Copies of plans in Setälä's archives, SRM.
64. Nyström fell ill in the autumn term of 1917 and died on the last day of the year. Usko Nyström was acting professor in the 1917-1918 academic year and in the autumn term of 1918. Armas Lindgren, who had sat on an official committee for reorganizing the teaching of architecture, was named acting professor in December 1918. His position was made permanent in 1921. See Suomen teknillisen korkeakoulun vuosikertomukset 1917-1921; Wuolle 1949, p. 387.
65. During her trainee period she is known to have made a dining-room table, a chair and a cupboard. Author's interview with Johanna Alanen, 30.9.1991; See also Suhonen 1985, p. 40.
66. Herler 1984, p. 57.
67. Ibid., pp. 22, 57; 'Suomen Taideteollisuusyhdistyksen taideteollisuus- ja arpaisvoitonäyttely'. Uusi Suomi 29.10.1922.
68. Schildt 1982, pp. 130-131; Herler 1984, pp. 29, 57.
69. The marriage took place on 6.10.1924. See Schildt 1982, pp. 131-132.
70. Author's interview with Johanna Alanen 30.9.1991.
71. Aili-Salli Ahde, Johanna Alanen's godmother, recalled how, already as a student, Alvar Aalto had shown others how they should draw. Author's interview with Johanna Alanen 30.9.1991.
72. Herler 1984, passim.
73. Ibid., p. 49; Schildt 1982, p. 273; Drawings for the women's lounge of the Häme Student Corporation building. Stamped: 'Arkit. Alvar Aalto, sign. marrask. [November] 1924, AM (Aino Marsio)', 91/14-15, 91/109. AAA.
74. Schildt 1982, pp. 280-281; Schildt 1990, p. 135; Marsio-Aalto 1929, pp. 74-75.
75. Drawings and plans for Villa Flora 86/21-22. AAA.
76. Marsio-Aalto 1929; Cf. Schildt 1982, pp. 280-281; Schildt 1990, p. 135.
77. Alvar Aalto also participated with his own entry ('karhiit') which was only purchased by the jury. Keinänen 1980a, pp. 48-54.
78. Ibid., p. 49.
79. Aino Marsio-Aalto had cared for their children at home, which corresponded to Alvar Aalto's feelings that the presence of a mother was important for small children; it was also important for Aalto who often worked at home. Author's interview with Johanna Alanen 30.9.1991.

