

The London School of Economics and Political Science

**THE MAKINGS OF A SURROUNDING WORLD:
THE PUBLIC SPACES OF THE AALTO ATELIER**

Harry Charrington

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DECLARATION

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ABSTRACT

This thesis considers the qualities of the Aalto atelier's public works, and their production. It argues that the atelier's achievement in making places rests on the simultaneous operations of its playful working approach coupled to an underlying historical - human - orientation.

It maintains that, reflexive with the specific character and history of Finland, the Aalto atelier's public works form an *Umwelt* (surrounding world) that invokes the experience of an earlier stage of historical development and public life, and which evolves through the accretion of experiences acted upon it. This is communicated by a morphology of environmental relationships and taxonomy of spatial and formal types that form a sublimated pattern in which buildings and spaces structure, inform and frame public life. They create an environment in which socially beneficial patterns of behaviour are either encouraged to happen, or are represented, and therefore legitimised and encouraged.

The Aalto atelier achieved this through an assimilatory and intuitive approach to design. They adopted a technique that matched their aims through conceiving spatial design as a unifying topology structured by lived experience. This was an approach enabled by its ingenious realisation within the freedom and values of play. The social practice that shaped this artistic process necessitated sensitivity to contingency and so enabled the Aalto atelier to build within the everyday conditions of modern life. The process was fulfilled through the support of an atelier – a collective approach to design – that appreciated these values and saw them translated into material form.

The thesis evaluates this through a single case study, the Seinäjoki Centre (1951-88). In addition, it documents the historical and contemporary circumstances and connections, that informed the Aalto atelier's work, and it draws on interviews with twenty-eight of its members.

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Chapter 1 INTRODUCTION

“It is good to collect things, but it is better to go on walks.”
Anatole France¹

The Aalto atelier, led by Alvar Aalto, is one of the best known, but still least understood great architecture practices of the 20th century. A contrast between reputation and comprehension that is an outcome of modern architectural practice, and its sustaining historiography, focusing on the image of the designed object at the expense of the skills or conditions that shaped it. Indeed those constituting contingencies of design are seen as obstructing the architectural vision and true reality of experience, so that while a product is admired, little is learnt of how it was brought about.

In relation to the Aalto atelier, previous documentation and analysis has similarly focused on an idealised representation of its works and contexts. The casting of the Aalto atelier in the singular as ‘Aalto’, and the omission of the other members of the atelier, including his two partners, is indicative of this; as is the paucity of writing on the productive elements of the atelier’s work. This is a particular oversight as, of the critically acclaimed 20th century architectural practices, the Aalto atelier is uniquely important in describing a means of restoring a linkage between architectural excellence and the everyday. A practice that was not only prolific (completing over four hundred projects), but managed to build well in response to a diversity of briefs and situations.²

The timeliness of undertaking a study of the Aalto atelier’s work also relates to the wider practice of architectural and urban design. Many of the aims and achievements of the Aalto atelier illuminate the discourse of the last three decades regarding public

space, and the restoration of that space, and the modern city. In particular issues regarding context, history, typology, pluralism and 'sense of place'.

HYPOTHESIS

This dissertation provides an enquiry into the qualities of the Aalto atelier's public spaces and considers the ingenuity of their realisation. My hypothesis is that the nature of these works was formed through three specific design approaches, which form the major research questions of the thesis. Firstly there is evidence of an assimilatory and intuitive approach to design. This, I will argue, was formed from a critical and emancipated knowledge of the circumstances in which the practice was framed and the capacity and genius of the Aalto atelier for contingency. Secondly, the Aalto atelier evolved a particular cultural ambience through approaching spatial design as a unifying morphology structured by lived experience, landscape and history. Thirdly, the Aalto atelier brought this world about through a design technique rooted in the freedoms and values of play, the nature of materials and the discipline of an iterative design process. I will argue that it is the simultaneous and reflexive operation of these three skills in relation to an underlying historical and human orientation that is the Aalto atelier's most pertinent legacy.

The thesis is structured to consider these three main themes. It commences with a documentation and historical enquiry into the varying contexts and people in which, and with whom, the Aalto atelier practiced; and it is from this that the broad topic of the thesis derives. This is followed by a description of the major themes of the Aalto atelier's design of public places. Lastly there is an exploration of Alvar Aalto's own approach to design in relation to the atelier's organisational and representational

techniques. Augmenting existing commentaries, the thesis is an examination of the Aalto atelier's practice and work within the immediate contexts of its buildings and practice, focussing on one case study in detail. The overall intention of the thesis is to bridge the gap between the 'Aalto' of previous conceptual criticism and the Aalto atelier's own reflective artistic practice. I became aware of this gap while working as a student in the atelier from 1986-7, under the direction of Elissa Aalto, where the habits and production of the atelier seemed at odds with much of what had been written about it.

Writings on the Aalto atelier are copious and this thesis is indebted to their documentary and interpretative work. However I am cautious with regard to the accounts, Finnish or foreign, which deal with Alvar Aalto as either an emblematic 20th century or Finnish architect, as well as those that try to focus on a single narrow theme of his designs. Alvar Aalto spoke of his "many sentimental critics" and the fate that their terms decree for projects.³ In 1962 he wrote:

"I have the impression - although I am not sure that my analysis is correct - that the attitude of the intellectual world toward Finland is a mixture of two elements: respect and pity. From the days of the Winter War [1939-40], pity has been a distinct ingredient in international criticism of Finnish art. This means that not everything that should be said emerges from behind these two elements. The critics are not critical enough; they avoid saying anything negative. Specialists - architects, whole academy and university classes - flock to Finland in large numbers, thousands of them every year. We have ample opportunity, my colleagues and myself, to hear the truth straight from the horse's mouth. Their comment, almost without exception, runs like this: 'How is it possible that your society itself - your cities, your mid-sized towns, your very social fabric, are as weak as they are?' [...] Every high-class specialist who visits Finland says this straight out. And yet I have never seen them mention this negative aspect in their writings. They always list all the favourable points, and forget the unfavourable ones. Here we see how much damage is done when foreign elements enter criticism, and criticism is not tough and clear-sighted all the way. The only way to repair the damage done in the international

architectural field is through genuine self-criticism and this needs to be done in an organised way".⁴

LITERATURE REVIEW

The most seemingly straightforward source of contemporary documentation of the Aalto atelier's work is in the Finnish architectural journal *Arkkitehti / Arkitekten* (The Architect, henceforth *Arkkitehti*), which from 1928 onwards has been the journal of *Suomen Arkkitehtiliitto – Finska Arkitektsförbund* (the Finnish Association of Architects, henceforth referred to by its acronym SAFA). An advantage of studying the Aalto atelier's work as represented in the journal is that it appears in the context of its professional peers, though it should be noted that following Alvar Aalto's election as Chairman of SAFA in 1943 he would have been in an influential position in relation to the journal. Even before this time Alvar Aalto used his friendship with various editors of *Arkkitehti*, in particular Hilding Ekelund (1931-4); to influence perceptions of his work.⁵ In *Arkkitehti*, reviews of buildings by individual architects were uncritical as it was considered unprofessional to publicly criticise a peer's work. This was also conditioned by the fact that as SAFA's in-house journal, its public function was to promote and defend architects from external forces, or what Alvar Aalto expressed as "certain systematic attacks upon the architectural profession".⁶

Siegfried Giedion provided the first critique, Finnish or foreign, of the Aalto atelier in his 1952 second edition of *Space, Time & Architecture*. Giedion, a friend of Alvar Aalto since 1929, had been a student of his compatriot Swiss art historian Heinrich Wölfflin (1864-1965), and constructed an enduring image of Alvar Aalto and Finnish

architecture located within an international context, and an attendant international agenda.⁷ While the Aalto atelier's work had attracted only a passing mention in the original 1941 publication of *Space, Time & Architecture*, the 1952 edition gave Alvar Aalto the most extensive coverage of any single architect as part of Giedion's reconstruction of his earlier account of modernism's evolution. Giedion related Alvar Aalto to Paul Klee and Juan Miró as "closely bound to the organic and irrational" and called Alvar Aalto's work a necessary "leap from the rational-functional to the irrational-organic", a counter-balance of "new space conceptions" permissible now the first "functional conception" had been obtained.⁸ This description evolved yet further in successive editions of the book; in the 1952 edition the chapter on Alvar Aalto is described as; 'Alvar Aalto: Elemental and Contemporary' and in the 1967 fifth edition; 'Alvar Aalto: Irrationality and Standardisation'.⁹

Giedion placed Alvar Aalto in an abstracted Finnish society and landscape at a remove from the rest of Modernism. "The freedom of the view from the north" reinforced a romantic construct of remoteness as a setting for "the days of creation". This "creative periphery" was a concept first established in a supplement issued in 1931 by the *Congrès International d'Architecture Moderne* (henceforth CIAM), was an international grouping of self-declared leaders of modern architecture established in 1927, of which Giedion was a founder member, and which was dominated by Le Corbusier (1887-1965) until after the Second World War.¹⁰

'Aalto the exception' has become both theme and motivation for much coverage of the Aalto atelier in relation to wider arguments about modernism ever since. Robert Venturi's *Complexity and Contradiction in Architecture* (1966), whilst questioning modernism's premise entirely, celebrated Alvar Aalto's exceptional capacity to accept

and manipulate ‘impurity’ as signifying his place outside modernism’s doctrinaire brief.

Kenneth Frampton’s *Modern Architecture: A Critical History* (1985) saw him as an exemplar of Frampton’s construct of ‘critical regionalism’. Colin St. John Wilson in *The Other Tradition* (1995) placed Alvar Aalto as the central figure in his conception of ‘an other tradition’ within modernism. The same exceptionalism also formed the ground for those who rejected the Aalto atelier’s work as inconsequential to modernism, such as Henry-Russell Hitchcock (1958), Manfredo Tafuri and Francesco dal Co (1976), the latter two who wrote:

“with Aalto we are outside of the great themes that have made the course of contemporary architecture so dramatic. The qualities of his work have a meaning only as masterful distractions”.¹¹

‘Finland the exception’ is a corollary touchstone to ‘Aalto the exception’ and is presented as central to the formation and practice of his work; as Giedion describes it, Finland is to Alvar Aalto “as Spain is to Picasso”.¹² Giedion’s actual presentation of Finland is scanty, but it is nevertheless depicted as both pastoral and yet progressively urbane; a description that has dominated coverage ever since, along with the implicit or explicit suggestion that Alvar Aalto’s ‘natural’ modernist architecture emerged because of this bucolic vernacular background. A limited knowledge of Finland’s history abets this, as in Malcolm Quantrill’s statement that “In the first place, Finland is not culturally part of Europe”.¹³ Internationally little is known of other Finnish artists so that Jean Sibelius (1865-1957) often appears in texts on Alvar Aalto for no other reason than that he too is a famous Finn.¹⁴ This nature romanticism and idealising of Finnish society is also relative; with Finland acting as a ‘primitive’ conscience to the industrialised United States and European countries at the ‘centre’ of Modernism’s narrative; so that where industrial developments were covered a stress was placed on a visual harmony between

industrial development and nature, as with the Aalto atelier's factory at Sunila (1936 onwards).¹⁵

As Alvar Aalto pointed out, the bias common to these foreign descriptions of Finland in turn coloured the way Finnish architects and writers saw themselves. The creative periphery of Finland, the product of the receiving eye of an international audience, became the view from within as well as without; resulting in a construct, dating from the 1950s, of a carefully choreographed Finnish architectural history corresponding to the image of Finland as a progressive, homogenous Scandinavian country: what has been called the “marketing triumph of a modern Finland” (fig 1.1).¹⁶ This image was first marked by the success of Finnish exhibitors at the 1947 Milan Triennale and culminated with the Olympic Games held in Helsinki in 1952; the internationally recognised ‘Golden Age’ of Finnish Design. An emerging historiography established ‘Finnish Architecture’ as a succession of unified styles in which each period neatly handed over one to the other, an architectural history that was a national cause and a success story that mirrored the nation’s post-war unity (see Chapter 2). This aestheticisation was capable of rendering the impoverishment of Finland’s rural past, which as late as 1868 included lethal famines, as a metaphysical attribute of a Finnish asceticism rooted in the values of a minimalist vernacular.¹⁷

The first manifestations of this structure can be seen in the writings of Giedion, and his fellow Swiss compatriots Claudia and Eduard Neuenschwander’s *Alvar Aalto and Finnish Architecture* (Zurich, 1954). Eduard Neuenschwander was a former member of the Aalto atelier and the book was made with the atelier’s cooperation. In its brief introductory history the Neuenschwanders omit any reference to periods of ‘eclectic historicism’ such as 19th century Neo-Renaissance and 20th century Nordic Classicism (including the

Aaltos'), while emphasising the 'purity' of the vernacular and 17th and 18th century wooden classical churches and towns (fig 1.2).¹⁸ The Finnish architectural historian Nils Erik Wickberg's *Suomen Rakennustaide* (Finnish Architecture 1959) was the first comprehensive history of 'Finnish Architecture' and established a narrative with no overlaps or competing dissonances, which was subsequently institutionalised by SAFA and foreign writers. Its chapter structure presented a distinctive chronology; mediaeval field- stone churches and castles, timber vernacular peasant farms, 17th and 18th century wooden churches and small towns, the Neo-Classical establishment of the Grand Duchy of Finland by Carl Ludwig Engel from 1809 onwards, the Neo-Renaissance of the late 19th century, early 20th century National Romanticism, 1920s Nordic Classicism, 1930s Functionalism and finally the 1950s Golden Age (fig 1.3).

Wickberg's structure and emphasis has been emulated ever since and it continues to be the basis of books on Alvar Aalto and Finland. For instance, J. M. Richards': *A Guide to Finnish Architecture* (1966), the first English language history of Finnish architecture; Asko Salokorpi's: *Finnish Modern Architecture* (1970), Malcolm Quantrill's: *Alvar Aalto: A Critical Study* (1983), Vilhelm Helander and Simo Risto's: *Suomalainen Rakennustaide* (Modern Architecture in Finland, 1987), and Richard Weston's: *Alvar Aalto* (1995).

Parallel to this developing historiography was a controlled presentation of contemporary architecture. In 1953 SAFA instituted, under Alvar Aalto's chairmanship, a five-yearly cycle of retrospective exhibitions entitled *Suomi Rakentaa / Finlana Bygger* (Finland Builds) in which a selection of work designed by SAFA members in the previous five years was chosen by a SAFA appointed jury and exhibited to the public. Presented, as in *Arkitehti*, without critical commentary or interpretation the buildings were displayed to impress a professional view, as Kristian Gullichsen would later state,

that: “Finnish architecture is what Finnish architects do” (fig 1.4). A legacy of which was to entrench SAFA’s professional domination of architectural discourse and a corresponding resistance to theory.¹⁹

Another feature of these presentations was the use of certain photographers and photographic techniques. Given Aino Marsio-Aalto’s expertise as a photographer (see Chapter 3), this was something of which the Aalto atelier was particularly aware. From the 1930s the atelier employed Gustaf Welin to photograph its work for *Arkkitehti*, whilst from the 1950s onwards Heikki Havas photographed the buildings, often under the direction of Alvar Aalto. In Welin’s and Havas’ images, together with those of Eino Mäkinen and others “photography and the layout constructs another architecture in the space of the page”.²⁰ Carefully cropped images heightened the building’s autonomous compositional forms and relation to an unadulterated landscape and carefully screened out any foreground elements of townscape or infrastructure. At times props were introduced to heighten this, as in Mäkinen’s iconic photograph of Säynätsalo Town Hall (1949-52, fig 1.5). This involved someone holding a leafy branch to ‘correctly’ frame the view, an image that has since been accepted, and discussed, as architectural reality by, amongst others, Leonardo Benevolo (1964), Kenneth Frampton (1980), Siegfried Gidion (1967), H. R. Hitchcock (1958) and Charles Jencks (1973).²¹

If it was in the 1950s that the contexts for the discussion of both the Aalto atelier and Finnish Architecture were set out, it was only in 1963, with Karl Fleig’s publication of the first volume of his three volume *Alvar Aalto*, that a major documentation was made of the atelier’s work itself.²² The book was edited under the auspices of Alvar Aalto and the layout, editing and content, showed the Aalto atelier’s work as Alvar Aalto wished the world to see it. Although he stated his sole purpose was to prevent “mis-

representation” of his work, the book omits buildings that revealed his neo-classical designs, as well as his expedient approach to emergency wartime and postwar reconstruction housing. Members of the atelier redrew many buildings and the book makes extensive use of photographs by Weilin and Havas, as well as those of the eminent American photographer Ezra Stoller, whom Alvar Aalto had gone to lengths to secure to record his American projects.²³

In 1970, in collaboration with Elissa Aalto, Leonardo Mosso and others, Karl Fleig followed this book with *Alvar Aalto Synopsis*, which illustrated for the first time a significant number of Alvar Aalto’s paintings, sketches and writings, along with photographs and critical essays. In 1973 Göran Schildt edited a more extensive collection of essays, speeches and sketches by Alvar Aalto published as *Luonnoksia* (Sketches). This exposed the myth of Alvar Aalto as an architect who never wrote, something which had appealed to writers as diverse as Giedion and Venturi. The former had stated that Alvar Aalto never wrote as it could not reflect “the radiance of his whole being”, while the latter called Alvar Aalto’s silence his most “endearing characteristic”. The endurance of this myth, even after the publication of *Luonnoksia*, partly owed to most of the writings having previously being available only in Finnish and Swedish, and most notoriously to a 1958 remark of Alvar Aalto that, “God made paper for drawing architecture on. Everything else – at least to me – is a misuse of paper. *Torheit* – as Zarathustra would say.”²⁴ Fleig’s documentary works and Schildt’s collection of writings laid the basis for the first texts of an emergent Alvar Aalto scholarship in the late 1970s, in which there was an inquiry into the works of the atelier beyond these sanctioned representations.