80. A good example is the close resemblance of her *Bölgeblick* series with pressed glass vessels designed in the 1920s by Edward Hald at the Orrefors glassworks in Sweden, see Keinänen 1980a, p. 49.
81. Schildt 1985, pp. 117-118.
82. Uusi Aura 10.7.1935.
83. Pirkko Tenkama has written about these diverse contacts between different artists of the period, see Tenkama 1987, pp. 149-166.
84. Parko 1984, 92; Schildt 1985, pp. 127-128; Schildt 1990, pp.134-135
85. See e.g. Keinänen 1980a, pp. 51-52.
86. Tekniska föreningen 1895, pp. 42-45.
87. Droste 1989, pp. 188-194.
88. Wäre 1983, p. 240.
89. Konttinen 1991, p. 17.
90. Lukkarinen 1989, pp. 74-75.
91. Ibid. p. 76.
92. Fack-klubbens för arkitektur möte 22.10.1892. Tekniska föreningen 2-3/1892, pp. 109-112.
93. Fack-klubbens för arkitektur möten 4.2. & 4.3.1893. Tekniska föreningen 1-2/1893, pp. 41-43.
94. Ibid., p. 43.
95. Arkitektklubbens sammanträden 4.9. & 28.9.1907. Arkitekten 7/1907, pp. 115-116.
96. On the background of professional journals, see Wäre 1991, pp. 38-39, 52-53, 64, 83, 87.
97. Wäre 1991, pp. 37-38.
98. Viljo 1986, pp. 89-95.
99. Cf. Salokannel 1990, pp. 83-84.
100. On master-builders and their competition with architects, see Suominen-Kokkonen 1989.
101. Arkitektklubbens sammanträden 4.9. & 28.9.1907. Arkitekten 7/1907, pp. 115-116; See Arkitektklubbens extra sammanträde 21.10.1907. Arkitekten 8/1907, p. 139; Suominen-Kokkonen 1989, pp. 165-167.
102. Arkitektklubbens sammanträde 28.9.1907. Arkitekten 7/1907, p. 116.
103. Ibid.; Suominen-Kokkonen 1989, pp. 166-167.
104. From the turn of the century architects also competed with civil engineers for town-planning projects, see Nikula 1983, pp. 221-225.
105. Frosterus 1908, pp. 1-4.
106. Brunila 1910, pp. 29-31.
107. Haapio 1977, p. 102; Professori Wivi Lönn - ammatikuntansa vanhin. Kaunis Koti 3/1963, pp. 32-33, 36-37.
108. Lönn also participated in the Hämeen Pohja building competition held with invited participants in Tampere in 1908. All the prizes went to entries by master-builders. Rakennustaito 20/1908, p. 246.
109. Five of Lönn's six winning competition entries were for projects in Tampere: the Alexander Primary School (1903), the Tampere Home Economics School (1902), the Tampere Fire Station (1905), the Tampere Voluntary Fire Brigade building (1908), and the Tampere Commercial Institute building (1910). The sixth was for a Finnish-language secondary school in Mikkeli (1908). Kivinen 1982, pp. 33-81; Interview with Wivi Lönn, Kyllikki Halme 12.11.1958, SRM; 'Opus Wivi Lönn', Archives of the *Architecta* association, SRM.
110. Interview with Wivi Lönn, Kyllikki Halme 12.11.1958, SRM.
111. Arkitektklubbens sammanträde 28.9.1907. Arkitekten 7/1907, p. 115.
112. Suominen-Kokkonen 1989, p. 167.
113. 'Atlas Bank A.B. inbjuder härmed herrar arkitekter till tävlan', Arkitekten 2/1927.
114. Kivinen 1982, pp. 47-50; Eskisserna till det nya folkskolehuset, Tammerfors nyheter 16.5. & 20.5.1903
115. Tammerfors Nyheter 20.5.1903.
116. Kivinen 1982, p. 48.
117. Ibid., pp. 55-57; Täflan om brandstationen, Tammerfors Nyheter 9.2.1906.
118. Kivinen 1982, pp. 61-62.
119. Ibid., s. 62; Haapio 1977, pp. 102-103.
120. Interview with Wivi Lönn, Kyllikki Halme 12.11.1958, SRM; Haapio 1977, pp. 102-104.