Paul David Pearson's *Alvar Aalto and the International Style* (1978) was the first book to research Alvar Aalto's background and working methods. Pearson delved into Alvar Aalto's previously obscured neo-classical origins and concluded that Alvar Aalto's "rich harvest" of vernacular and classical motifs as a student and young practitioner were the basis for his mature work. Pearson states that following his initial classicist and functionalist works, it was in the final version of the Viipuri Library (1935) with its "picturesque" drawings that Alvar Aalto established a way of working that would lead to the "full romantic repertoire" summarised in the Villa Mairea (1936-9).²⁵ Thereafter, allowing for the innovative use of brick introduced at the Baker House Dormitory at the Massachusetts Institute of Technology (hereafter MIT, 1946-9), the Aalto atelier's output was regarded as a reworking of this established design process.²⁶

Demetri Porphyrios' *Sources of Modern Eclecticism* (1982) was rooted in Michel Foucault's definition of heterotopia.²⁷ Porphyrios sees Alvar Aalto's architecture as one of "indiscreet juxtaposition" which, following an "anachronistic path of the building as a city [...] kept within the realm of a continuing discourse established by history". "Safeguarding classicism's compositional iconography", Alvar Aalto developed typologies as a "privileged tool for representing propriety" that owe their legibility to their relationship with historic exemplars; as does Alvar Aalto's relationship to nature which is "Nature as already internalised by previous architectural reflection".²⁸ It is through linking this attitude to type to mid-19th Century attempts to imbue picturesque composition with a number of pragmatic justifications, that Alvar Aalto creates the picturesque as a "technical term". A *naturlyrismus* that underlay his view of the city as *ex analogia naturalis*; in which, seen as a datum of naturalness, the picturesque Mediaeval city became the "City as the terrain of phenomenological aesthetics", diverse, plural, particular and communal.²⁹

Subsequent foreign retrospectives of Alvar Aalto's career and work can be seen as developments of these two studies, along with Göran Schildt's later biography (see below); notably Quantrill's *Alvar Aalto: A Critical Study* (1983), Weston's *Alvar Aalto* (1995) and Nicholas Ray's: *Alvar Aalto* (2006). Within Finland, however, the narrative has had a different shape. While few critical appraisals were made of Alvar Aalto's works from the late-1950s until his death, *Arkkitehti* reflected the emergence of distinct factions on the board of SAFA following Alvar Aalto's resignation as SAFA Chairman in 1959 after a sixteen year tenure. A change of emphasis that moved from supporting a professional and self-consciously non-ideological approach serving society, to proselytising, as the architect Juhani Pallasmaa called for, a "methodologically controlled praxis" in which "the measurable will supplant the observable".³⁰ A shift reflected in an increasing editorial hostility to the perceived artistic individuality of Alvar Aalto. Kirmo Mikkola, the editor of *Arkkitehti* in the late 1960s, later characterised this period as a time when architects lost their "social solidarity" both with regard to each other and with society as whole. Alvar Aalto's response to the coverage of his, and his generation's, work in the press was to withdraw, remarking "*Ketä siellä tänään tapetaan?*" (Who are they hanging out to dry today?).³¹

The discrepancy between domestic and foreign coverage began to be resolved in the years following Alvar Aalto's death as the Finnish architectural profession began to question itself in the same terms with which Alvar Aalto's foreign admirers praised his work. In 1979 the Museum of Finnish Architecture published the yearbook *Abacus* in which the architect Pekka Helin wrote an essay about the "dead end" and "pessimism" of contemporary Finnish architecture. He criticised its bias towards extreme simplification for production and declared the need to re-establish a linking of

“architecture to place and users”.³² In the same book Mikkola wrote an extensive article depicting Alvar Aalto as a Lamarckian humanist and evaluating his work in relation to his acquaintances such as Fernand Léger.³³ This was later developed into the first biography *Alvar Aalto* (Finnish only 1985). Mikkola was also the Chairman of the first Alvar Aalto Symposium held in 1979, at which speakers from both Finland and abroad questioned modernism in general, and championed Alvar Aalto’s work in particular, as both palliative and alternative.³⁴

By the late 1980s Alvar Aalto was re-established as central to the historiography of Finnish Architecture and ironically it was the same writers who had previously attacked Alvar Aalto that now led his rehabilitation.³⁵ The normative aesthetics that had dominated architectural debate within Finland in the previous two decades were abandoned, and as Göran Schildt said in 1985, “it is today Aalto’s digressions from Functionalism rather than his contributions to it that arrest us”.³⁶ Finnish Architecture was now identified as an exceptional aesthetic signifying an assumed set of ‘humane’ values, largely stemming from the Golden Age of the 1950s. The era that had, as Alvar Aalto had noted, so attracted foreign eulogies about himself and Finnish Architecture in the first place. Domestic definitions and interpretations of both Finnish Architecture and Alvar Aalto now veered to the nationalist, nostalgic and metaphysical. Tuomas Wichmann, the organiser of SAFA’s *Suomi Rakentaa 9* exhibition in the centenary year of Alvar Aalto’s birth, 1998, wrote in the accompanying catalogue:

“The jury had a strong opinion of what constitutes the national features in modern, high quality Finnish architecture. Projects showing clear signs of international trends were universally condemned and thus not included”.³⁷

In contradiction of his earlier mechanistic stance, Pallasmaa wrote “a real work of art pushes our consciousness away from its everyday practices and aims it at the deep

structure of reality”, and Pallasmaa’s subsequent writings admitted metaphysical and phenomenological interpretations into coverage of Aalto, and Finnish Architecture in general. This is often tinged with a nationalist romanticism as when he stated of wood that it “reawaken[s] the peasant and forest dweller concealed in the Finnish soul”.³⁸

The 1980s also saw the emergence of a Finnish architectural history separate from the architectural profession and press. Central to this were the exhibition and publishing programme of the Museum of Finnish Architecture in Helsinki and the Art History Department of Helsinki University. As Architecture has been taught at the Helsinki Technical University (previously Helsinki Polytechnic) since 1873 there is an institutionalised separation of the two disciplines. From the mid-1980s the Museum undertook systematic documentation and research into Finnish architecture; manifested in a series of exhibitions, mostly on individual architects, with accompanying monographs. Equally important were the series of papers published by the *Taidehistorian seura* (Art Historical Society) and an emerging scholarship programme at Helsinki University of Art and Design (TAIK) from the mid-1990s onwards.³⁹ In the case of the Aalto atelier this research has revealed lesser-known work and an increasing recognition of Alvar Aalto’s first partner, Aino Marsio-Aalto, culminating in the exhibition, and accompanying book *Aino Aalto* (2004). More broadly it has also brought the work of the Aaltos’ lesser-known architectural contemporaries out into the open, including their collaborators and friends Erik Bryggman (1891-1955) and Hilding Ekelund (1893-1984).

The writer Göran Schildt has commented on the changing perceptions of Alvar Aalto in Finland, from that of “rascal” in the 1920s and 1930s, to reverence in the 1950s, to rejection in the 1960s, to restitution in the 1980s, as the outcome of a small, insecure

society with a need for symbols and “big men”.⁴⁰ While the ever-increasing reverence for Alvar Aalto in Finland and abroad during the 1990s led the critic Roger Connah to describe the centenary celebrations of Alvar Aalto’s birth in 1998 as the confirmation of a “self-feeding” criticism in which Alvar Aalto could be treated as a phenomenon, with an “expediency of inexactitude” that suited all concerned (figs 1.6a-b).⁴¹ An architect who could be both the exception to, and yet the saviour of, modernism, as Kristian Gullichsen claimed; “Aalto remained the eternal rebel, who refused to join the mainstream of the modern movement, which he had helped to create”. A contextual architect whose context could be all but ignored, so that a building such as the Villa Mairea (1936-9), deracinated of its context (see Chapter 2), can be creatively read as a text denoting natural romanticism, collage or metaphysics (fig 1.10c).⁴²

Göran Schildt’s three part biography of Alvar Aalto (1984-9) is the most significant study of all. As a friend of Alvar Aalto, and a noted Finnish travel-writer and art critic, Schildt’s perspective is unique, both in detail, and in that much of what he writes about, such as the status of the Swedish-speaking minority and the Civil War, is still vital in Finland rather than historical fact. Schildt begins his biographical trilogy with the comment of his being “a poor Boswell” and states that he will write in a manner “commensurate with the bonds of friendship”.⁴³ The emphasis is on Alvar Aalto, in particular the period from 1898 to 1939; and other characters, including numerous Finnish and foreign influences, contemporaries and collaborators, are mentioned only in passing. The period of Schildt’s and Alvar Aalto’s friendship, from 1953 onwards, receives scant attention, and, rather than reading as a trilogy, the three books read as two books with an extended epilogue. Overall, however, the biographical and contextual detail has made his text a primary source for all subsequent scholarship on Aalto.

Schildt stresses what he calls Alvar Aalto's childhood Gustavian / Linnaean inheritance in a Finland isolated from the prevailing Romanticism and Modernity of Central and Western Europe; and that it was as an encroachment on his childhood "idyll [...] between Darwin and Goethe", that Alvar Aalto experienced the mechanisation of the 20th century.⁴⁴ Schildt describes a world that did not perceive of a 'collision' of the humanities and sciences and which idealised the progress of civilization through man's practical ingenuity. A pragmatic functionalism that Schildt saw as underlying Alvar Aalto's designs.

Schildt calls the period 1917-1927 an "unknown decade" in Alvar Aalto's life, and notes his reluctance to speak of a time which included the Finnish Civil War, his architectural education, and his earliest work as an architect. As well as coverage of Alvar Aalto's time at the Helsinki Polytechnic School of Architecture and his connections to contemporary architects, teachers and theorists, Schildt records Alvar Aalto's relations to the Helsinki art scene, but his main emphasis is on the importance of Paul Cézanne (1839-1906).⁴⁵ Schildt documents the importance of Alvar Aalto's European connections from his student days onwards, particularly those with Sweden and also recorded Alvar Aalto's connections with America in the 1930s and 1940s for the first time.⁴⁶ He sees Alvar Aalto as drawn to the ideals of the "New Deal" and "expert society" of the 1930s but calls his time in America a failure.⁴⁷ In contrast he sees Alvar Aalto's later travels in the 1940s and 1950s to Italy, or 'rustic' environments such as Andalusia and Morocco, as being of great importance to his development.

Schildt gives Alvar Aalto's work a *Gestalt* reading, seeing it as structured by the spectator's memory which fills in the 'gaps' of suggestive compositions. Schildt

contends that in place of empirically building up to a simple idea, Alvar Aalto would start with often contradictorily “rich” ideas drawn from his experience, particularly of a generalised Mediterranean culture linking nature and civilization, and hone them into a concept. For Schildt this is Aalto’s “unique contribution” to 20th century architecture, along with his creation of interiors as an “Inner Landscape” mainly drawn from Cézanne’s work.⁴⁸ This reading may relate to Schildt’s doctorate on Cézanne and his experience of, and writings about, the Mediterranean such as in *Daphne och Apollon* (1952) and *Ikaros’ hav* (The Sea of Icarus, 1957).⁴⁹

RESEARCH METHODOLOGY

At the present moment, whichever emphases may be placed on it, the reputation of the Aalto atelier seems assured. Yet if design can be crudely broken down into three parts, context, approach and output, then the reputation is over-ridingly focused on the last part; a synchronic image that masks a diachronic nature. Consequently, the works produced by the atelier are valued not for what they are and what they do, but for what they look like. The most simple, but most prolifically produced artefact, the ‘bent knee’ stool, Artek Model S60 (1932) is an example of this gap (figs 1.7a-b). It exists as an ‘iconic’ object, as a product that has been endlessly imitated; but the precise nature of its making, from which we might learn rather than just admire, is hidden. Legs of locally sourced birch are laminated at their top end with 3mm birch strips, which are then bent in a jig and glued under pressure to form a jointless and stable ‘knee-joint’ with which to attach the leg to the sitting surface; the form preserving the tension of its manufacture. Technique and artistry, global influences, are relocated to a local instance and material. The stool is available with 3 or 4 legs according to need. The top is of linoleum which is warm to the touch, ‘gives’ a little to the user and its colour can be varied (the palette is derived from Fernand Léger⁵⁰), and the edges are neatly trimmed

and protected with a birch strip matching the legs. The stool is stackable - and attractive stacked - as well as enduring and recyclable. Mass-producible and affordable in intent, so it is in reality.

The locations within which the design skills of the Aalto atelier were practiced, and to which they responded and in turn shaped have been overlooked and as Roger Connah says:

“The more Aalto is isolated in the history of the 20th century, the less hold we have on its commonality, on its resonance and echo with the many events and movements in the 20th century. [...] The more Aalto is seen as a precursor and synthesiser of contradictory strains in Finnish architecture, the more Finnish architectural history will be scripted to this conformity”.⁵¹

Documenting the precise circumstances of the Aalto atelier, and the nature of the relation of its work's to that context, is therefore crucial, even if it may besmirch the purity of Alvar Aalto's location in the 'creative periphery'.

The Aalto atelier itself had many manifestations, in Jyväskylä from 1923-28, in Turku from 1928-33, and in Helsinki from 1933-94, where it occupied a number of differing locations. There were, as well, satellite offices for specific projects, for example in Rovaniemi in Finland and in Boston in America. Alvar Aalto (1898-1976) graduated from architecture school in 1921 and from 1924 worked in a twenty-five year partnership with Aino Marsio-Aalto (1894-1949), an architect who had joined his office in 1923, until her death in 1949. Alvar Aalto then practiced as principal until he married the architect Elsa (Elissa) Mäkihiemi (1922-1994), a member of his atelier, and formed a partnership that lasted until his death (figs 1.8a-c). Elissa Aalto continued to run the atelier until her death in 1994, when it closed. Aino Marsio-Aalto's and Alvar Aalto's son-in-law Heikki Alanan has commented:

“It has been said that Alvar was the more spirited and imaginative one, while Aino drew better. Alvar’s design work was more spontaneous and removed from the everyday level, while Aino remained loyal to functionalist ideals and designed practical things that were carefully studied and finished throughout. But such evaluations are only the guesses of posterity as to what Aino’s and Alvar’s joint life and work were like”.⁵²

As Renja Suominen-Kokkonen has written, the true contribution of Aino Marsio-Aalto has all but been erased in the institutionalised term ‘Aalto’.⁵³ This is even more the case with Elissa Aalto, despite her taking artistic responsibility for the atelier for 18 years and supervising the construction of buildings such as the Essen Opera House (1959-1988) that are now so evidently part of the ‘Aalto’ canon. Giedion is one of the few commentators to acknowledge the equal status of Aino Marsio-Aalto, but refers to Alvar Aalto alone throughout *Space, Time and Architecture*. I do not dispute Alvar Aalto’s status as the central figure in the history of the atelier, but I see no reason to ignore the fact that for most of the atelier’s existence it was a partnership. Moreover, of all aspects of the Aalto atelier it is the people who have worked there, and their habits and skills, that have had the least regard (fig 1.9).⁵⁴ I will therefore speak of the ‘Aalto atelier’ when describing works and their representation; ‘Aino and Alvar Aalto’ and ‘Alvar and Elissa Aalto’ when writing of the general circumstances of the couples, and ‘Alvar Aalto,’ ‘Aino Marsio-Aalto’ and ‘Elissa Aalto’ when singularity is justified.

Giedion, who had introduced Alvar Aalto to, amongst others, Constantin Brancusi, Alexander Calder and Max Ernst, acknowledged Alvar Aalto as possessing a personality that, in a romantic comparison to James Joyce, needed “stimulation from contact with men of varied callings”, while Schildt cites Alvar Aalto’s relationships with an extensive array of personalities.⁵⁵ In terms of a Finnish context alone, this necessitates extending the knowledge that we have of the Aalto atelier’s milieu. This includes the work of

painters and interior designers, as well as architects and theorists to whom Alvar Aalto acknowledged his debt. It also means articulating the architectural conversation and debates that took place in Finland, as opposed to assuming they were merely reflections of wider debates within Europe. Alvar Aalto's professional role, as well as the influence of the Finnish competition system for procuring buildings and the Aalto atelier's relationships with clients more generally, needs considering. The main guide in this will be the facts outlined in Göran Schildt's work, but Schildt's view on these people is nonetheless, a view; for instance whilst he expounds on the influence of Gustaf Strengell (1878-1938) he suppresses the importance of Sigurd Frosterus (1876-1956) whom he viewed as a technocrat (see Chapter 3).⁵⁶

Alvar Aalto's relationships with some international figures challenges the dogmatic identification of separate 'schools' so prevalent in histories of modernism. The relationship of Alvar Aalto with László Moholy-Nagy (1893-1946), that of a 'Scandinavian empiricist' and an 'experimental constructivist' from the Bauhaus, has been ignored or treated as incidental to the Aalto atelier's work by critics, as has Alvar Aalto's involvement with the 'rationalist' world of CIAM and the Bauhaus.⁵⁷ Similarly, a divergence of European and American models has marginalised connections such as those with Lewis Mumford (1895-1990), Richard Neutra (1892-1970) and William Wurster (1895-1973).

Histories of Alvar Aalto have tended to see the last twenty years of his career as disappointing, either as rehashing earlier ideas or of being whimsical; as well as ignoring the atelier's work on housing and more everyday buildings.⁵⁸ At the centenary exhibition *Alvar Aalto Seitsemässä Talossa / Alvar Aalto In Seven Buildings* held at the Helsinki *Taidehalli* (Art Hall) in 1998 the seven buildings chosen were bespoke, and set either in

the city grid of Helsinki or in an apparently unspoilt nature: Paimio Sanatorium (1928-32), Viipuri Library (1927-35), Villa Mairea (1936-9), Säynätsalo Town Hall (1949-52), Rautatalo (1951-55), National Pensions Institute (1953-8) and Vuoksenniska Church (1955-8, figs 1.10a-g).

However, the last twenty years of Alvar Aalto's life were his most productive, and they offer the opportunity to enquire into the relationship between ideas and their evolution, as well as how an increasing workload affected its practice. Moreover, for all the implied or explicit dismissal of the latter years of the Aalto atelier's output, critics have made a long list of exceptions, including the Essen Opera House (1959-87), the Academic Bookshop in Helsinki (1961-9) and the Finlandia Hall (1962-75, figs 1.11a-c). To inform the body of the thesis I will focus on one location, the provincial Seinäjoki Town Centre (1951-89), a complex of buildings which extends from the 'Golden Age' to the very last years of the Aalto atelier. Examining a single, particular instance offers the possibility replacing the vagaries of analogy with a direct observation of what the Aalto atelier actually did, and to extrapolate from what was done. The Case Study's role will be akin to Johann Wolfgang von Goethe's (1749-1832) comment that:

"The great point with the poet is to express a manifold world, and he uses the story of a celebrated hero merely as a sort of thread on which he may string what he pleases".⁵⁹

The major primary source of the thesis, apart from the constructed places themselves, is a series of interviews conducted with 28 members of the Aalto atelier, who have experiences reaching as far back as 1946. The architect Vezio Nava, the site architect for the Riola Church, Bologna (1966-80) and I carried out these interviews in 2000-02, supported by a stipend from the *Alvar Aalto säätiö* (Alvar Aalto Foundation), and a list of these interviews and interviewees is given in Appendix 2. Using a subsequent grant from the *Suomen kulttuurirahasto* (Finnish Cultural Fund) these were then translated by

Jaana Kuorinka and myself. Over 50 buildings and places and their creation are discussed as well as various themes and issues: roles in the office, organisation, representation, design approaches and methods of development and detailing, work on-site, clients and consultants. Interviews have also been carried out with a number of researchers and experts in Finland, Britain and America, details of whom are given in the acknowledgements.

The archives of the Alvar Aalto Foundation provide first-hand evidence of the Aalto atelier's activities in the form of approximately 200,000 drawings along with correspondence and writings. The drawings are all unsigned (a tradition of the atelier) and in general I will treat them as products of that collective whole rather than of any individual. Treating design drawings as 'tools' (see Chapter 9) Alvar Aalto threw away many, if not most, sketches; so the evidence in the drawing archive cannot be viewed as comprehensive. For instance, out of a total of approximately one thousand drawings in the archive of the Kulttuuritalo (House of Culture, 1953-8), only a very few conceptual sketches are preserved. It was only in 1966 that an exhibition of Aalto's work (at the Palazzo Strozzi, Florence) included any of his sketches; a creative force that Göran Schildt said overwhelmed him when he visited the show.⁶⁰

Other archives used include those of the Helsinki University of Technology, although much of its material was lost in an air-raid in 1944. (Another archive even more comprehensively destroyed was that of the Evo Forestry Institute, which was lost in a fire in 1956.) The Museum of Finnish Architecture, the National Board of Antiquities, Jyväskylä Province, Seinäjoki Town and the Finnish National Archive all furnished original resources. The observations about Alvar Aalto's paintings are based on my first hand experience of them at exhibitions at the Amos Anderson Art Museum, Helsinki

(1998) and the Architectural Association, London, (1988) as well as on reproductions (the majority are in private collections).

Alvar Aalto's texts, collated from speeches as well as essays, are more complex to deal with than the drawings and paintings. Whilst most texts will be sourced from Göran Schildt's edited collection of his writings, *Näin puhui Alvar Aalto / Alvar Aalto In His Own Words* (1998) a number of writings in the Alvar Aalto Foundation's Archives have not been translated.⁶¹ Göran Schildt has observed that Alvar Aalto's "chameleon-like" personality led him to say, and appear to be differing things in differing contexts:

"When in Alajärvi he was the local boy, entertaining the farmers with juicy stories in the local dialect. At SAFA he was the suave representative of the young Finnish intelligentsia. His pronunciation of Swedish, originally of the purely Finnish variety, immediately turned into the Swedish version when in Sweden, and progressed to almost Danish when he crossed the sound into Denmark".⁶²

Alvar Aalto's writings also possess a certain hubris and grandiosity, for instance calling his mother "Ibsenian".⁶³ As Mikko Merckling has noted:

"there is a dilemma between what Aalto said in his lectures and what has been written. His spoken word was easily more interesting, including the mimicry. His written stuff is quite dry, tautological, like a different world".⁶⁴

Of secondary sources, the most important are materials that the Aaltos themselves read, or had direct access to through their friends and associates; some of which survive in the remnants of the Aaltos' own library, catalogued in 2005 by Arne Heporauta of the Alvar Aalto Archive and listed in Appendix 3. Göran Schildt's catalogue of the Aalto atelier's projects, together with a chronology established by Arne Heporauta will form the thesis' reference for dates.⁶⁵

Language forms another condition for the research, particularly as Finland is a bilingual country with a Finnish-speaking majority and Swedish-speaking minority, a situation that reflects a complex history between these two groups of Finns, as well as between Finland and Sweden. As Finland was governed as part of the Swedish State until 1809, Swedish was the language of government and education, a situation that continued during 19th century Russian rule. The complexity of this language base can be seen in how many of the main protagonists of Finnish Independence and 'Finnish' artists were Swedish-speakers, most notably the poet J. L. Runeberg and the composer Jean Sibelius. The architectural historian Jorma Mänty has written:

"Cognitive psychologists have been able to demonstrate significant differences in thinking between Indo-European and Fennno-Ugrian speakers. According to some studies, for example, Finnish-speaking Finns conceptualise the world in topological terms, whereas Swedish-speaking Finns (and this would apply in all probability to all other Indo-European languages) tend to focus on movements and vectoral relationships. If accurate, such findings have enormous implications for architectural theory as well".⁶⁶

Alvar Aalto was bi-lingual with a Swedish-speaking mother, and Finnish-speaking father, but coverage has tended to emphasize the more exotic Finnish; for every time a commentator points out that *aalto* means 'wave' in Finnish, and creates a narcissistic theory that Alvar Aalto's 'line' was an embodiment of his self, they fail to notice his Swedish first name.⁶⁷ Alvar Aalto felt differences in outlook between Finnish and Swedish-speaking Finns were exaggerated, and he refused to become involved in the so-called language battles; "Looking at the differences between Finnish-speaking and Swedish-speaking Finns [...] we soon find that they vanish once we come to a deeper level".⁶⁸

More straightforwardly, neither Swedish nor, more particularly, Finnish are commonly spoken languages outside their homelands. This has meant that a large number of texts are unavailable to most foreign commentators. Amongst other sources these include

copies of *Arkkitehti* as well as Gustaf Strengell's *Stadens som konstwerk / Kaupunki taideluomana* (The City as a Work of Art 1922) which I will argue was a critical influence on the Aalto atelier's work. A further barrier to the English-speaking world is that Finland was, until the Second World War, within a largely Germanic sphere of influence, with the German language required for undertaking any tertiary level of education. At the Diet of Porvoo in 1809 when Finland was incorporated into the Russian Empire as a Grand Duchy, Czar Alexander 1 admired the "country's western, Germanic culture" and links through the Baltic States to German culture (for example the University of Dorpat, now Tartu) were strong.⁶⁹ Alvar Aalto was fluent in German and, aside from his Swedish friends, his most important foreign friendships were also with German speakers; including Moholy-Nagy, Giedion, Neutra and Philip Morton Shand (1888-1960). He received a largely Germanic secondary and higher education, not only in terms of language but also in terms of its structure and in the materials used. Consequently these are little known in the English-speaking world, and they have become relatively obscured in a modern Finland now increasingly dominated by the English language.

Chapter 2 LOCATION

“I like to build in Finland. This is not just because of the obvious emotional considerations involved, but because I know most about the problems of building in Finland”.

Alvar Aalto ¹

This chapter sets out the Aaltos' consistent practice of architecture in response to the particular circumstances of Finland; above all to the unstable circumstances of the First Republic (1917-44) and subsequent construction of the Second Republic. Coverage of the Aalto atelier, or rather Alvar Aalto, has largely treated Finland as part of a generalised and homogeneous Scandinavia, largely synonymous with Sweden. Such a construct disregards the nature of Finland and its history, and makes it impossible to understand the reasons for Alvar Aalto's insistence on the solidarity of society, of reconciling dualities and the necessity of harmony. Instead they become merely platitudinous.²

Finland sits between the 60th and 70th parallels with 75% forest cover, often overlapping the 33% of wetland. There are countless lakes, the world's largest archipelago, a landmass of barely covered granite still rising from the crushing weight of the Ice Age, and relatively, extremes of season and temperature. The thin layer of top-soil is matched by a (relatively) thin layer of population; in 1898 it was 2.6 million with 0.3 million living in towns and in 1976, the year of Alvar Aalto's death, it was 4.7 million with 2.8 million in towns (fig 2.1).³

Finland's seasons impose a dualistic diurnal, thermal and landscape cycle on the country. The climate's assertiveness produces an intuitively poetic and pragmatic responsiveness that runs through the Aalto atelier's work, and when visiting Brazil in 1954, Alvar Aalto remarked on the skin of a house finding its own form in response to

climate.⁴ The sun's angle of incidence, relatively low throughout the year, reinforces this. In winter almost as much light can come from the reflective surface of the ground as from the vault of the sky. This low angle (in Helsinki in the south of the country, the sun is approximately 50° at its zenith at midsummer, and 6° in midwinter) also emphasises contrast, silhouette and glare, as well as producing extreme ranges of atmospheric conditions (figs 2.2a-b).⁵ In response to this, and in contrast to classical architecture's horizontal emphasis, the striations and mouldings of many of the Aalto atelier buildings have a vertical emphasis exploiting the modelling potential of the oblique sun (fig 2.3). The roof-lights first developed for the Viipuri Library have a depth of aperture that at this latitude admits no direct sunlight to disturb the reader, and would be unviable further south owing to overheating from a high sun (figs 2.4a-b).

Orientation is critical for solar access and the 12 metre deep plan of the living room at the Villa Mairea is only plausible because of the low sun's solar penetration; at more southern latitudes it would simply be too dark in the centre of the room. In this landscape the 'white wall', a stable sinecure of modernism in most other environments, is in Finland dynamic as it merges and then contrasts with its surroundings according to the season (figs 2.5a-b). The range of colour and tonal variations in the landscape is remarkably narrow when coming from further south, particularly so in the winter which produces subtle and changing variations within a narrow spectrum of, particularly, blues, blacks, greys and browns.

Low temperatures are such that, even in the 20th century, buildings could not be conceived of as skeletal frames to be made habitable through the application of regenerative heating and cooling technologies alone. The 'white' and 'glass' architecture of so much of modernism, such as Le Corbusier's Armée du Salut (Paris, 1929) and

Mies van der Rohe's Villa Tugendhat (Brno, 1930), suffered catastrophic environmental failures in what are conventionally thought of as fairly benign climates through their assumption that passive technologies and traditions could be ignored in favour of lightweight enclosures abetted by mechanical means of heating and cooling. In the more extreme climate of Finland such a technological picturesque could not even be considered.

Buildings in Finland have to respond through their material specification and form, with restricted opening sizes with double or triple-glazing, well-insulated and hence massive walls, and shallow roof pitches which retain snow as an insulant. Where the Aalto atelier used large areas of glazing in pursuit of a literal transparency, it was both site specific and countered by another part of the building having a high thermal mass and small openings. At the Jyväskylä Institute of Pedagogics (1952-3) floor-to-ceiling glazing in the foyer forms a continuity of the interior with the adjacent pine forest, whose canopy shades the glass and reduces the refraction and glare that makes the experience of so many glass walls opaque. To balance out the consequent heat losses in relation to the building overall, the Aalto atelier deployed the massive enclosed form of the auditorium above (figs 2.6a-b).

In *Boken om vårt land* (*Maamme-kirja*, The Book of Our Land, 1875) the Finnish writer and historian, Zacharias Topelius (1818-1898) identified and sanctioned a series of idealised settings that best represented “the full picture of Finland” to form a *kansallismaisema* (National Landscape).⁶ A process that mirrored the Finnish ethnographer and folklorist Elias Lönnrot's (1802-1884) collection of folk-songs to form the *Kalevala* (1835-45) which had earlier validated Finland in terms of folklore. Alvar Aalto grew up in two such landscapes; the agricultural plains surrounding the

village of Kuortane in Ostrobothnia (Finnish *Pohjanmaa*, Swedish *Österbotten*), and then the wooded hills around the small town of Jyväskylä in Häme province (figs 2.7a-b). In 1918 his parents moved back to Ostrobothnia, to the village of Alajärvi, near to where Aino Marsio-Aalto built a family summer cottage on the lakeshore in 1926. Aino Marsio-Aalto, née Aino Mandelin, a Swedish surname fennicized to Marsio in 1906, was herself an urbanite from central Helsinki (fig 2.7c). Elissa Aalto, née Mäkinen, was from Kemi in the more remote region at the head of Gulf of Bothnia. The Aaltos' architectural practice began in Jyväskylä in 1923, moving in 1927 to Turku in the southwest of the country before moving onto the capital Helsinki in 1933 where it continued until Elissa Aalto's death in 1994.

Far less is known of Aino Marsio's upbringing than Alvar Aalto's, but her father was a manager at the State Railways in a cosmopolitan and rapidly industrialising Helsinki. Her childhood home was profoundly musical, and she continued to play and teach music as well as practice architecture throughout her life. She grew up in *Alku*, the first worker's co-operative apartment building in the city where coincidentally the future Social Democrat leader and Prime Minister Väinö Tanner lived and was a youthful friend.⁷

Alvar Aalto's father, J. H. Aalto (1869-1940), was a Land Surveyor, and his maternal grandfather, Hugo Hamilkar Hackstedt (1837-1909), was a Forester and Head of Finland's first Forestry Institute at Evo. Forestry formed a formal part of Alvar Aalto's education and in addition he accompanied his father and grand-father in their work and grew up in "the complicated biological unit" of forest landscapes, developing an appreciation of natural structures as well as the romance of nature's forms.⁸ The forest is central to Finnish life and its identity, and as recently as the Second World War has

been a place of sanctuary. A critical timber resource, it is also a place of sustenance, and there is a Finnish saying that, for a farm to be viable it requires ten hectares of forest to every one hectare under cultivation. The fragility of an agrarian economy at Finland's latitudes was present in the Aaltos' lives in the memory of the *suuret näkkävuodet* (The Years of Great Hunger) of 1868-8. In this last great famine in Europe attributable to natural causes, up to 15% of Finland's population died from starvation and ensuing epidemics.⁹

Prior to the 19th century few towns of any size existed inland from the coast. Jyväskylä was only founded in 1865 to open up the forestry resources of Central Finland and, even though it was a regional capital, its population was only 3,000 at the turn of the 19th and 20th Centuries. For Alvar Aalto industrialisation was not an historical past, it was an ongoing, and at times, dramatic collision as the singular culture of modernity confronted the diversified nature of an agrarian place and society (figs 2.8a-c).¹⁰ A conflict that was communicated most famously in the author Juhani Aho's (1861-1921) novel *Rautatie* (The Railway 1884) which documents the impact of the railway's arrival in a small Finnish town.

Alvar Aalto was born at the Peltonen farmstead in Kuortane in Ostrobothnia whilst his home from the age of five until he left for university was at Harjukatu 10 within Jyväskylä's rigid grid structure. Common to both these rural and urban milieux was their disposition of independent dwellings and workplaces around an informal courtyard that structured and related differing activities, classes and permanent and more transient dwellers (figs 2.9a-c). Whilst the Jyväskylä home was overlaid with a more self-conscious and complex bourgeois class structure, for Alvar Aalto it formed an 'organic' ideal of urban life equivalent to that of the rural idyll of the extended

Finnish farmstead.¹¹ Pragmatically it also demonstrated an ability to maintain external hierarchies of public and private space within a unified visual field that remains common in rural, suburban and urban Finland. The lack of dividing fences in many of the Aalto atelier's housing schemes is only possible in a society that is not anxious about a visual sharing of space.

As well as dwellings, these environments were economic units in which work and leisure and public and private life combined to form an *oikos* in which male and female spheres formed an “undifferentiated and indivisible” totality.¹² Alvar Aalto's mother Selma (1867-1906), a Post-Mistress, and following her death when he was eight, his step-mother and mother's sister Flora, a French teacher (1871-1957), were emancipated professional women, which though unusual, was not exceptional at the time. Their independence may help explain why Alvar Aalto appears to have readily acknowledged his wives as full partners.¹³

Jyväskylä was a national centre of Finnish intellectual life with a seminary for Finnish language teachers and visitors to Harjukatu 10 included the poet Eino Leino (1878-1926), the painter Akseli Gallen-Kallela (1865-1931) and the aforementioned writer Juhani Aho, amongst others. Alvar Aalto was educated at *Jyväskylän Lyseo*, the first Finnish language grammar school in Finland established in 1858. The Jyväskylä of his youth was a centre of the new wave of Finnish political identity reaching back to the philosopher and statesman J. V. Snellman (1801-1888) whose identification of fennicization – that is the duty of Swedish-speaking Finns to promote Finnish, then a peasant language spoken by about 85% of Finns, he regarded as a rational, Hegelian matter of ‘national survival’.

In contrast, Alvar Aalto linked his bi-lingualism to his sceptical worldview and a capacity to see things from two points of view; the “*ausser sich geben*” (going outside oneself) that he quoted from Goethe.¹⁴ Later on it was of benefit in establishing connections with the predominantly Swedish-speaking intellectual and artistic milieu in Helsinki, and with Sweden more generally. Alvar Aalto’s international outlook was further reinforced by a broadly Germanic curriculum at the *Lyseo* and he became fluent in German, developing a particular love of Goethe’s work. Simultaneously his step-mother Flora gave him a life-long affection for French writers and his capabilities in French and German would again be significant when he studied architecture, as the majority of architecture books at the Helsinki Polytechnic were either in Swedish or came from Paris, Berlin and Vienna.¹⁵

Before 1809, when Sweden was forced to relinquish Finland to Russia by the French Emporer, Napoleon, Finland had been ruled as a province of Sweden since the Middle Ages. Finland was therefore only constituted as an independent political entity when, in 1812, it was established as an autonomous Grand Duchy of Finland within the Russian Empire. Swedish continued to be the language of government and education and it was often educated, Swedish-speaking Finns, including Snellman, who were the leaders of the first cultural manifestations of a distinct Finnish identity in the 19th century. Firstly, through the work of Lönnrot and Topelius, and later the work of National Romantic artists such as Sibelius and Akseli Gallen-Kallela (née Axel Gallén) in which:

“The way to look forward, ironically seemed to be to look back [...] past modes would provide the discipline, economy and originality of expression which [they] sought” (figs 2.10a-b).¹⁶

Allied to Snellman’s emphasis on fennicization, a ‘Kalevaic’ culture took on the form of a national conscience as Imperial Russian repression in the late 19th century inveighed

against the freedoms guaranteed the Grand Duchy at its creation in 1812. So that although the *Kalevala* was published in 1835 it was only brought to the fore in the 1890s, in a large part through Gallen-Kallela's symbolist depictions. The enduring status of this period in the creation of Finland's self-image was such that when the Finnish philosopher Yrjö Hirn (1870-1952), a figure of great importance to Alvar Aalto (see Chapter 7), challenged the accepted faith in the *Kalevala* in 1932 it caused a furore.¹⁷

Alvar Aalto established his own sceptical relation to these touchstones of Finnish cultural identity. In 1921, in an article in the journal *Jousimies* (the Archer) he had clashed with Gallen-Kallela over the status of architecture and art, claiming a new unity of art was only possible through architecture.¹⁸ While in a 1949 essay, *Finland as Model for World Development*, he stated that Snellman and his followers' emphasis on fennicization had endowed Finland with an overly literary emphasis to its cultural aims and identity, he wrote:

“It is curious to find what a wide gap exists between the arts, sciences and practical work based on pure thought and literary effort, and those based on matter. One might almost say that the River Styx runs between them. Very occasionally one finds literature arising from an act of creation based in matter. An example of this is Goethe’s *Italienische Reise* (Italian Journey)”¹⁹

Declaring himself interested in tradition but not in folklore, Alvar Aalto taunted:

“The absurd birch-bark culture of 1905, which believed that everything clumsy and bleak was especially Finnish’ [but lauded] “our brilliant trio of architects [the partnership of Eliel Saarinen (1873-1951), Hermann Gesellius (1874-1916) and Armas Lindgren (1874-1929)] who at the turn of the century created both depth and surface, depth in that they created their work directly from existing conditions, from nature; surface in that never before, and never since then, has this difficult, aristocratic art form gained such popularity and genuine esteem” (figs 2.11a-b).²⁰

Despite being part of the Russian Empire, Finnish political life followed a party system modelled on Swedish examples. However issues of Finnish identity created a more

layered political scene than the more conventional left-right divisions of 20th century political debate, with which they overlapped. J. H. Aalto was a member of the *Nuorsuomalainen Puolue* (Young Finns), a socially and economically liberal party that advocated a passive, if confrontational, approach to the Russian authorities. The party had split from the *Suomalainen Puolue* (Old Finns) a more socially and economically conservative party under the influence of Snellman. Closely linked to the clergy it considered issues of language as more important than the law. Together with the *Svecomans*, a liberal party that stood for Swedish-speaking interests, these parties co-existed with the Social Democrats and Communists. The legacy of these identity politics would continue throughout the 20th century and affect the Aaltos' careers on a number of occasions. In one instance the enduring influence of the clergy resulted in the construction of the Viipuri Library being delayed for two years as they attempted to resist the building of a supposedly leftist building so close to Viipuri Cathedral.²¹

By 1903 increasingly unconstitutional behaviour by the Russian authorities split the political scene across party lines into 'Constitutionalists' and 'Compliants'; the former averring outright opposition to, and the latter attempting to amend through co-operation, the Russian position.²² In 1904 the Russian Governor was assassinated and in 1905 both Constitutionalists and Socialists supported a general strike. As a consequence of the 1905 Russian Revolution a unicameral Finnish Senate was established, and elections held on the basis of universal suffrage in 1906 resulted in the Social Democrats becoming the largest party. In 1910 the Czar withdrew Finnish autonomy altogether, and with the start of the First World War the Czar declared total Russification an aim.