121. Nikula 1990, pp. 149-150.
122. E.g. furniture-design competitions arranged by the Kotiteollisuusyhtiö Pirtti firm in 1919 and Finnish Crafts Association in 1925 for the needs of small homes, see Salme Setälä's archives, SRM; Brummer-Korvenkontio 1925, pp. 31-35.
123. Maunula 1990, pp. 160-161.
124. See Profiles 1983; Vepsäläinen 1982.
125. Nikula 1990, pp. 126-127; Vepsäläinen 1982, pp. 48-49.
126. See Mäkinen 1987, pp. 168-188; Setälä 1973.
127. Lukkarinen 1989, pp. 74-75.
128. Wäre 1991, pp. 120-121.
129. Minutes of the *Tumstocken* club, November 1919. Archives of the *Architecta* association, SRM.
130. Leila Gadolin was chairperson from 1909 to 1910. Heiniö 1918, p. 386.
131. Setälä 1970, pp. 36-38.
132. Herler 1984, p. 58.
133. Minutes of the *Tumstocken* club, November 1919. Archives of the *Architecta* association, SRM.
134. Ibid. Founding members included Aili Salli Ahde, Elsa Arokallio, Elsi Borg, Kerstin Holmberg, Eva Kuhlefelt, Hanna-Lisa Nohrström, Aino Marsio, Elin Nissilä, Elli Ruuth, and Salme Setälä. Agda Aspelin and Sylvi Nyysönen joined at a later stage.
135. Minutes of the last meeting of *Tumstocken*, February 1924. Archives of the *Architecta* association, SRM.
136. See roll of members in 1914. This source is not completely reliable, as the Architects' Club did not keep accurate records of members, but it clearly points to groupings within the membership. Arkitekten 1/1914, pp. 11-12.
137. Arkitektklubbens sammanträde 25.4.1917. Arkitekten 5/1917, p. 94.
138. Missing from the published list of members are Elsi Borg and Arla Nyman, who had been admitted in 1927 and 1929 respectively. Arkitekten 12/1930.
139. Haapio 1982, pp. 1-3.
140. Ibid., pp. 3, 9-10. The idea was proposed by Aili Salli Ahde-Kjälldman, Märta Blomstedt, Elsi Borg, Eva Kuhlefelt-Ekelund, Elli Ruuth, Salme Setälä, and Anna-Lisa Stigell.
141. Ibid., p. 12.
142. Letter from chairperson Aili Salli Ahde and secretary Marja Pöyry of *Architecta* to the board of the Finnish Association of Architects, 20.4.1943. Official documents, Archives of the *Architecta* association, SRM.
143. Aili Salli Ahde-Kjälldman's remarks at a joint meeting of the boards of the Finnish Association of Architects and *Architecta*, 29.10.1943. Official documents, Archives of the *Architecta* association, SRM.
144. Ibid.
145. Extract from the unauthorized minutes of the autumn meeting of the Finnish Association of Architects, 26.11.1943. Official documents, Archives of the *Architecta* association, SRM.
146. Haapio 1982, p. 13.
147. Rules of *Architecta* laid down in 1945; Minutes of *Architecta's* meeting 15.9.1954. Official documents, Archives of the *Architecta* association; Haapio 1982, p. 14.
148. See af Schultén 1963, p. 7.
149. Setälä 1973, pp. 286-287.
150. Minutes of *Architecta's* meeting 15.9.1954. Official documents, Archives of the *Architecta* association, SRM.
151. Haapio 1982, pp. 13-14.
152. Minutes of the meeting of the board of *Architecta* held on 13.10.1954. Official documents, Archives of the *Architecta* association, SRM.
153. Minutes of the meetings of the board of *Architecta* held on 25.10. and 2.11.1954; Letter of dismissal from *Architecta*