From February 1915 Finns left for Germany to train as *Jääkärit* or *Jaeger* troops to fight in any forthcoming struggle. Forty percent of these were students, so that by the time Alvar Aalto arrived at Helsinki Polytechnic in the late summer of 1916 it was into a radicalised environment demanding full independence, and he was himself arrested for suspected involvement in the *Jaeger* movement.²³ Following Alexander Kerensky's suppression of the Finnish Senate elected after the February Revolution of 1917, *Punakaartit* (Red Guards) and *Suojeluskunnat* (White Guards) formed throughout Finland to protect what they saw as their own, and national, interests.²⁴ After the October Revolution in Russia a reconvened Senate *de facto* declared Finnish Independence on 15th November, achieving this practically on 6th December 1917.

In January 1918 the Senate, excepting the Social Democrats, established the White Guard as a Finnish army and on 28th January it was ordered to attack the Russian troops that had remained in Finland; the same day that the revolutionary Socialists and Red Guard seized power in Helsinki. In the ensuing four months of Civil War over thirty-four thousand Finns were killed, or one percent of the population, with massacres carried out on both sides, particularly at the cessation of fighting when thousands of Reds were shot or died in prison camps.²⁵ Alvar Aalto secreted himself out of Helsinki and made his way back to Jyväskylä, from then on fighting in the White Army. Out of the eleven students in Alvar Aalto's year at the Polytechnic four were killed in the Civil War, as was Alvar Aalto's earliest architectural mentor Valter Thomé.

There is still no authoritative account of the Civil War and its aftermath and it is not the intention of this thesis to try and interpret this period except in terms of how it affected the work of the Aalto atelier. For example in Varkaus, a 'company' industrial town of the Ahlström forestry concern in the east of the country, where the Aaltos would later

design the town plan and workers' housing, the male population was literally decimated (figs 2.12a-c). The public silence that is usually maintained about the period has been seen by some as motivated by a desire for reconciliation and the need to create a myth of unified nationhood; others, such as the critic Nils-Börje Stormborn, reviewing Väinö Linna's trilogy *Täälä pohjantähden alla* (Here Under the North Star) in 1960, the first novel to really write of the experiences of the Civil War, believed the silence on the matter owed to still open wounds.²⁶

A national policy of "Internal Reconstruction" led to the parliamentary Social Democrats being allowed to stand in the 1919 elections when they became the largest party in the Senate. But of twenty governments formed between 1919 and 1939, nineteen were nationalist and conservative, the Social Democrats only holding power for a few months in 1926. Throughout these two decades, however, parliament and democracy endured, unlike in the neighbouring and similarly newly independent Baltic States, but fragility characterised political life.²⁷ In 1929-30, under the duress of rightists, which included many members of the *Suojelukunta* (Civil Defence Guard), a militia formed out of the White Guard, left-wing demonstrations were banned and the Socialists barred from elections. In October 1930 the former President K. J. Ståhlberg and his wife were kidnapped and in 1932 there was an attempted *putsch*, the *Mäntsälä Kapina* (Mäntsälä Rebellion) led by the former Chief of Staff of the Finnish Army, General Wallenius.²⁸

The historian Matti Klinge has identified two prevalent ideologies in 1920s and 1930s Finland:

"National and nationalistic, where the groupings were semi-fascist or xenophobic, often passionately anti-Russian and anti-communist [and] a resurgence of the old 'Fennoman' ideas, inclined towards agrarian politics and forgetting the international culture".²⁹

These attitudes extended into intellectual circles as well, with the universities being dominated by national, Germanophile and conservative forces. The Rector of the University of Turku, the writer V. A. Koskenniemi, addressing the highly nationalistic *Akateeminen Karjala-Seura* (Academic Karelian Society) on Independence Day in 1933 saw Finns as much the victims of Scandinavian oriented Swedishness as of international Marxism and berated the treachery of a liberalism that betrayed its origins. Of these attitudes artists and architects were closest to the Fennoman ideology, but combined with the urban and cosmopolitan liberalism that had characterised pre-Independence artistic spheres.³⁰

The architectural style of the new Finnish state was Neo-Classicism, bestowing the cultural virtues of classicism both upon the representational buildings of the nation such as the universities and upon the new 'national' industries (fig 2.13). Commercial institutions and businesses favoured a continuity of the Germanic rationalism of the pre-Independence period (fig 2.14) while Sweden and Denmark engendered the 'culturally progressive' Nordic Classicism which came to the fore following the Gothenburg Jubilee Exhibition of 1923 (fig 2.15). There was blurring and overlapping between these various movements, but it is the self-consciously international style of 'Nordic Classicism' that is emphasised within Finnish Architecture's historiography (see Chapter 1).

Following the Civil War Alvar Aalto returned to Helsinki in the summer of 1918 to complete his studies, joining Aino Marsio who had remained in Helsinki throughout the conflict. They appear to have lived conventionally amongst their peers, Aino Marsio graduating in 1920 and Alvar Aalto in 1922. Both joined SAFA, which at this time was a tiny professional body (in 1910 there were 119 members, of which a 100 were in the

capital; in 1952 there were still only 415 members). Such small numbers meant that professional relationships were inevitably personal, and when the Aaltos moved to Turku in 1927 they counted as 2 of only 10 architects. Unsurprisingly, Alvar Aalto refused to ever criticise another architect's work.³¹ It is worth noting the status that women had at the time in the profession. Whereas in most of Europe women architects were the exception before the Second World War, in Finland they were relatively common, and Aino Marsio would not have felt an outsider either in education or professional life (fig 2.16).³²

A self-defining group (there is no registration of architects in Finland) SAFA was capable of structuring architectural discourse throughout the 20th Century, even more so after 1928 when it took over the journal *Arkkitehti*. Pekka Korvenmaa has observed: “Aalto inherited the legacy of a well-organised professional body with a high social status that governed the design of the built environment”.³³ Finnish architects were, from the 19th Century onwards, closely bound into the construction of a national identity through a resolutely technocratic and non-partisan approach, as well as positions in the state bureaucracy. As part of the National Romantic movement, this elite, casting themselves as impartial experts and artists at the same time, helped define a concept of an independent Finnish architectural identity that was rational and nationally expressive, as well as above the vagaries of politics.³⁴ As the architect Martti Välikangas noted:

“The minimal interest of our technical spheres in affairs of state and our almost total keeping aloof from anything that has an even remote reference to politics are facts known of old”.³⁵

A key element of this architectural identity lay in the architectural profession's dominance of town planning which, at the turn of the century, it had “wrested” control

of from the engineering profession; a situation that has continued to the present day with no separate profession of town planning in Finland.³⁶ When in 1920 Alvar Aalto's tutor Carolus Lindberg began teaching the first course dedicated to town-planning theory at the Polytechnic, as much as he stressed artistic skills he also emphasised attentiveness to practicalities of climate and traffic circulation.³⁷ This competence enabled architects to keep town planning within their field and so ensure an aesthetic view prevailed over a more utilitarian one. So that, although when it was viewed by architects as technique alone, town planning was of a lower status than, and subordinate to, architecture; when it was seen as a geographical extension of architecture it could become the highest art form of all. As Alvar Aalto remarked:

“art as a whole is like a pair of scales, with what is known as the liberal arts (monumental architecture, sculpture, painting, ornamental art) in one pan, and the practical arts (town planning, housing, constructive art, utility art) in the other. The focus, art developing into the faithful image of its own era, is now in one pan, now in the other, depending on which is supported by prevailing social conditions”.³⁸

Architecture students were a *de facto* member of this architectural elite from the time they crossed the threshold of the only architecture school, the Helsinki Polytechnic, and would associate socially, and often work for, their professors and other architects. The Polytechnic was established in 1863 on a Germanic model and followed Swedish models with a bias towards engineering, with an architecture course being established in 1873 (previously architects had trained abroad, primarily in Sweden). In 1879 the course curriculum was premised, in the manner of Durand and Rondelet at the original *École Polytechnique* in Paris, on an overarching separation of technique and artistry, and with design projects structured according to building types – housing, public building and so on.³⁹

The adoption of the Polytechnic system in preference to the British Arts and Craft Model or French *Beaux-Arts* model, had been opposed by Snellman, amongst others, as diluting both the aesthetic and academic; and the influence of such views began to be felt during Frans Sjöström's headship (1873-1885), when his belief that the judgement of design projects should be guided by experience, and not by teleological calculation, began to hold sway.⁴⁰ By the time Aino Marsio and Alvar Aalto enrolled in, respectively, 1913 and 1916, the curriculum had undergone further minor amendments to stress drawing and design so that paradoxically, within the overall Polytechnic model, the studio system was almost a model of the *Beaux-Arts* system.

Design was exercised as the skilful manipulation of a given task in which the functional brief of design projects was defined for the students and the demand for a complete *rendu* of a building presenting it in plan, section and elevation took precedence over all other aspects. With architectonic proficiency valued over programmatic inquiry and with tight deadlines, an idea needed to be quickly and confidently established in the form of an *esquisse* and schemes established as a completely composed and technically realisable *project au net* as soon as possible (fig 2.17).⁴¹ Models would be made, but only at the end of a project as a means of presenting the final scheme. These demands meant the studio system nurtured a kinship and competitiveness that was transferred into architectural practice, and the habits of the Aalto atelier, from Alvar Aalto's sketching to its artistic ethos, reflected the Aaltos' education (see Chapter 9).

The Polytechnic's emphasis on a complete *rendu* and its representational bias of plans, sections and elevations, usually placed on one sheet to stress their three-dimensional consistency; together with an internal and external perspective and model, mirrored the requirements for entries in SAFA's frequently held architectural competitions. It was

through this comprehensive competition system that SAFA and architects exercised their greatest influence over the public perception of the profession, and the commissioning of buildings. As Alvar Aalto saw it: “Our profession is the only one in the world to have set up a system of competitions which really provides society with the best possible results”.⁴² The Architects’ Club (the predecessor of SAFA) established competition rules in 1892, that endured until 1970, which state that for any competition to be recognised by SAFA, and hence for its members to be allowed to enter, the competition must be organised by SAFA with at least 2 architects nominated by SAFA on the jury, who were also assigned the casting vote. In 1907 in defence of ‘artistic capacity’, non-architects were barred from competitions.⁴³ Architectural competitions were required to be held for the procurement of even minor public buildings, thus opening up opportunities for relatively inexperienced architects to win significant commissions. It also created a system in which responding to one’s peers views was critical; to be successful an architect would have to be an able designer and a developer of competition winning presentations, which are not necessarily the same thing. It is reasonable to conjecture that the architectural members of the juries would often know the identity of at least of some of their peers’ entries. Consequently the prolific number of open competitions promoted a unique way of thinking about, and a technique of practicing, architecture; something that Aino Marsio-Aalto knew from her experience working for the eclectic and highly successful competitor, Oiva Kallio (1884-1964) from 1920-3.

An average of about ten competitions a year were held during the Aaltos’ careers, and of these the Aalto atelier entered eighty-two, winning prizes in thirty-eight, of which twenty-six were first prize. Nineteen of these competition-winning schemes occurred between 1948 and 1958, including those at Seinäjoki.⁴⁴ Competitions appealed to Alvar

Aalto's competitive temperament, while Kirmo Mikkola has argued that it was suffering defeats to functionalist schemes by other architects in competitions of the mid-1930s that accelerated Alvar Aalto's rejection of that style, and the evolution of his own expression.⁴⁵ Most importantly it meant that the Aalto atelier had, from its earliest years, a stream of public and state commissions.

In architectural circles of the 1920s the major concerns were resolutely urban, reflecting the metropolitan bias of the profession, and Alvar Aalto's short-lived first business, *Taideteollisuustoimisto Aalto & Ericsson* (Aalto & Ericsson Office of Applied Arts), an interior architecture company set up in Helsinki together with the painter and interior designer Henry Ericsson (1898-1933), reflected this. When Alvar Aalto and, separately, Aino Marsio took the decision to move to Jyväskylä in 1923 however, they found themselves in a living vernacular "of small farmers".⁴⁶ A situation that mirrored the largely agrarian nation: in 1910-18, 66-74% of the population were involved in farming, in 1938-40, 55-64%, and in 1950 approximately 50%. It would not be until the 1950s that urban construction overtook rural construction for the first time.⁴⁷ There was a rural, or rusticising, bias to policy and, reaching back to the National Romantic period, an establishment of *gemeinschaft* (community) over *gesellschaft* (society) as a Finnish national identity based on yeoman farmers, craft and a belief in folklore as the "untarnished reflector of the pristine national soul".⁴⁸ This was a mystical nationalist sentiment that culminated in the 1935 *Kalevala* centenary celebrations and that was conveyed in the literature of the time, particularly in the Nobel Prize winner F. E. Sillanpää's (1888-1964) novels that described a "heyday of an idiosyncratic rural romanticism marked by the idealisation of healthy country life".⁴⁹

Nor until the 1930s did these values become at odds with the realities of production.

The scale of workshops meant it was as affordable to purchase one-off pieces of furniture as a serially produced piece, and the Aaltos' early furniture designs reflect this (figs 2.18a-b). Construction was focused on, preferably owner-occupied, single family houses in suburban and semi-rural settings that idealised a Finnish *heimatstil*. In towns the tensions of an emergent industrial class were addressed with the building of limited social housing, but apartment blocks were considered dangerous when compared to the benefits of houses and smallholdings. In the words of the editor of *Rakennustaito* (Building Skill) Yrjö Similä in 1933:

“one fears that the inhabitants of collective houses will have too much free time ... that the mis-use of this additional free-time will break out in the form of anti-social thought and action”.⁵⁰

In Jyväskylä the Aaltos demonstrated their professional independence in a period of four years, whilst seemingly making use of Alvar Aalto's family connections and wartime service. They remodelled or designed six churches, built the 'Aira' apartments for railway workers (1924-6) and constructed the *Jyväskylän työvaentalo* (Jyväskylä Workers' Club, 1924-25) at the same time as they were redesigning the Civil Guard's premises, for whom they would later build an entirely new building, *Jyväskylän suojeluskuntatalo* (Jyväskylä Civil Guard House, 1926-9).⁵¹ They also built the *Seinäjoen suojeluskuntatalo* (Seinäjoki Defence Corps Buildings, 1924-6, figs 2.19a-d).

The Aaltos move to Turku in 1927, provoked by their victory in the competition for the *Lounais-Suomen Maalaistalo* (South-Western Finland Agricultural Co-operative) coincided with the onset of larger-scale industrialisation and urban migrations together with increasing industrial output (80% between 1926 and 1929).⁵² The former capital of 'Sweden-Finland', Turku, facing Stockholm, was a self-consciously pan-Scandinavian,

city.⁵³ During the Aaltos' six years in the city they developed an overt international and modernist orientation and travelled extensively abroad to conferences and meetings with like-minded groups such as CIAM and the Swedish avant-garde group *acceptera*. In addition they deliberately employed foreign assistants in the atelier. The Aaltos won the Paimio Tuberculosis Sanatorium competition (1928), which, along with their furniture production, gave the atelier an international reputation because of the boldness of its functionalist design coupled to the scale of its progressive social programme; which stood in contrast to the individual private houses that were the typical product of their international functionalist contemporaries at this time (fig 2.20). In Turku itself they allied themselves to groups such as the *Tulenkantajat* (Torchbearers) movement with its motto *ikkunat auki eurooppaan* (Windows Open To Europe).⁵⁴ This connection led to the commissioning of a set design for Hagar Olsson's (1893-1978) expressionist anti-war play *S.O.S* in 1930, influenced by Erwin Piscator's *Das Politische Theater* that Alvar Aalto had in his library (fig 2.21).

The Aaltos' orientation was international, but seen from Helsinki, their status in Finland was provincial and provocative; a situation commented on by the Swedish critic Gotthard Johansson (1903-1971) in 1933. In the same year the Helsinki neo-classicist J. S. Sirén (1889-1961), in competition with Alvar Aalto, was appointed as Professor of Architecture at Helsinki Polytechnic, and when Alvar Aalto stood for the SAFA Board he received only 9 votes out of 50. Of the Helsinki architects he received support only from Hilding Ekelund as well as Sigurd Frosterus, Gustaf Strengell and their circle (see Chapter 3).⁵⁵ Alvar Aalto's fight with Bertel Jung (1872-1946) the former town-planning architect of Helsinki, can be seen as a metaphor for these tensions. At the 1932 Nordic Building Congress in Helsinki:

“Bertel Jung went up to a restaurant table where Gunnar Asplund and Alvar Aalto were sitting and said: ‘So this is where the Bolshevik architects are!’ Whereupon Aalto rose and gave Jung a box on the ear. There was a tremendous uproar, and the [SAFA] Board of Association set up a tribunal which discussed the incident for several months”.⁵⁶

Despite this, the Aaltos moved to Helsinki in 1933, apparently to be closer to Viipuri where the Library was now under construction. Alvar Aalto became Chairman of the radical *Projektilo* film club which showed films by the French and German avant-garde, including those by the Aaltos’ friend Moholy-Nagy. It also showed Soviet films, for which reason it was closed down for sedition by the authorities in 1935. The Aalto atelier also designed two projects for known leftists, a workers’ open-air theatre (1935) for Nyrki Tapiovaara, and a Film Studio (1938) for Erik Blomberg. As a consequence of these activities Alvar Aalto was interviewed and put on a register by the *Etsivän Keskuspoliisi* (Central Detective Police).⁵⁷ However, none of these activities appear to have been party political, and they were perhaps more akin to the *Clarté* movement in Sweden; a left-wing artists organisation that strove to change society through cultural means, not workers’ direct action, which the Aaltos’ friends Sven and Viola Markelius supported.