- to Salme Setälä 15.11.1954. Official documents, Archives of the *Architecta* association, SRM.
154. Minutes of *Architecta*'s election meeting held on 24.11.1954. Official documents, Archives of the *Architecta* association, SRM.
 155. Minutes of *Architecta*'s meeting held on 22.5.1958. Official documents, Archives of the *Architecta* association, SRM. *Architecta* became an officially registered association in May 1965, at which time the board of the Finnish Association of Architects still opposed an association of this type as contrary to its rules. *Architecta* sent the board of the Association an official statement from the registration authorities, which brought an end to the dispute. *Architectan käsikirja* 1965. Historiikka, Archives of the *Architecta* association, SRM.
 156. Haapio 1982, p. 14.
 157. Trachtenberg 1988, p. 215.
 158. Mäkinen 1985; see Aili Salli Ahde-Kjälman's remarks at a joint meeting of the boards of the Association of Architects and *Architecta* on 29.10.1943. Official documents, Archives of the *Architecta* association, SRM.
 159. Vepsäläinen 1982, p. 6.
 160. Extract from the minutes of the meeting of the Finnish Association of Architects on 26.5.1943 and unauthorized extract of minutes dated 26.11.1943. Official documents, Archives of the *Architecta* association, SRM.
 161. See material on discussions held at *Architecta*'s meetings, e.g. on the responsibilities and requirements of good architects and on homes and professional life. Minutes of *Architecta*'s meetings held on 24.1.1945 and 30.1.1946. Official documents, Archives of the *Architecta* association, SRM.
 162. Carroll 1979, p. 33.
 163. Diary excerpt quoted in Parker & Pollock 1981, p. 155.
 164. Scott 1987, pp. 1066-1074.
 165. See Parker & Pollock 1981, pp. 48-50.
 166. See Suominen-Kokkonen 1987 on lower-level training. As late as the 1910s the University of Technology did not cater to the special physical needs of its women students: 'They had the male conveniences there, but nothing for women', see Haapio 1982, pp. 19-20.
 167. On the mechanisms of discipline and order, see Foucault 1987, pp. 159-266; see Lagerspetz 1990 on acclimatization of male and female students into the world of technology.
 168. Häyrynen 1984, pp. 47-51; Lagerspetz 1990, pp. 16-18.
 169. 'Och sen fröknar, sen ä ni såna duktiga karar', Nyström's remarks quoted in Setälä 1970, p. 9.
 170. Lagerspetz 1990, pp. 87-95.
 171. Wivi Lönn's description of her own student days. Interview with Wivi Lönn, Kyllikki Halme 12.11.1958, SRM.
 172. Setälä 1970, p. 74.
 173. Braidotti 1989, pp. 101-104.
 174. Häggman 1991, pp.143-156.
 175. Sulkunen 1987, pp. 157-172.
 176. On present-day women's combinations of career and family, e.g. in engineering, see Hertzberg 1989, pp. 75-77.
 177. Wright 1977, pp. 283-306.
 178. *Ibid.*, p. 284.
 179. Huhtanen 1983, pp. 98-100.
 180. Quoted in Hayden 1981, p. 196.
 181. Haapio 1977, p. 106.
 182. Interview with Wivi Lönn, Kyllikki Halme 1958, SRM.
 183. Häggman 1991, pp. 151-152.
 184. Sulkunen 1987, pp. 158-161.
 185. Haapio 1977, pp. 106-107; Kivinen 1982, p. 40.
 186. Gustaf Nyström's lectures: FIA, Folder IX, 'Den moderna arkitekturen och dess nuvarande ställning' (Modern Architecture and its Present Situation). SRM.
 187. Haapio 1977.
 188. See Kristeller 1983, p. 110.
 189. See Parker & Pollock 1981, p. 7.
 190. Halila 1967, p. 102.
 191. See Setälä 1973, p. 106.
 192. *Ibid.*, p. 222.
 193. Wright 1977, pp. 283-284.
 194. See Hertzberg 1989, p. 76.
 195. Official reply from the National Board of Construction, signed by General Director Jussi Lappi-Seppälä and Paavo Tähtinen, a legal expert, and dated 23.10.1958, concerning Salme Setälä's appeal over the nomination of applicants for the Kymi province architect's position. Copies of documents concerning Setälä's application and appeal, SRM.
 196. See Lagerspetz 1990, p. 115.
 197. In addition Setälä's mother, Helmi Krohn, her aunt, Aino Kallas, was also an author. See Setälä 1966.
 198. These points are based on the author's interview with Setälä's daughter, Helmiriitta Honkanen, 8.2.1991 and Honkanen's unpublished memoirs (1991), private collection of Helmiriitta Honkanen.
 199. See Setälä 1971.
 200. Suomen naisarkkitehtien Wivi Lönnille omistama muistoalbumi tämän 70-vuotisjuhlapäivänä 20.5.1942. Wivi Lönn Collection, Oulu University Library.
 201. See Heilbrun 1988, pp. 112-114.
 202. Kuivasmäki 1979, p. 8; Tuulio 1980, pp. 6-7.
 203. Setälä 1973, p. 381.
 204. Setälä 1970, p. 74; Setälä 1966, pp. 606-607.
 205. Aino Aalto in memoriam, *Arkkitehti* 1-2/1949.
 206. Brown 1989, p. 237.
 207. Pollock 1988, pp. 9-11.
 208. Porphyrios 1982, pp. 110-112.
 209. Porphyrios 1982, pp. 110-112; See Saarikangas 1991, p. 248.
 210. See Schildt 1990, pp. 124, cf. *ibid.* pp. 130, 134-135.
 211. See Parko 1984, pp. 91-92.
 212. Porphyrios 1981, pp. 96-104.
 213. See Herler 1984.
 214. See Tenkama 1987.
 215. This process was not followed through in all Aalto furniture. Some chair models are impossible to sit in, and the famous three-legged stool is not the most practical of designs.
 216. Bourdieu 1985, pp. 105-108; See Lepistö 1991, pp. 25-28.
 217. Bourdieu 1985, pp. 131-132.
 218. See Glazer & Slater 1987, pp. 143, 231-232.
 219. Tickner 1988, p. 95.
 220. Lilius 1980, p. 45.
 221. Tickner 1988, pp. 94-97; See Baldwin & Harrison & Ramsden 1981, pp. 447-452.
 222. Harding 1986, p. 31; See Scott 1987.
 223. Kristeller 1983, p. 110.
 224. See Tickner 1988, pp. 106-108; Harding 1986, pp. 112-126.
 225. Baldwin & Harrison & Ramsden 1981, p. 434.
 226. Foucault 1984a, p. 74; See Braidotti 1991, pp. 89-90.