The prevailing conservatism of Finnish taste similarly resisted the internationalist nature of the Aaltos’ work. This can be seen in sales of their furniture throughout the 1930s when the UK and Sweden were their largest markets, and those in Finland were limited. The Aaltos’ products, highly desired as “anonymous good design” abroad, only achieved national status after the Second World War, following their international recognition.⁵⁸

Notwithstanding that Alvar Aalto cultivated being seen as an ‘outsider’, he nevertheless conformed to SAFA’s ideal of an architect as a member of an elite group of public servants - impartial, objective, technically minded and respectful of modernity. His speeches on the role of the architect were premised primarily on the established view of the architect as a public expert who operated above politics and in solidarity with society; “Not serving in the sense of being humble, but serving by cultivating the field of activity it considers – rightly – to be most important for Finnish culture”⁵⁹.

Following the debacle of his 1933 attempt to become a member of SAFA’s Board, following the completion of the Viipuri Library in 1935 Alvar Aalto’s increased stature within the profession, and within the country as a whole, saw him elected to the Board in the same year. He later became its Vice-Chairman in 1939 and its Chairman in 1943, retiring in 1959. The Aaltos’ son, Hamilkar Aalto remarked that on becoming Chairman Alvar Aalto’s bohemian air changed to one of responsibility and confidence.⁶⁰

Alvar Aalto’s greatest influence at SAFA coincided with the outbreak of the Winter War in 1939 and the Continuation War of 1941-44, events that bolstered SAFA’s position as a quasi-body of state, establishing it as a cultural force. For Alvar Aalto this meant the realisation of his goal of centralising architectural policy dating back to his involvement with CIAM (see Chapter 3). He helped establish a Commission on Regional Planning, and most significantly brought about the “elastic standardisation” of building components (see Chapter 8).⁶¹

During the 1930s, the Aaltos were responsive and opportunistic in recognising the importance of timber as Finland’s most abundant material, and the fact that its forestry industry was the most technologically advanced, with the greatest international contacts

and vision. From 1932 until the early 1960s forestry concerns would underwrite the office with uncounted commissions, making it viable even during wartime conditions (fig 2.22). Alvar Aalto knew the leading industrialist Gösta Serlachius, from his time as a student in Helsinki, and in 1930 Serlachius commissioned the Toppila works from the Aaltos. However Serlachius conformed to a typical 1930s view of architecture; and while he was happy to have a ‘functional’ factory site, he commissioned Bertel and Valter Jung to design a neo-classical company Headquarters (1934). It was the Aaltos’ introduction, by the art historian Nils-Gustav Hahl (1904-1940), to “the progressive patricians” Harry and Mairie Gullichsen (1907-90), the former the Managing Director of Ahlström, the largest forestry company in Finland, and the latter an amateur artist, that was most significant. In 1936, the Aaltos, together with the Gullichsens and Hahl founded Ab Artek Oy as an interior design company, exhibition centre and manufacturer of the Aaltos’ furniture, with Aino Marsio-Aalto as managing director.⁶²

At the end of the 1930s the Gullichsens were “an apolitical, technocratic force [...] free of agrarian backwardness and actual party politics”, with a belief in leadership of industry that was analogous to the Aaltos’ ambitions for architecture. It was in relation to this proselytising of a socially progressive Finland through design and architecture that the Gullichsens’ repeatedly commissioned the Aaltos. They underwrote the expense of the Villa Mairea, their second home adjacent to Ahlström’s headquarters, as a model representation of this progressive Finland. As Pekka Korvenmaa noted:

“the manifesto-like character of Villa Mairea was a profound statement of the Finnish industrial elite [...] expressing the internationalism and modernity of the new technocratic group of decision makers”.⁶³

Working for Ahlström, the Aaltos were able to design the first examples of their standardised housing, the *AA-jäjestelmä* (AA system, 1936), and later *A talo*, which

exploited the availability of timber and its suitability for a flexible, component-based standardisation (figs 2.23a-b). In the 1940s and 1950s Alvar Aalto would link this elasticity of standardised production, and the economies it promoted, to his notion of the Nordic countries as a laboratory in which to promote the humane values of a civil life. A life that he saw as being impossible to bring about in larger industrialised nations because of their distorting scales of commerce and production.⁶⁴

Forestry companies commissioned the Aalto atelier to plan small-scale settlements that incorporated public buildings, social facilities and social housing without ownership barriers or aesthetic meddling by others; for example at Sunila, Inkeroinen (1936 onwards) and at Säynätsalo. Most ambitious of all were the series of Regional Plans that commenced with the Kokemäenjoki River Plan (1942, figs 2.24a-b). Ahlström had extensive interests in the Kokemäenjoki Valley, and Harry Gullichsen persuaded both the agrarian districts and the city of Pori of the benefits of a Regional Plan for the district. The status of the project, and the demonstrable closeness of the State and the 'progressive' industrialists, already planning for a post-war Finland at this time, was evidenced by the Finnish President attending the launch of the Plan. After the war the Kokemäenjoki River Plan led to the similar Kymijoki and Imatra Master Plans (1947-53).⁶⁵

Synonymous with these productive and professional accomplishments was a theoretical and political one that culminated in Alvar Aalto's 1939 plan, together with the Swedish theorist Gregor Paulsson (1889-1977), for an unrealised journal, *Den Manskliga Sidan* (The Human Side) that was conceived as a model of reconciliation:

"There can be nothing more distinctive of the culture for which we have worked in the countries of northern Europe than our striving for a state of equilibrium between

individual and group phenomena, for harmony between the personal activity of individuals and collective creation".⁶⁶

Owing to Harry Gullichsen's influence, Alvar Aalto was co-opted onto an informal association and "legendary discussion group" of leading politicians and industrialists who met to discuss the future of Finland, before, during and after the war for a period of over twenty years. Other members included trade union leaders such as Eero Wuori, politicians including the Social Democrat K. A. Fagerholm, three-times Prime Minister between 1948 and 1958, as well as other industrialists like Vilhelm Lehtinen, a school-friend of Alvar Aalto, who was Finnish Consul in New York at the time of the Aaltos' New York World's Fair Finnish Pavilion in 1939 and was later Chairman of the forestry company Enso-Gutzeit. The group met at an Helsinki villa, that during the war was used as the headquarters of the Finnish army's logistics office headed by Holger Nystén, who worked for the Finnish Paper Industry Association, FinnPap (1918-1996). Nystén and Fagerholm lived at the villa, and the group became known as the *Nysténin piiri* (Nystén circle), although it was also known as *Greta's kolkhoz*, after the housekeeper.⁶⁷ During the War, as well as working as a practitioner and for SAFA, Alvar Aalto was designated a propaganda agent working for the Finnish Government Information Centre by Fagerholm, then the Minister of Social Affairs.⁶⁸

This bond gave Alvar Aalto (and by extension SAFA under his Chairmanship) a disproportionate weight during the war and the subsequent period of reconstruction. As the country recovered from the war, the broadly social democratic and pan-Scandinavian perspective of the *Nysténin piiri* became a central part of both Finland's political life and national self-image. Alvar Aalto was in a situation of professional, political, and artistic leadership unparalleled by any other architect in Finland. In January 1945 his curation of the exhibition *Amerika Rakentaa* (America Builds) in

Helsinki, sourced from the Museum of Modern Art in New York (henceforth MOMA), signalled the country's new cultural orientation away from Germany towards America.⁶⁹ Coupled with his wartime activities at SAFA, the late 1940s also signalled a final shift of power from the 'old guard' of Finnish architects; despite J. S. Sirén's attempt to have the Aalto atelier's 1949 victory in the competition for the new Helsinki Polytechnic declared void.

As well as competitions, the Aalto atelier, after the relatively sparse years of the 1930s now received copious large-scale commissions. In 1943, the same year that he became SAFA Chairman, Alvar Aalto was also elected to the *Pörssiklubi* (Stock Exchange Club) in Helsinki; a male only meeting place for politicians, industrialists and businessmen from where Alvar Aalto would henceforth conduct a large part of his business.

Members included Vilhelm Lehtinen and Göran Ehnrooth, the Director of the Nordic Bank, who would later commission work from the Aalto atelier. As Jaakko Kontio noted of the Vuoksenniska church:

"Enso-Gutzeit [Vilhelm Lehtinen's company] donated the site [...] The parish had no say in this. Enso-Gutzeit said Aalto was going to be the architect".⁷⁰

Equally Alvar Aalto's oft cited 'charm' and capacity to promote his vision extended in other directions. Matti Janhunen, the Communist Minister for Social Affairs was effectively the client for the Aalto atelier's National Pensions' Institute and it was on his recommendation that the atelier was commissioned to design the *Kulttuuritalo* (House of Culture, 1952-8), the Communist Party and Trade Union headquarters.⁷¹

The Winter and Continuation Wars instigated by the 1939 invasion of Finland by the Soviet Union unified Finland politically, a consensus that endured into the post-war period. Following the preliminary peace treaty of September 1944 Finland lost

approximately 10% of its territory, including the second largest city, Viipuri (Vyborg) and had to resettle 12% of its population. Issues of economy and state that had only begun to be addressed in the 1920s and 1930s now became a unified national cry of conscience, driven by the austerity and endeavour required to pay war reparations to the Soviet Union. A situation that the Soviets exacerbated through their pressure on Finland to refuse American offers of Marshall Aid.⁷²

Once again, as after Independence, these conditions meant that the Aaltos' careers coincided with a construction boom matched by a material austerity. Valter Karisalo, who worked in the atelier in the 1940s recalled that; "Brick was difficult to acquire in those days. I had to buy the brick on the black market. We used wood whenever we could".⁷³ Migration of builder-craftsmen from the countryside into the cities and towns guaranteed a skilled workforce, but combined with an overall shortage of labour, led to lengthy construction periods that in turn allowed for a measure of architectural adaptation even after construction began. Mandatory regulatory practices for building sites were not instituted until 1957, so up until this point their organisation could be as the contractors wished, hence allowing for yet further contingency and innovation on the workplace, (and presumably more dangers).⁷⁴ Even at their most rhetorically 'modern', the Aaltos' buildings would be at most semi-industrialised in their construction and they were able to work many times with a trusted set of contractors and consultants, as Jaakko Kontio recalled:

"the Seinäjoki Church (1951-62) was not done totally according to the plans. A skilful master-builder could do things his way in those days. [...] And they absolutely improvised in Vuoksenniska (Church, 1955-8). On site I mean. The local journalists counted 105 different windows. The window manufacturer set up a workshop inside the church. They measured the openings and built the windows".⁷⁵

Greta Skogster-Lehtinen's Birch-Bark Wall-Covering (1942) signified the wartime and post-war status of craft as an "uncorrupted" cultural value born in isolation of "natural materials", a status which Alvar Aalto's 1941 essay *Karelian Architecture* propagandised (fig 2.25).⁷⁶ Timber was co-opted, as a native resource, as a metaphor for a wider Finnish identity and the Finnish landscape, as well as an expression of native resourcefulness, exemplified by the decorative applications of Yrjö Lindegren's extensions to the Helsinki Olympic Stadium (1952). However, in contrast to this metaphorical and decorative status, as a structural material timber was seen as 'backward'.⁷⁷ While, informed by pattern books, its use remained prevalent in the countryside, the architects and housing providers of the new low-rise, low-density suburbs of Tapiola (1953 onwards) and Maunula (1951 onwards) largely avoided using it; and the wide-scale demolition of large areas of timber buildings in Finnish cities and towns continued into the 1970s (fig 2.26). The most important material remained rendered low quality masonry with concrete floors. At a time of limited means, an architecture based on plaster allowed for both simple construction methods and scenic compositions, so that just as the stucco of the 1920s had allowed for a palette of Italianate colours of Nordic Classicism, so now it provided for a sheer 'Modernist' surface.⁷⁸ The use of fair-face brickwork was also relatively common, but the skills required to lay it made it more expensive and, along with the difficult to work indigenous granite and copper, it was reserved for more prestigious projects.

The Olympic Games of 1952 marked the end of the 'Period of Reconstruction' and the beginning of the 'Golden Age'; a designation in the historiography of Finnish Architecture and Design for the mythicised *Heroism and the Everyday* that characterised the construction of a modern Scandinavian welfare state.⁷⁹ As the burden of war reparations was lifted large scale housing provision was pushed to the forefront of

architectural policy and the State established public guaranteed loans for housing. Heikki von Hertzen, the director of the housing association *Asuntosäätiö*, the creator of Tapiola, had stated already in 1946:

“The principal social focus of the mediaeval town was the church. In the Baroque city it was the ruler’s palace, and in the Industrial Age it was the factory. The focal points in the town planning of the era that is now dawning will be the home and the school” (fig 2.27).⁸⁰

The scale of the undertaking facing the country can be measured by the fact that even after sixteen years of constant activity, in 1960 there were still one hundred and thirty persons per hundred rooms, including kitchens.⁸¹ The majority of this reconstruction was in the newly established suburbs but was rural in its nature, blurring city and country’ and was largely based, as before the war, around the single family home. Finnish films idealised the small town idyll. “Sighing angrily” against the new factories, they depicted Helsinki as brutalising, and only in the 1960s were they set in the new suburbs (fig 2.28).⁸²

It was also in the 1960s that the austerity that had enforced an explicitly “adapted” architecture responding to immediate needs and resources was challenged by architects able to exploit an increased material affluence. Whereas the acculturated work of the 1940s and 1950s formed an inclusive built environment that involved the regulation of existing class structures, as well as of man and nature, architects in the 1960s began to more dogmatically impose technocratic and rhetorical ways of thinking.⁸³

In building this mostly related to a desire to emulate the ‘order’ of foreign models of pre-fabrication and scales of construction; a yearning seen in buildings with *in-situ* construction having grids marked on to their stucco elevations to imply they were formed from pre-fabricated elements. Architects, together with cooperative building

societies now operating as ordinary business minded contractors, promoted industrialised forms of construction to create large-scale housing districts. The instrumental benefits of this more systematic construction were immediate and for the first time the building of apartment blocks began to match the building of houses. A transformation of Finland took place with the completion of approximately one million dwellings between 1957 and 1978, amounting to two-thirds of the total number of dwellings in the country (fig 2.29).⁸⁴

Chapter 3 MILIEU

“It is not good for man to be alone’, said Goethe, ‘and especially to work alone. He needs sympathy and suggestion to do anything well. I owe to Schiller the *Achilleis*, and many of my ballads, to which he urged me; and you [J. P. Eckermann] may take the credit to yourself if I complete the second part of *Faust*.’”

Johann Wolfgang von Goethe¹

To overlook the milieux which informed the Aalto atelier’s practice of assimilation and transformation, would be to denude its work just as much as ignoring the location of its formation. For the Aaltos the direct contact and spark of personal acquaintance allowed complex design issues to emerge in a non-hierarchical dialogue in which there were no dogmatic roles of original and imitator. Many of these relationships were opportunist and Göran Schildt has remarked that; “Aalto was no saint, not even a boy scout; he was a person who manoeuvred with considerable shrewdness in a complicated world”.² But many reflected an openness to ideas born out of an inquisitiveness into what an architecture supportive of, and contingent with, modern life might be; and more particularly how such architecture might be evolved and made manifest.

Alvar Aalto received a broadly ‘classical’ education at the Jyväskylä Lyceum, but graduated from the *Realistiosasto* (Realism Line) with its emphasis on modern languages.³ As well as receiving schooling in German literature, he grew up with his step-mother’s library of French literature and Scandinavian classics, such as Henrik Ibsen and August Strindberg, and two of these books that Alvar Aalto reread many times set out approaches that would endure throughout his career.⁴ In Anatole France’s *La Rôtisserie de la Reine Pédaueque* (At the Sign of the Reine Pédaueque) the (anti-) hero Abbé Coignard continually deflates the doctrinaire and lauds “a prodigious leaning to doubt”, whilst in turn admitting to the weakness of his attempts to match his own aspirations, and

hoping that grace will intervene and help.⁵ Similarly the Goethe of *Italienische Reise* (Italian Journey) is non-dogmatic and a long way from the storms and stresses of *Sturm und Drang*. Here Goethe trusts his common sense and intuition, and balances his expression in a way that Alvar Aalto mirrored in his remarks about his education at the centenary celebrations of the Jyväskylä Lyceum in 1958:

“The language programme comprised, as I believe it still does, everything from the classical languages to the more practical major languages spoken in the world today. This multi-lingualism indirectly generated culture. Like it or not, the student was provided with a variety of perspectives for assessing phenomena. What followed was something like Goethe's *ausser sich gehen* (going outside oneself).”⁶

Göran Schildt relates Alvar Aalto's education to a pre-industrial order of nature and civilization. Instead of the scientific utilitarianism which characterised interpretations of the new natural sciences in larger industrial centres, education in the provinces of Scandinavia coupled this new understanding of man as part of an evolving nature to an eighteenth century notion of 'Ideal Beauty'. Invention was seen as a necessary act of progress as exemplified by Alvar Aalto's forester grandfather Hugo Hamilkar Hackstedt, an inventor in his own right, who gave Alvar Aalto a Swedish edition of Friedrich George Wieck's *Buch der Erfindungen, Gewerbe und Industrien* (The Book of Inventions, Trades and Industries, 1857-62). The book explains, with the grotesque certainty of its time regarding race, a natural order where even the boldest inventions are seamless with nature.⁷ Citing August Strindberg, Alvar Aalto would later state invention in the same terms and attempt to reconcile the instrumental demands of modern architecture with Goethe's concept of an empathetic harmony in which patterns of natural growth are shadowed by human artifice, so that the form relates to both their conditions.⁸ As Goethe put it:

“One thing is certain: all the artists of antiquity had [...] a knowledge of Nature [...] These masterpieces of man were brought forward in obedience to the same laws as the masterpieces of nature”.⁹

Alvar Aalto’s earliest synthetic creations were realist watercolour paintings and, excepting a prolonged interval from the mid 1920s until the mid 1940s, he painted throughout his life. As a student Alvar Aalto took lessons first with the realist painter Eero Järnefelt (1863-1937), and then with the expressionist Tyko Sallinen (1879-1959), and his social life revolved as much around artists as architects.¹⁰ Järnefelt was distinct from his romantic and symbolist contemporaries in the naturalist intensity of his work; a leading member of the ‘Young Finns’ his ‘Burn Beating’ (1893) is one of the key political paintings of the period (fig 3.1). Sallinen was a central figure in Helsinki’s artistic life, and was mentored by the architect and theorist Sigurd Frosterus, of whom Alvar Aalto stated:

“Sigurd Frosterus was the injection of intellectual poison that Finland had to take. [...] Among the older Finnish architects I am perhaps most grateful to Sigurd Frosterus and Gustaf Strengell. They were not the ones who discovered me – that I did myself – but they were the first who understood me and gave me recognition”.¹¹

Frosterus wrote his doctoral thesis *Väri ja valo* (Light and Colour) in 1903 on Cézanne and Post-Impressionist colour, in conversation with the Bloomsbury Group artist and critic Roger Fry (1866-1934). He stressed that artists should have a systematic understanding of their tools and paint with a ‘scientific’ post-impressionistic colour division, together with the spectral, bright colours of modernity.¹² The first leading artist to follow this was another friend of Alvar Aalto, Magnus Enckell (1870-1925), in whose portrait of *Mrs. Emmy Frosterus* (1908) “the colours of the rainbow made their triumphal appearance” (fig 3.2). In 1912 the *Septem* Group of artists was established at the behest of Frosterus, the year after the Finnish National Gallery purchased

Cézanne's *Viaduct à l'Estaque* (1893), and their exhibitions represented the breakthrough of modernism into a scene still dominated by the National Romantics and Symbolists (fig 3.3).¹³ Sallinen, together with Marcus Collin (1882-1960), and again supported by Frosterus, then established the *Marraskuu* (November) Group, and in the controversies that surrounded these artists Alvar Aalto played a minor supporting role as art critic of the Helsinki paper *Iltalehти*.¹⁴

The works of the group, as well as those of Hélène Schjerfbeck (1862-1946), had a turbid scale of colour, coarse structuralism and narrow tonal range. Together with their use of vernacular motifs their ambience conveyed an alternative image of Finland to its conventionally pictorial and symbolic expression, presaging Alvar Aalto's rejection of the "birch-bark culture", and characterising the use of colour and tone in many of the Alvar Aalto's later works (figs 3.4a-d). Alvar Aalto praised Sallinen's work for its depiction of a Finnish landscape that was:

"not idealised but intertwined with man, seeing something of value in the Finnish earth, its wounded landscape, even in its violated forests and its desolate suburban development".¹⁵

This sentiment is also evident in Ragnar Ekelund's (1892-1960, the architect Hilding Ekelund's brother) paintings of landscapes and the newly built suburbs of Helsinki with their empty streets of intense colour, narrow tonal range and affecting geometries, as well as in Alvar Aalto's own paintings (figs 3.5a-c). When in 1921 Alvar Aalto was commissioner for an exhibition of Finnish art in a private gallery in Riga, he exhibited his gouache studies of the Old Town and spoke of how "in the art of today we can detect the dawning of a Nordic Renaissance".¹⁶

Both Aino Marsio and Alvar Aalto found sympathy for a "social climate favourable to art" within the Polytechnic's rigid curriculum, thanks to Armas Lindgren, whose

pedagogic approach derived from the education programmes of the English Arts and Crafts movement which he had studied and admired for their stress on “depth and content” over simple appearance. This was a Ruskinian theory of imperfection that was a touchstone of another tutor, Usko Nyström (1861-1925) who conveyed Pre-Renaissance history by drawing examples and details on the blackboard for the students to copy and emulate as a true sense of proportion and taste.¹⁷ Lindgren instilled Post-Renaissance history by emphasising the *archittetura minore* of Italy and the need to travel, absorbing the atmosphere and drawing with a soft pencil; “the mediaeval night was awe-inspiring, full of dreams and radiant visions. Its life is like a fairy-tale to modern man, its dreams the hymns of saints”.¹⁸ This scenic rendering of history was reflected in textbooks of the time illustrated with etchings of buildings characterised by a picturesque composition and foreground activity and occupation. Hilding Ekelund recalled copying drawings from Paul-Marie Letarouilly’s *Edifices de Rome Moderne* (1874, fig 3.6). Other books used in this way included Jacob Burckhardt’s *Die Arkitektur der Renaissance in Italien* (1869), and Torsten & Werner Söderhjelm’s *Italiensk Renässance* (1907).¹⁹ In addition, the tutors made no separation in the teaching of architectural history and design.²⁰

Many of the generation of architects who taught the Aaltos had been part of the National Romantic movement, a movement that sublimated the vernacular of Finnish farmsteads and the ‘anonymous’ traditions of mediaeval church building. Students visited vernacular environments, including those at the Seurasaari Open Air Museum in Helsinki, where the exhibits included the Niemelä *Torppa* (Farmstead) from eastern Finland (fig 3.7a). A contrast to the larger and more formally organised Swedish-influenced farmhouses from the west of the country that Alvar Aalto had grown up amongst, Niemelä was a “crystal cluster” of autonomous log buildings or “cells” that,

drawn together in contrasting and complementing unity with each other and the landscape, suggested informal courtyards. A structure that would reappear in the Aaltos' later works, together with the exploitation of a single material to its limits and the '*tupa*' – the multipurpose room for living, working, eating and sleeping – that the Aaltos cited as an alternative to the "decadence" of more modern divided concepts of the room when discussing minimum standards for dwellings (figs 3.7b-e).²¹

Precise surveys, as well as atmospheric studies, were made of these buildings under the guidance of Gustaf Nyström (1856-1917) "the Finnish architectural encyclopaedist" who was Professor of Architecture from 1895 until his death. Gustaf Nyström's library formed a critical part of the Department's resources and included works by Richard Baumeister, Hermann Muthesius, Alois Riegl, a heavily annotated copy of Gottfried Semper's *Der Stil*, Alois Maria Wurm-Arnkreuz, as well as Auguste Choisy.²² Gustaf Nyström was the first cosmopolitan, that is non-Scandinavian oriented, architect in Finland. He had studied under Heinrich von Ferstel (1828-1883) in Vienna, and his views collided with the symbolic National Romanticists. His work and teaching maintained a rationalist approach to form, detailing and technology, and his 'Rotunda' extension to C. L. Engel's neo-classical University Library (1902-6) used the latest concrete construction techniques in a seamless response to the existing building (fig 3.8). Often dismissed as a "dry old academician", as late as 1955 Alvar Aalto recalled his international outlook, learning and rigour as important to his education.²³

At the time the Aaltos attended the Polytechnic, however, it was the tenets of National Romanticism that held sway. These included the value and free use of history and a literary and material culture rooted in the adoption of nature as a symbol of freedom. In formal terms, buildings were conceived as an organic unity with individualised rooms

combined through agglomerative planning, the whole flexing in harmony with the constraints of the site (figs 3.9a-b). What had changed was the expression of such values, which were no longer to be found only in the isolation of the Finnish vernacular but in Northern Italy. Such transference was made possible by Lindgren's emphasis on the classical interplay of nature and civilization so that "Classicism and antiquity remained as the backbone of culture from which deviations in whatever direction were possible".²⁴ Recently graduated architects such as Hilding Ekelund, Eva Kuhlefelt-Ekelund and Erik Bryggman made study trips to Italy where they ignored the Gothic, High Renaissance and Baroque and focused on the *quattrocento* and *architettura minore* esteemed by Lindgren, and Goethe before him.²⁵

Bryggman and the Ekelunds published sketches and extracts from diaries of their months in Italy in 1921 (figs 3.10a-d). Bryggman wrote in his notebooks:

"Towns on mounts – S. Gimignano, Gubbio, Assissi... definitely much more worthwhile than to fill one's bags with innumerable details would be to study plans and locations [...] proceed from the site and location [...] combination of nature and art [...] towns; the individual houses, walls, terraces and steps".

Ekelund observed and recorded Mantegna's frescoes in the Chapel of S. Eremitani in Padua as "monumentally composed, full of life's pathos held just below the surface" (figs 3.11a-b).²⁶

In 1921 Aino Marsio won a scholarship, together with her fellow students Aili-Salli Ahde and Elli Ruth, and made an extensive trip through Europe visiting Berlin, Dresden, Vienna, Venice, Ravenna, Siena, Florence, Rome, Naples and Capri. In 1924, following in the footsteps of the Ekelunds, Alvar Aalto and Aino Marsio-Aalto honeymooned in northern Italy.²⁷ Writing on their return Alvar Aalto followed Ekelund in describing Mantegna's cycle of frescoes in Padua as:

“the synthetic landscape [of] the rising town [that] has become a religion [...] in which aesthetic value arose as a by-product, just like the beautiful lines that mark human civilization on Mantegna’s frescoes”.²⁸

Like Goethe before him, Alvar Aalto established northern Italy as a touchstone of a future life in the north of Europe:

“Despite the lapse of so many centuries and such countless changes, the region still imposes on its inhabitants the same habits, tastes, amusements and style of living [...] I know the highest temperature from which in future to calibrate the thermometer of my existence” (fig 3.11c).²⁹

This ‘Italian Fever’ was reflected back onto Finland in the years after Independence as progressive artists and architects stressed the western European heritage of the country.

Just as National Romanticists had travelled eastwards to search for an ethnographic essence in Karelia, now architects made study trips to Ostrobothnia, the most ‘western’ province in the country, to admire the “Doricist sensibility” of the farmsteads for the simplicity of their means and effects and their “incessant irresolution between the classical and the vernacular [...] that reveals the primitive force on the basis of which buildings are [formed]” (fig 2.9a).³⁰ Trips augmented by an interest in the picturesque wooden townscapes of cities such as Porvoo and Viipuri where classical buildings followed irregular, topographically responsive mediaeval street patterns.

This Mediterranean and pan-Scandinavian orientation naturally led to an interest in the emerging austere Nordic Classicism of Sweden and Denmark. As well as the buildings’ architectural expression, it was the accompanying landscape design, with its treatment of the *topos* as a design element and equality of building and landscape, that engaged Finnish architects. Trips were funded to visit various gardens, while in 1919 Aino Marsio worked for the landscape architect Bengt Schalin, “Finland’s Grand Old Plantsman”.³¹ Alvar Aalto, having unsuccessfully applied to work in Gunnar Asplund’s

Stockholm office in 1920, worked briefly in Gothenburg for Ares Arkitektbyrå before returning to work for Arvid Bjerke at the 1923 Gothenburg Fair. This was an event at which Hilding Ekelund worked for Hakon Ahlberg on the Pavilion for the Swedish Guild of Arts and Crafts, a building of great influence throughout Scandinavia with its disposition of autonomous interior and exterior spaces linked by steps and staircases over a natural hillside (fig 3.12).

Most of the Aaltos' secular work in Jyväskylä owed to Swedish models, and by the mid to late 1920s the Swedish influence was so persuasive that in the Viipuri Library Competition (October 1927) all the prize-winners, including the Aalto atelier, designed compositional variations of Asplund's Stockholm Library, elaborated by differing classical dressings (fig 3.13).³² Only in a few examples, however, notably the work of Erik Bryggman, did any Finnish work develop a sensibility that reached beyond such foreign sources.

As I stated in Chapter 2, Nordic Classicism was not however the style of the new State, which favoured either a straightforward revival of the Empire Style, or an eclectic merging of that style with the weighty appearance and materiality of the pre-Independence Germanic rationalism, exemplified by Eliel Saarinen's Railway Station (1904-17). J. S. Sirén's victories in the competitions for The Finnish Parliament (1924), and the extension of C. L. Engel's Helsinki University Main Building (1937), showed his ability to work in both styles; whilst Hilding Ekelund's second prize-winning scheme in the former showed the contrasting sensibilities of Nordic Classicism (figs 3.14a-b).³³ Some architects combined elements from all three tendencies, including Aino Marsio's employer, Oiva Kallio, whose eclecticism was applied according to differing clients. His HOK business headquarters (1919-21) is massively modelled with historicist motifs,

whilst the austere Villa Oivala (1926), implies its classicism more simply through association and proportion.³⁴

The most coherent alternative to Nordic Classicism in the 1920s came in the work of Pauli Blomstedt (1900-35) and Sigurd Frosterus who described the Nordic Classical sensibility as “architectural anaemia”; Sweden with an “affectation” of Italian archaism.³⁵ This polemic matched his, and his erstwhile partner Gustaf Strengell’s, 1904 attack, *Architecture: A Challenge to Our Opponents*, on the earlier archaising nationalist tendencies of National Romanticism.³⁶ Frosterus had worked briefly for Henri van de Velde in Weimar and Strengell for Charles Harrison Townsend in London, and as in painting (Strengell was a former Curator of the Ateneum, the Finnish National Gallery), the pair brought international modernism to the fore.

Frosterus’ Stockmann Department Store’s (1916-30) structural rationalism and tectonic had Berlin antecedents in Alfred Messel’s Wertheim Department Store (1914) and Peter Behren’s AEG Turbine Factory (1909). Its urbanity, however, responding to its sweeping and sloping site both in plan and section, is indebted to Otto Wagner (fig 3.15a). This reflexivity with the site characterised Frosterus’ private house designs, which formed part of what was called the Vasa Renaissance, a free variation of the domestic brick architecture of the Swedish Baroque. Vanaja Manor (1919-24) is typical in its use of fragmented massing, cranked plans and the integration of the garden, all devices that the Aaltos would later use consistently (fig 3.15b).

More importantly, coupled to Frosterus’ remark that the raking light of the setting sun on a rough brickwork surface was his favourite architectural effect, his eschewal of the preciousness of a decorated surface or a purely rational aesthetic in favour of uneven

and unrelieved masonry suggests a source for the Aalto atelier's brick buildings from the late 1940s onwards (fig 3.15c).³⁷ Indeed, even though their work of the 1920s is conventionally treated synonymously, the weighty tectonic of the Aalto atelier contrasts with Bryggman's lightness and refined delicacy of surface and detail.

Although Finland was still a predominantly agrarian country, for many architects in newly independent Finland, it was the representational authority of the city that was their greatest concern. The first person to advocate an urbanism that went beyond the grid-plans that still dominated Finland at the end of the 19th century was Gustaf Nyström. He was largely inspired by the works of Otto Wagner in Vienna and Joseph Stübben's practical *Handbuch des Städtebau* (1890), reflected in the setting of The House of Estates (1891). The National Romanticist Lars Sonck (1870-1956) countered Gustaf Nyström's classical emphasis in writings based on Camillo Sitte's *Der Städtebau* (1889), which he demonstrated in an 1898 proposal to 're-site' the neo-classical Senate Square and House of the Estates on more *gemütlich* principles (fig 3.16).³⁸

Despite this seeming antagonism, what is remarkable about Finnish town planning of this period is how unified it was in both compositional and pragmatic terms, with variation largely restricted to aesthetic modelling. After the Töölö Plan Competition of 1906, Gustaf Nyström and Lars Sonck only needed minor adjustments to reconcile their two prize-winning schemes as a single entity (fig 3.17). Just as nineteen years later in the 1925 Töölö Bay Competition, the difference between the scheme of Birger Brunila and Frosterus, and that of Alvar Aalto's tutor and friend, Carolus Lindberg, is in the loading of their architectural expression, not their urban form or disposition (figs 3.18a-c).³⁹ For most of the intervening years between these two competitions, urban design was dominated by Eliel Saarinen's series of highly resolved and comprehensive

designs. Viewed from above in sweeping perspectives these emphasised 'The City As a Work of Art'; a *gesamtkunstwerk* of highly detailed axial streets and boulevards leading to significant monuments. Their legacy endured beyond his departure for Chicago in 1922 to characterise large-scale Finnish town planning until the mid-1930s (fig 3.19).

The Aalto's friend and mentor Gustaf Strengell's *Stadens som konstwerk / Kaupunki Taidemuotona* (The City as a Work of Art, 1922) is in many ways a summation of pre-Modernist approaches to urbanism in Finland. The book is an analysis of European cities from the mediaeval to the Baroque. Like Stübben's work it was in part an illustrated gazetteer, with 362 illustrations in 261 pages, but it also matched the social practice of the British Garden City movement's town planning principles, in particular Raymond Unwin's, to the historical and topographically responsive environments described in the German and Austrian tradition.⁴⁰ The book served to reinforce the Nordic Classical idealisation of the 'unconsciously' designed town but its analysis of Baroque city plans also showed examples that matched the scale required in contemporary urban planning.⁴¹ These examples also possessed the dynamic qualities lacking in 19th century neo-classicism, such as the nominally national Finnish 'Empire' style which Strengell and, later, Alvar Aalto repudiated with reference to its "colossal measurements" and yet "wizened" sense of space (fig 3.20).⁴² Strengell's narrative intention was to visualise realisations that answered his call to contemporary architects to think of the city as the Middle Ages had thought of the cathedral, rather than focusing on issues of style or individual works. While the value placed on a unified townscape reflects the book's dedication to Eliel Saarinen, for whom Strengell had worked, the stress on the life of the town mirrors the earlier writings of Frosterus.

Bryggman's Atrium and Hospits Bertel complex (1928-9) encapsulated Strengell's argument. Bryggman fragmented and subjugated the various individual programmes to the site to create a series of interlinked spaces (fig 3.21a-b). Following their move to Turku in 1927 the Aaltos began an association with Bryggman, already the leading architect in the city. Bryggman had worked for both Lindgren and Frosterus as well as for the leading town planner Otto-Iivari Meurmann (1890-1994) on city plans for Helsinki. He had also travelled Europe extensively and in 1928 he visited the *Neues Bauen* Weissenhofsiedlung in Stuttgart, and in Frankfurt the city architect and planner, Ernst May, showed him around the demonstratively egalitarian Römerstadt and Praunheim housing areas.⁴³

The Aaltos and Bryggman were the first Finnish architects to make the change to Functionalism, a 'jump' that is usually thought to have stemmed from the Swedish architect Sven Markelius's (1889-1972) lecture *Rationaliseringsträvanden inom den moderna busbyggnadskonsten* (Striving for rationalisation in modern architecture) at the SAFA conference in Turku in April 1928 (fig 3.22).⁴⁴ Prior to this, however, there was already an unfolding interest in functionalism, as it shared many of Nordic Classicism's progressive formal goals of simple geometries, plain surfaces and minimal decoration; as well as a concern with the city. Such overlaps are evident in the Aaltos' clumsy South-Western Agricultural Cooperative Building, and in the ease with which Bryggman shifted the expression of the Hospits Bertel from one style to another (figs 3.23 and 3.21b).