6. SOURCES AND BIBLIOGRAPHY

ABBREVIATIONS:

AAA	Arkkitehtitoimisto Alvar Aalto & Co:n arkisto (Archives of Alvar Aalto Architects Ltd.)
AIA	American Institute of Architects
FIA	Föreläsningar i Arkitektur (Lectures on architecture)
ETM	Eesti Teatri- ja muusikamuseum (Estonian Museum of Theatre and Music)
HKM	Helsingin kaupunginmuseo (Helsinki City Museum)
HYY	Helsingin yliopiston ylioppilaskunta (Helsinki University Students' Union)
KA	Konstakademiens arkiv (Archives of the Academy of Art, Stockholm)
KFA	Konstfackskolans arkiv (Archives of the Vocational School of Art, Stockholm)
KB	Kungliga biblioteket (Royal Library, Stockholm)
KTH	Kungliga tekniska högskolan (Royal University of Technology, Stockholm)
MV	Museovirasto (National Board of Antiquities)
SMYA/	Suomen Muinaismuistoyhdistyksen Aikakauskirja /
FFT	Finska Fornminnesföreningens Tidskrift (Journal of the Finnish Antiquarian Society)
SRM	Suomen Rakennustaiteen museo (Museum of Finnish Architecture)
STKK	Suomen Teknillinen korkeakoulu (Finnish University of Technology)
TEKNISKA	
FÖRENINGEN	Tekniska Föreningens i Finland förhandlingar (Journal of the Engineering Society in Finland)
TK	Taidehistoriallisia tutkimuksia - Konsthistoriska studier (Studies in Art History)
VA	Valtionarkisto (Finnish State Archives)

UNPUBLISHED SOURCES:

American Institute of Architects, Washington D.C. (AIA)

Archives:
Material from the Archive of Women in Architecture

Archives of the Academy of Art, Stockholm (KA)

Royal Academy of Art
Catalogue
Collection of Professor Grundström
Föreläsningar i arkitektur (Lectures on architecture)
Program för täflingar i arkitektur (Competition programmes in architecture)

Archives of Alvar Aalto Architects Ltd. (AAA)

Archive collections:
Photocopies of drawings and plans
Photographs

Archives of the Vocational School of Art, Stockholm (KFA)

Documents:
Certificates
Registers:
Enrolment records

Artek OY, Helsinki

Archives of the drawing office
Folders of drawings

Estonian Museum of Theatre and Music, Tallinn (ETM)

Archives:
Teatri osäühisus "Estonia" (Estonia theatre company)
Collections of photographs
Correspondence

Estonian State History Archive, Tartu

Building plans and designs
Estonia theatre

Finnish State Archives, Helsinki (VA)

Archives of the *Konkordiaförbundet* association
Minutes of board meetings
Study reports by recipients of grants

Helsinki University Students' Union (HYY)

Archives:
Building plans and designs

Helsinki City Museum, Helsinki (HKM)

Pictorial Archives

Helmi Riitta Honkanen collection, Espoo

HONKANEN, Helmi Riitta, 1991. ... Ja tyttö etsi viivaa.
Unpublished manuscript
Photograph collection

Museum of Finnish Architecture, Helsinki (SRM)

Archives:
Archives of the *Architecta* association
Historiikka (History of the association)
Minutes and records of the *Tumstocken* club
Official documents
Photographs
Taped interviews with Wivi Lönn
Archives of originals:
Armas Lindgren collection
Correspondence
Building plans and designs
Wivi Lönn collection
Building plans and designs
Photographs
Salme Setälä collection
Unpublished manuscripts
Lecture notes
Student projects
Drafts and specifications of plans
Photographs
Copies of official documents

Library:

Gustaf Nyström collection
Correspondence
Föreläsningar i Arkitektur (FIA; Lectures on architecture)
Programme for graduate projects in architecture

National Board of Antiquities, Helsinki (MV)

Section for History
Pictorial Archives

Riitta Nikula collection, Tapiola Notes on an interview with the architect Aini Sarsa 11.11.1987

Oulu University Library, Oulu

Special collections:
Wivi Lönn collection
Personal memento books
Naisarkkitehtien muistoalbumi (Commemorative album donated by women architects)

Royal Library, Stockholm (KB)

Manuscript department:
Fredrik Wilhelm Scholander collection
Correspondence

Royal University of Technology, Stockholm (KTH)
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