Alvar Aalto obtained *Ausblick auf eine Architektur*, a German translation of Le Corbusier's *Vers Une Architecture* after a meeting in 1926 with the Swedish architect Uno Åhrén (1897-1977) who had visited the *Exposition des Arts Décoratifs* in Paris in 1925. In

his 1926 essay *From Doorstep to Living Room*, Alvar Aalto's juxtaposition of a photograph of Le Corbusier's *Pavilion de l'Esprit Nouveau*, taken from *Vers Une Architecture*, adjacent to Fra Angelico's *Annunciation* makes clear his interest in their equivalent "harmony between the figures and the forms of the buildings and the gardens", rather than any interest in novelty alone (figs 3.24a-b).⁴⁵

The Aaltos' Turun Sanomat newspaper offices and printing works, completed in January 1929, fulfilled all of Le Corbusier's 'five points' of modern architecture in a refined, if doctrinaire, way. But it was the Aaltos' and Bryggman's joint design for the Turku 700th Anniversary Fair of 1929, which stemmed from the Aaltos' presence at discussions in 1928 concerning the much larger Stockholm Exhibition of 1930, and its uniquely festive interpretation of Constructivist and *Neue Sachlichkeit* aesthetics, that began to suggest their own interpretation of the new style (fig 3.25). The Aaltos presence at the discussions was consequent to their maintenance of contacts with the Swedish architectural scene throughout the 1920s, particularly with Sven and Viola Markelius. In the early 1930s Alvar Aalto formed a Finnish extension of the *acceptera* group consisting of the architects Gunnar Asplund, Sven Markelius, Uno Åhren, the painter Otto Carlsund (1897-1949) and the theorists Gotthard Johansson and Gregor Paulsson. Asplund, Paulsson and Markelius were responsible for the Stockholm Exhibition, seeing it as a modernist embodiment of the *Skönhet för alla* (Beauty for all, 1899) ideology of Ellen Kay, which was reiterated in Paulsson's *Vackrare vardagsvara* (More Beautiful Objects for Everyday Use, 1919) that the Aaltos' knew (fig 3.26a).⁴⁶

After the provincialism of Jyväskylä, Turku's urbanity and links to Sweden opened up a series of linkages with continental Europe, both in relation to formal architectural concepts and social issues, the latter perhaps driven by the more urbane Aino Marsio-

Aalto, whom both Mairie Gullichsen and Viola Markelius named as the socially progressive part of the partnership at this time.⁴⁷ In 1928 Alvar Aalto received a grant from the Kordelin Foundation to visit modern developments in Europe, and in October 1929 he attended the second CIAM Congress, CIAM 2, in Frankfurt following Sven Markelius' nomination of him as the Finnish representative.⁴⁸ Alvar Aalto would hold press conferences or write techno-romantic paeans, reminiscent of Frosterus and the *Tulenkantajat* group, after each journey; as Hilding Ekelund noted in 1930:

“With the same ardent enthusiasm as the academics of the 1880’s drew Roman baroque portals, Gothic pinnacles etc. in their sketchbooks for use in their architectural practice, Alvar Aalto noses out new, rational-technical details from all over Europe which he then makes use of and transforms with considerable skill” (fig 3.26b).⁴⁹

On their 1928 Kordelin funded “air tour” the Aaltos sought out and met Poul Henningsen in Denmark, Johannes Duiker and L. van der Vlugt in the Netherlands and André Lurçat, Le Corbusier and Alfred Roth in Paris. It was probably through Henningsen’s journal *Kritisk Revy* that the Aaltos first encountered a critique of functionalism, and more particularly of the Bauhaus. Henningsen’s mass-produced ‘PH’ series of lamps used spun steel louvres to reflect and hide the light source in contrast to contemporary Bauhaus designs that were crafted artisan productions masquerading as machine products, and which had no concern for shading or glare.⁵⁰ At CIAM 2 Alvar Aalto first met Moholy-Nagy, who later spent a month in Finland with the Aaltos in June 1931, and whose friendship with the Aaltos continued until his death. A friendship and relationship of mutual benefit with Giedion was also established. Co-opted onto CIAM’s executive committee CIRPAC, Alvar Aalto attended the CIAM/CIRPAC ‘Special Congress’ in Berlin in 1931 and visited the Bauhaus in Dessau where he met Walter Gropius and Josef Albers.⁵¹

An immediate impact was an interest in the plastic possibilities of reinforced concrete that would endure throughout the Aalto atelier's work. Through collaboration with Emil Henriksson, a German trained Turku engineer, the Paimio Sanatorium, indebted to Johannes Duiker's Zonnestraal Sanatorium in the Netherlands (1926-8), was able to make use of the latter's cantilevered construction. A more playful approach to materials was made available when Moholy-Nagy gave the Aaltos copies of his books in the *Bauhausbücher* series, including *Malerei Fotografie Film* (1927) and *Von Material Zu Architektur* (1930), which elaborated on Moholy-Nagy's and Josef Albers' time and motion studies and examples of their Dessau students' material collages, as well as Kurt Schwitters' *Merz* collages (figs 3.27a-b).⁵²

Moholy-Nagy's approach to materials had a sweeping effect on the Aaltos, who throughout the 1920s had been making bespoke wooden furniture. As a student, Aino Marsio-Aalto had developed her skills as a carpenter through working with the master-carpenter Niilo Wilander, the foreman of Hietalahden Puuseppätehdas (Hietalahti Carpentry Works) who lived in the *Alku* flats where she was brought up.⁵³ By the late 1920s the Aaltos had begun to bend and laminate wood in Muurame, near Jyväskylä, but it was only when they came into contact, through the furnishing of the South-Western Finland Agricultural Co-operative building, with the Turku cabinet-maker Otto Korhonen (1884-1935), that these began to bear fruit. Using techniques and compositional sensibilities garnered from Moholy-Nagy, the Aaltos and Korhonen produced a series of wooden reliefs studying the formal and material possibilities of lamination, which then led them into a series of bent wood furniture.⁵⁴ The Aaltos' meeting with Philip Morton Shand at the 1930 Stockholm Exhibition led to their first major international exhibition, when they showed their furniture at Fortnum & Mason

in London in the autumn of 1933, and the establishment of Finmar to market their products in the UK (figs 3.28a-c).

Aino Marsio-Aalto was also an accomplished photographer. After the Aaltos moved to Turku in 1927 her works show her indebtedness to contemporary avant-garde photographers, most clearly Moholy-Nagy. Her photograph of the Toppila Mill is usually erroneously cited as being Moholy-Nagy's, and her use of 'tilted' camerawork give her photographs of Paimio Sanatorium a dynamic effect attributable to his influence (figs 3.29a-c). Aino Marsio-Aalto peopled her photographs of urban spaces with labourers, cleaners and children to stress their social contexts (fig 3.30). In the late 1930s her photographs became more documentary in nature as a response to increased travel and the need to record materials and samples for Artek.⁵⁵ Other photographs use everyday *objets-type* and recast them as elements of illumination and shadow, reflectivity and absorption. The interiors of the Aaltos' buildings, particularly the juxtaposing of matt and reflective surfaces, for instance at the Turun Sanomat Building, establish similar effects (fig 3.31).

Another impact of Moholy-Nagy and other members of CIAM was on the Aaltos relation to technology and nature. The biological analogies that appeared in Alvar Aalto's writings of this time are reflexive with the period's advocacy of natural sciences in lieu of tradition. Bergsonian vitalism was to be found on the bookshelves of a number of architects in Finland, including Alexis Carrel's *Man the Unknown* (1935), which Alvar Aalto read. Concerns continued in the questioning of Frosterus: "Is he going to modify his environment to such an extent that it makes his inner resources fragile?"⁵⁶

To this, Moholy-Nagy, familiar with the Vienna Circle and its philosophy of the 'Unity of Science', brought an approach of *biotechnique* that stressed the evolutionary nature of design in response to purpose, and at CIAM 2 Le Corbusier, Pierre Jeanneret and Ernst May wrote of biological needs as standards and of "natural standardisation". Alvar Aalto's, *The Housing Problem*, written after his return from the congress in turn mirrors this with its call for open plans based on "biodynamic forms [...] Architecture is [...] deeply biological, if not a predominantly moral matter", whilst many of his other essays of the 1930s paraphrase Moholy-Nagy.⁵⁷ The biological analysis was also congruous with SAFA's (and CIAM's) self-appointed status as a body of 'scientific' experts above politics.

The move to Turku also renewed the Aaltos' connection with the art world that had diminished with their move to Jyväskylä. Turku's artistic scene was directed towards Sweden rather than Helsinki, and the city was nicknamed the 'Halmstad of Finland' after the Swedish surrealist group of the same name. The journal of *Tulenkantajat* featured articles decrying the "tragi-comic monumental mania" and "astringent chauvinism" of contemporary nationalist painting and sculpture. It was through the Swedish influenced 'Turku School', and its leading member, Edwin Lydén (1879-1956) who knew Paul Klee, that the Aaltos were first exposed to contemporary European artists such as Wassily Kandinsky and Franz Marc.⁵⁸

Through the *acceptera* group the Aaltos also knew Otto Carlsund, a pupil of Fernand Léger (1881-1955), who had collaborated with Le Corbusier on an aborted cinema project in Montmartre in 1925. Carlsund, like Léger, hoped to combine a post-impressionist spatiality with an architectural scale through creating vast paintings that would merge with their architectural setting. This was a scale of work Alvar Aalto also

knew from 1934 when, at Giedion's behest, he collaborated with the architect-turned-painter Max Ernst to decorate and furnish the restaurant of the Corso Theatre in Zurich. In 1947, Alvar Aalto and Carlsund held a joint exhibition of 'Constructivist Art' at Thurestam Gallery in Stockholm, with Carlsund displaying his paintings and Alvar Aalto the wooden reliefs made with Korhonen.⁵⁹ At CIAM 2 Alvar Aalto became friends with Léger himself, and with Alexander Calder and Constantin Brancusi, during a lengthy stay in Paris 1937 in connection with CIAM 5, and the construction of the Aaltos' Finnish Pavilion at the World Expo. He also became acquainted with Georges Braque, Hans (Jean) Arp and others through the art dealer Christian Zervos.⁶⁰

Following the Aaltos move to Helsinki in August 1933, despite earlier confrontations with the 'Old Guard', the Aaltos found architects adapting to, or adapting, European modernism. As abruptly as the Aaltos changed from classicism to functionalism, so did the Helsinki architects Pauli and Märta Blomstedt who designed a hotel room alongside the Aaltos' *minimum existenz* flat at the 1930 Helsinki Minimum Apartment Exhibition. Others evolved their earlier neo-classicism into what is known idiomatically as *funkis*, a readily modified functionalist style derived from the already austere rendered aesthetic of the prevailing neo-classicism, as with Oiva Kallio's *Pohja* Insurance building in Helsinki that combines ribbon windows with classical motifs (fig 3.32).⁶¹ What marks Finnish *funkis* is adaptiveness as opposed to any singular zeal, in the words of Kirsi Saarikangas:

"In Finland, unlike in the other Nordic countries, functionalism remained essentially an aesthetic style, whose social aspect was present in the written debate".⁶²

Moving to Helsinki against the backdrop of a worldwide depression the Aaltos had little work, though income from their furniture sales allowed them to start work on their

own house at Riihitie (1935-6). Their meeting with the Gullichsens at this time was therefore fortuitous. It not only led to extensive architectural commissions but to the setting of the Artek company in the autumn of 1935, which enabled the Aaltos to further develop their long-standing interest in applied arts and interior architecture.

The Aaltos' immediate motive for setting up Artek was to find a reliable manufacturer to supply Finmar in the UK with adequate stock of their furniture.⁶³ However Artek's founding Manifesto of 1935 expresses a propagandising zeal for the promotion of international applied arts and modern art (figs 3.33a-b). Maire Gullichsen, who had attended Léger's classes in Paris, supported Alvar Aalto's scathing comments about the pictorial and over emotional nature of Finnish art and founded the "Free Art School" in Helsinki in 1935 to counter the nationalist bias of the Helsinki Art Academy. From its outset Artek exhibited foreign artists, beginning in 1937 with a joint show by Léger and Calder.⁶⁴ Artek also changed the working relationship of Aino Marsio-Aalto and Alvar Aalto. He worked in their atelier at their Riihitie home while she, as Managing Director of Artek worked at its atelier in Helsinki city centre, along with separate design assistants. Alvar Aalto's role was primarily to promote the company and he visited the offices infrequently.⁶⁵

In Finland, as with town planning, interior design was recognised as a separate, but equal, part of an architect's repertoire. At the same time that he was working with Henry Ericsson, Alvar Aalto had been a Board member of Ornamo, the Finnish Association of Designers, and he also made forays to Sweden and Estonia to study furniture and glass-making.⁶⁶ From the start of their own practice in Jyväskylä in 1923, the Aaltos collaborated with artisans, acting as an agent for, and working with the internationally trained art-smith Paavo Tynell (1890-1973) whose company Taito would

make the Aalto's wrought metalwork until 1952, when Viljo 'Sparks' Hirvonen took over. It was through this connection that the Aaltos were invited to submit designs for the 1933 Milan Triennale, where Aino Marsio-Aalto's *Bölgeblick* pressed glassware won second prize.⁶⁷

Both Tynell and the Aaltos were influenced by the ideals of Gregor Paulsson's *Vackrare vardagsvara*. Paulsson advocated, in contrast with the fixed totalities of the National Romantic movement, freestanding furniture that achieved a unity through complementary colours and style, set off by simple backgrounds; an approach mirrored in Gustaf Strengell's *Hem som konstwerk* (The House as a Work of Art, 1923), a complimentary volume to *Stadens som konstwerk*. In his essay, *From Doorstep to Living Room* (1926), Alvar Aalto praised the lightness and practical flexibility of Paulsson's approach, which informed the Aalto atelier's work from thereon.⁶⁸ The Aaltos were also familiar with the Austrian-born Swedish architect Josef Frank (1885-1967), whom they met in Turku in the late 1920s, and his stress on a responsive comfortable interior related to what he termed 'accidentism'.⁶⁹

On establishing Artek these interests were tied to socially progressive ideals, and in May 1935 Aino-Marsio-Aalto wrote:

"We aim that the furniture industry will serve social aims, producing useful, affordable and beautiful furniture that will suit every small home. Although the taste of the masses is quite difficult to steer".⁷⁰

Artek followed the Swedish *Clarté* movement's stance, as Matti Klinge has noted:

"In Finland its thinking could not be called left-wing, or party politically leftist. The Artek worldview generally felt anti-bourgeois. It opposed both the bourgeois traditions of the businessman and of the traditional handicrafts".⁷¹

In July 1935 Aino Marsio-Aalto undertook a study trip, funded by the Kordelin Foundation, to continental Europe to study contemporary developments in the applied arts.⁷² Her letters reveal an interest in ‘ethnic’ textiles, as well as the use of unmediated materials such as rattan and bark and the trip also brought forward the zebra weave fabric of Artek’s chairs, and the Beni Ouarain Berber rugs which were exhibited at Artek in October 1936. These rugs also appeared in buildings by Rietveld, Le Corbusier and Frank Lloyd Wright, and reflected the Aaltos’ interest in the international avant-garde’s use of ‘primitive’ objects as counterpoint to their self-conscious modernity.⁷³ However, their appearance as a fundamental element of Aino Marsio-Aalto’s interior for the Villa Mairea can also be seen to bear relation to the traditional *ryijy* rugs of Finnish homesteads.

This self-conscious ‘primitivism’, coupled to the prevailing biological analogies, allowed the Aaltos to re-evaluate the timber Finnish vernacular in modernist terms, praising its unaffected nature and visual variety achieved using minimal ‘raw’ materials and simple forms. An appreciation reiterated in later writings on Japanese architecture; another commonality with continental modernism.⁷⁴ As a student Alvar Aalto had shared an interest in the sparse harmonies of Japanese prints with painters such as Eero Nelimarkka and Hélène Schjerfbeck; a sensibility that was now reinforced by visits to the reconstructed Ziu-Ki-Tei teahouse in Stockholm and the analytical work of Tetsuro Yoshida’s *Das Japanische Wohnhaus* (1935, figs 3.34a-c).⁷⁵ This showed the exacting relationship of buildings to the sun’s angle of incidence, component based standardisation, the use of both refined and unfinished wood, as well as a poetic relation of building and landscape form achieved through a minimal expression; all of which formed part of the design repertoire of the Villa Mairea and influenced Alvar Aalto’s conception of “elastic standardisation” (see Chapter 8). The book was one of a

number on Japan in the Aaltos' library, many given to the Aaltos by their friends the Japanese ambassador Hakotaro Ichikawa and his wife Kayoko.⁷⁶ Their gifts also included a silk scarf that would seem to have been the inspiration for Aino Marsio-Aalto's *Kirsikka* fabric.

By late 1935, despite O-I Meurmann defeating Alvar Aalto in his application for the newly established town-planning lectureship at the Polytechnic, the Aaltos' status in Helsinki had changed with the setting up of Artek, the completion of the Viipuri Library, and Alvar Aalto's election to the Board of SAFA.⁷⁷ In the summer of 1936 the Aaltos won the competition for the Finnish Pavilion at the 1937 Paris World Exhibition, and the associated Karhula Glass Competition with their 'Savoy' vase.⁷⁸ On the basis of the Paris Pavilion, MOMA in New York invited Alvar Aalto to have a 'one man show' opening in New York in March 1938. The Aaltos were unable to attend the opening, however, in May 1938, they won all top three prizes in the competition for the Finnish Pavilion at the 1939 New York World's Fair, and they made their first trip to the USA in October 1938, staying in New York, and journeying to Yale to lecture with Fernand Léger. On a more extensive tour from March to June 1939, the Aaltos travelled across America from New York to San Francisco. En route they attended the CIAM meeting in Phoenixville and stayed with Calder in Connecticut, Eliel Saarinen in Cranbrook, Moholy-Nagy in Chicago and, in California, with Richard Neutra and William Wurster (who had visited the Aaltos in Helsinki in 1937).⁷⁹

An abiding interest in America predated this visit. The Aaltos had been stimulated by articles in *Arkkitehti*, knowledge of Frank Lloyd Wright and two books in particular; the German expressionist Erich Mendelsohn's (1887-1953) atmospheric *Amerika: Bilderbuch eines Architekten* (1926), and the Viennese-born American architect Richard Neutra's

more analytical *Wie baut Amerika?* (1927, figs 3.35a-b). The latter matter-of-factly delineates American practicality, organisation and standardisation of technology and settlements. At CIAM 2 Alvar Aalto met Neutra who later recalled:

“Alvar Aalto was still a young man at that time [...] and smiling related how he used *Wie baut Amerika?* to convert Finns of influence and means to overseas progressiveness”.⁸⁰

At the time of their visits the Aaltos had just begun to work with Ahlström on their first ‘type’ houses. Their first attempt at an “elastic standardisation” adapted to Finland’s timber resources and dispersed population. Arriving in New York Alvar Aalto sought out Frederick Kiesler (1890-1965), head of the Laboratory for Design-Correlation at Columbia University from 1937-1943.⁸¹ Kiesler had earlier worked with Léger in Paris and the architect Adolf Loos in Vienna, and, as a member of the Dutch de Stijl group, he had sought to develop an architecture of free-flowing spaces informed by film-making and installations. At Columbia Kiesler undertook to re-examine and redesign standard tools and building techniques in order to find economical and appropriate design solutions. He attacked what he saw as the rigid pseudo-functionalism of modernism and, using expressive diagrams and images, developed a theory of ‘correalism’ in which interacting concepts, people, objects and space could inform each other and evolve into constantly improving types (fig 3.36).⁸²

Kiesler’s research paralleled that of Albert Bemis, the author of the *The Evolving House*, who had developed several neighbourhoods using ‘model’ houses that he developed from traditional types.⁸³ Bemis left funds in his will for the establishment of the Albert Farwell Bemis Foundation (AFBF), a research centre for rational housing design at MIT, which began its work under John Burchard at MIT in 1938. In May 1939 Burchard and Alvar Aalto attended a ‘Symposium on Contemporary Architecture’ at

New York University along with Giedion, Makelius and Moholy-Nagy, and when Alvar Aalto returned to the United States in 1940 on behalf of the Finnish Information and Propaganda Office he met again with Burchard, and in July accepted his offer of a Professorship at MIT. While some commentators have seen this appointment as out of character for Alvar Aalto, he had in fact suggested a similar laboratory to the AFBF for the Helsinki Polytechnic as far back as 1932, apparently stimulated by the work of Moholy-Nagy and Neutra.⁸⁴

Alvar Aalto had already spoken in 1939, at a meeting organised in San Francisco by William Wurster, on the subject of Finland as a location for “a small institute for research on the small wooden house”, and his concern that technical research on housing was neither being evaluated nor assimilated by the architectural profession.⁸⁵ During his trip to America in 1940, at the behest of the Finnish Government, Alvar Aalto published a booklet in New York, *An American Town in Finland*, in an attempt to raise American funds for Finnish reconstruction projects following the Winter War (1939-40).⁸⁶ Burchard recognised that such reconstruction offered an unrivalled opportunity to investigate the construction of large numbers of shelters in timber. Giedion also wrote to Burchard at MIT in May 1941 that Aalto’s “use of standardisation in a human way” suggested ways to “tackle not only the rebuilding of Finland, but also the rebuilding of all other destroyed countries”. Giedion also contacted Le Corbusier in Vichy France to communicate the same message, which may have led to Le Corbusier adding Alvar Aalto’s name to the Board of Design for the United Nations in the spring of 1947 (from which he was rejected as Finland was not a member state).⁸⁷

With the war enforcing a State controlled economy in Finland, Alvar Aalto used his role as SAFA Vice-Chairman, his industrial connections and wartime secondment to the Finnish Information and Propaganda Office to establish the SAFA Office for Reconstruction and the Standardisation Office. This government-funded organisation married the ideas of the Aaltos, Kiesler, Moholy-Nagy and Neutra to the systematic work of Gropius' former assistant Ernst Neufert (1900-86) who had published the *Bauentwurfslehre* (Architect's Data) in Germany in 1936. Neufert visited Helsinki in 1942, with Alvar Aalto and a SAFA delegation undertaking a reciprocal visit to Berlin in 1943. The resultant *RT-kortisto* indexing system of building standards and components continues to be used in a modified form in Finland to this day (fig 3.37).⁸⁸

At some point on their 1940 trip to the United States the Aaltos met with Lewis Mumford, and this, together with the influence of Harry Gullichsen, would lead to the Aaltos designing a series of regional plans. Mumford's *The Culture of Cities* (1938) was translated into Swedish in 1942 and its influence in Finland was such that there was talk of an 'Aalto–Mumford School'. Mumford's ideal of cellular decentralisation related to the biological analogies of the 1930s and derived in part from another writer Alvar Aalto particularly admired, Pyotr Kropotkin (1842-1921), in particular his *Field, Factories & Workshops* (1899).⁸⁹ An admiration that extended to Alvar Aalto declaring himself an anarchist, as Veli Paatela, the site architect for the Baker House dormitory, relates;

"I was present once when someone asked him whether he was a communist. He replied: 'I'm not a communist'. 'Well, are you a bolshevik?' 'No, I'm an anarchist'".⁹⁰ Finland's dispersed population and industrial developments made it well-suited to Mumford's regional vision of participating communities blurring city and country and the Kokemäenjoki River Plan synthesised industry, transportation, farming, wilderness and residential areas into a single political and environmental entity that

Alvar Aalto called “an architectural plan [...] a single web” (fig 2.24a). In 1959, as Chairman of SAFA, Alvar Aalto successfully pushed for U. S. style ‘Area Plans’ to be incorporated into Finnish Law.⁹¹

These ideals led to what was called the ‘Forest Town’, a settlement with an equivalent attention to building and landscape form, in which semi-autonomous neighbourhoods were separated from one another by forest. The most famous of these was Tapiola Garden City (1953 onwards), planned by O-I Meurmann.⁹² Housing policy guided post-war development, particularly through the influence of the journal *Asuntopolitiikka* (Housing Policy), on whose Board both Alvar Aalto and Meurmann sat. The influence of the British New Towns was marked, but it was the US Federal Programme of building individual family houses that predominated. The influence of Mumford was particularly felt in the relating of the new towns such as Tapiola to the agrarian past.⁹³ The Aalto atelier’s planning followed Mumford’s precepts, for instance their Rovaniemi Town Plan of 1946, with a separation of traffic from pedestrian life married to a unified architectural treatment of structure and topography.

In between Alvar Aalto’s return from America in November 1940 and his next visit almost five years later, the Aalto atelier in Helsinki was sustained by plans and buildings for Finnish industrial concerns built from an ever more restricted palette. But Alvar Aalto also spent time in neutral Sweden. As Finland’s situation made it difficult to sustain supplies of furniture abroad after 1940, the Aaltos considered a base for Artek in Sweden and in 1945, with the backing of Ernest Sundh, a contractor from Avesta, *AB Svenska Artek* was set up in Hedemora, under Aino Marsio-Aalto’s direction from Helsinki.⁹⁴ In December 1942, Alvar Aalto entered an informal partnership with Albin Stark (1885-1960) in Sweden, the first of a number of partnerships that the Aalto atelier

would enter into over the coming years. The majority of their projects were carried out under the personal aegis of the industrialist Axel Johnson, a connection that seems to have come through the Aaltos' Finnish forestry industry contacts. As his time in America gave Alvar Aalto a freedom to develop his ideas on standardisation, so his time in Sweden generated three schemes that, although all unrealised, presaged the Aaltos' public buildings and housing design from hereon. These were a campus for the Johnson Institute at Avesta (1943), the Avesta City Centre Plan (1944), and the Nynäshamn Town Plan (1945), where Alvar Aalto and Stark also entered the Town Hall Competition.

In 1947 the Aaltos resumed their direct contact with Italy after a break of some 23 years. Their point of contact was Ernesto Rogers (1909-69), a member of CIAM's Council and the editor of first *Domus* and then *Casabella-continuata*, in whose pages Alvar Aalto wrote in 1954:

"I do not wish to speak of any specific journey, for in my mind there is always a journey to Italy [...] such a journey is a *conditio sine qua non* for my work".⁹⁵

Later, regular holidays in Venice led to friendships with the Venetian architects Ignazio Gardella and Carlo Scarpa.

Following the end of the Continuation War, Alvar Aalto made seven visits between 1945 and 1948 to fulfil his professorial duties and, following Wurster's appointment as Dean of Architecture at MIT in 1945, the Aaltos were commissioned to build the Baker House dormitory at MIT (1946-9). The curtailment of Alvar Aalto's professorship at MIT coinciding with the retirement of John Burchard, the rapidly declining health of Aino Marsio-Aalto and an expanding workload in Finland.⁹⁶

Aino Marsio-Aalto died of cancer on 13th January 1949. In the aftermath Alvar Aalto travelled and continued to practice alone during a period that saw Finland begin to undertake a major public building programme, and in the three years from 1949-52 the Aalto atelier achieved an extraordinary series of competition victories for Säynätsalo Town Hall, Helsinki Polytechnic, Lahti Church, Malmi Crematorium, Rautatalo offices, Jyväskylä Institute of Pedagogics, Seinäjoki Church, and Kuopio Theatre. In 1952 Alvar Aalto married the architect Elsa (Elissa) Mäkinen, a member of the atelier, and formed a second partnership.

With and without Elissa, Alvar Aalto travelled extensively to the 'backroads' of Europe, North Africa and the Levant, as much as to the major cosmopolitan centres that characterised his pre-war travels. On a trip to Spain in 1951 he asked the students guiding him to show him "villages rooted in the soil" and "only saw" the incidental, such as the rays of sun on a curtain and the effect of a whitewashed wall against a rock-face.⁹⁷ An interest in the picturesque vernacular and associated neo-realist movement was widespread in Scandinavia in Sweden's 'New Empiricism', and in Denmark, which was seen in Finland as "the measure of, and ideal, for good quality building". In particular, Kay Fisker's Århus University, begun in 1931, which was, together with the Johnson Institute and New England campuses, a model for the Aalto atelier's Helsinki Polytechnic (1949-68).⁹⁸ Kay Fisker's remark from 1927 about the virtues of Nordic Classicism could apply equally to much post-war Finnish architecture:

"A material no longer has worth according to its fineness or historical correctness, but rather in its relationship to its surroundings, colour, and surface treatment; this also constitutes a certain concept of proportionality" (figs 3.38a-b).⁹⁹

From 1945 onwards Alvar Aalto's relationship with other Finnish architects was characterised by dominance of architectural politics and pre-eminence in terms of

design; coupled to a certain remoteness engendered by foreign commissions and invitations.¹⁰⁰ Aside from his professional duties as Chairman of SAFA, throughout the 1950s Alvar Aalto was part of a continuing critique of doctrinaire modernism and re-evaluation of classicism, largely sustained by his friend, Nils Erik Wickberg, Professor of History and editor of *Arkkitehti*. Kyosti Ålander, an earlier editor of *Arkkitehti*, identified the Bauhaus as an “architecture of crisis”, responding to circumstance rather than a new order, whilst Hilding Ekelund’s inaugural address as Professor of Architecture in 1951 echoed Armas Lindgren’s earlier call for a free use of history.¹⁰¹ Wickberg contrasted the picturesque with a doctrinaire functionalism that he saw as reflecting Ortega Y Gasset’s “dehumanising of art”.¹⁰² Viewed in these moral terms, the picturesque became a necessary part of the restoration of culture; a view that informed the narrative of Wickberg’s defining *Suomen Rakennustaide* (Finnish Architecture) written in 1959.

These sentiments were opposed by the architect Aulis Blomstedt (1906-79) who, in a 1952 edition of *Arkkitehti*, in which Wickberg paid “homage to Borromini”, repudiated the Baroque as “*con bizarre invenzioni*”, and invoked Palladio and Cézanne as fundamental classicists whose greatness lied in their eschewing “deviations” in favour of reliance on “the eternal” and “old architectural requisites of Antiquity”. Blomstedt perfected a rigid proportional system, the ‘Canon 60’ (1960), an arithmetical-geometrical operation based on Pythagoras’ *tetractus* and applied to the human body: “I have tried to find an invariance, which would free architects to concentrate on essentials” (figs 3.39a-b).¹⁰³ This artistic rationalism was then brought to bear on the issues of mass-production in such a way as to preserve the artistic authority of the architect and to sanction repetitive element construction. Opposing Alvar Aalto’s approach Blomstedt stated:

“Industrial architecture cannot manage without pre-harmonised elements [...] There has been much discussion on the subject of ‘elastic standardisation’, but in order that life may retain its freedom and flexibility, standardisation must be exactly applied, remaining rigid as its name implies”.¹⁰⁴

In 1953, after Alvar Aalto ceased to attend CIAM meetings, Blomstedt, together with the Aaltos’ former employees Arne Ervi, Pentti Ahola and Ilmari Tapiovaara, formed the Finnish CIAM group *ptah* (named after the ancient Egyptian god of construction and *Progrès, Technique, Architecture Helsinki*). The group organised a report for SAFA that stated the equality of form and content and “landscape as the most valuable public building”, and later the group attended CIAM 9 in Aix-en-Provence and CIAM 10 in Dubrovnik.¹⁰⁵ While they, and their journal, *Le Carré Bleu*, were influential in Finland; the group’s insistence on the importance of geometry as the essence of architecture marginalised them in the face of the sociological debates instigated by the Team X group of architects at these meetings.¹⁰⁶

The *ptah* group and their followers, known also as ‘Constructivists’, rejected what they saw as Alvar Aalto’s individualism and stressed the autonomy of ‘artistic rationalism’. Their greatest impact was on urban design where they rejected any notion of historicism and followed doctrinaire models based on much larger-scale European precedents. In 1956 this led the architect Anna-Liisa Stegell to write of the “city complex” of a generation of architects working in small towns who “did not even try to seek the *genius loci*”.¹⁰⁷ The exhibition *Suomi Rakentaa 4* in 1970 exemplified the adoption of the mantra, “order is the key to beauty”, with existentialist grids used for all manner of buildings types and tasks. In 1967 the SAFA Conference formally repudiated the ‘Forest City’, and in 1970 a report for *Rakennustietosäätiö* (Finnish Building Centre) by

Kristian Gullichsen and Juhani Pallasmaa advocated the total pre-fabrication of

buildings.¹⁰⁸ Tore Tallqvist, who later joined the Aalto atelier recalls the period:

“I’d worked in Rundsten’s office [...] There were lots of young guys there and criticising Alvar’s architecture was very common. That came to a head with the Jyväskylä Kortepohja competition. [...] Rundsten won. And that allowed for the old grid plan to return into Finnish town planning” (figs 3.40a-b).¹⁰⁹

Together with the final rejection of the Aalto atelier’s Helsinki City Centre (1957-1972)

design, after fifteen years of endeavour, the last decade of Alvar Aalto’s life contrasted

with the optimism of his Finnish ‘Laboratory’ in the immediate post-war period.

However while Alvar Aalto is characterised as responding with hubris, and a retreat

from public debate, in fact he continued to give speeches and to design.¹¹⁰ Following

Alvar Aalto’s death, Elissa Aalto took over the running of the atelier single-handed. The

Aalto atelier continued until her death, either completing designs that had already been

commissioned, but were as yet unbuilt, such as the Jyväskylä (1964-82) and Seinäjoki

Theatres (1960-87), and the Essen Opera House in 1989; as well as extensions to

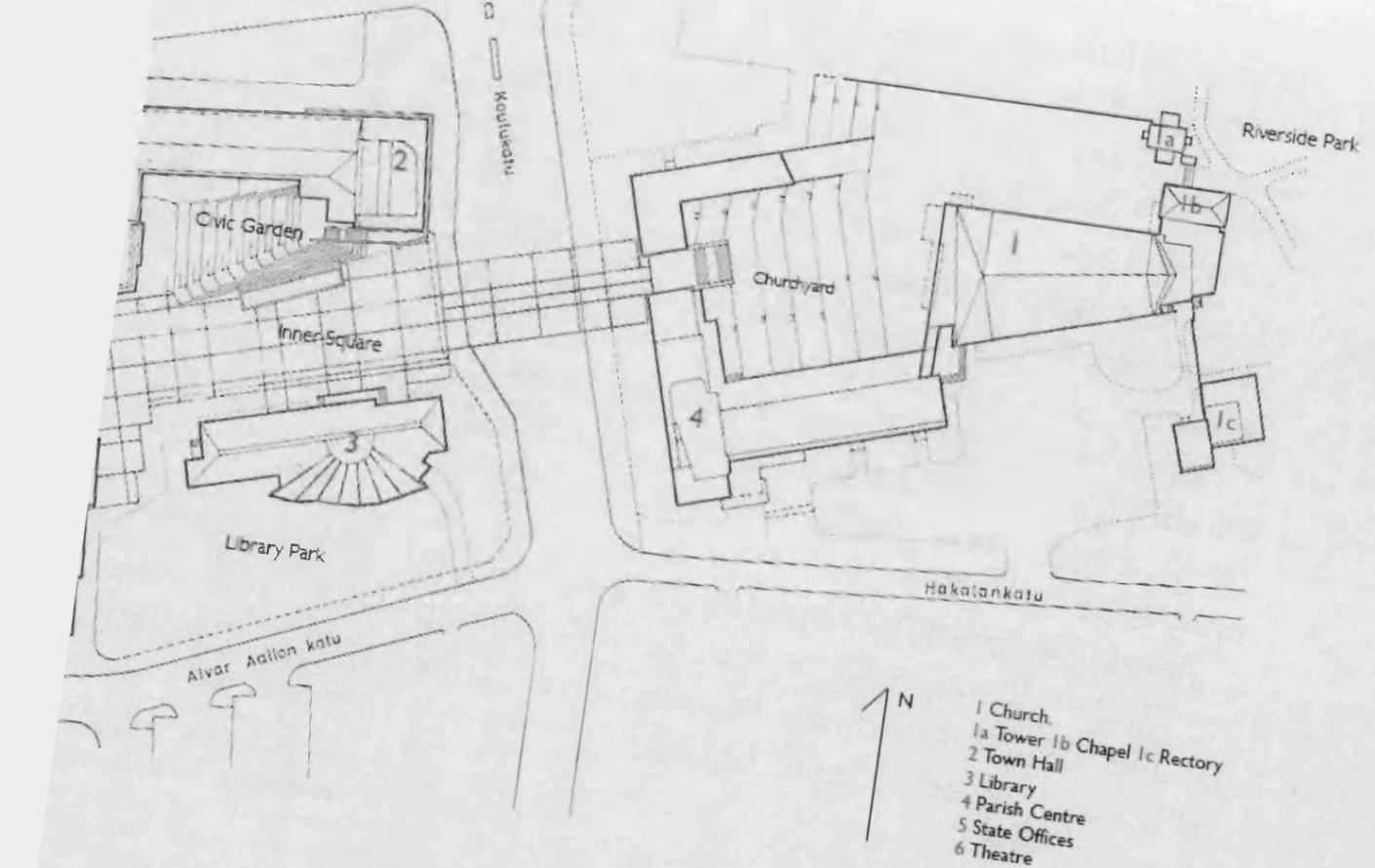
existing buildings such as the Central Museum of Finland (1986-89).

Chapter 4 INTRODUCTION TO CASE STUDY

Seinäjoki Town Centre (1951 - 87)

“The design of these core areas is crucial from the point of view of civic life and the citizens’ attitude to their surroundings. Formerly public events, spectacles and ceremonial processions played an important role in civic life: the citizens were often personally and directly involved in such activities. For this very reason the placement of public buildings in the city and in relation to each other was so precisely weighed. They were parts of a living organism that was constantly renewed. Urban architecture still has an important task in reflecting the inner life of cities. It must ensure that the buildings represent that public life and the citizens’ shared spiritual needs – the needs to which a city owes its very existence - also form the city’s inner silhouette”.

Alvar Aalto ¹



An overview of the Aalto atelier's output shows a consistent involvement in projects for public life. The atelier designed at least 40 master plans and 16 town or city centre plans ranging from a project for three squares in Jyväskylä (1926) to the vast Helsinki City Centre Plan (1958-75).²

Alvar Aalto called the town of Seinäjoki "One of the most despised railway junctions in our country" and despite Zacharius Topelius' description (see below) of Seinäjoki's surrounding province of Ostrobothnia (Finnish *Pohjanmaa*, Swedish *Österbotten*), in *Boken om vårt land*, the setting of the Seinäjoki Centre is usually seen in negative terms.³ Given that so many of the Aalto atelier's most esteemed works are noted for their relationship to nature and context, and the way in which they use their site to generate their *parti* - but are frequently set in either bucolic landscapes or the unified city grid of Helsinki, Seinäjoki offers an opportunity to assess how the Aalto atelier built on a difficult site that offered no conventional aesthetic counterpoint or extension (figs 4.1a-c).⁴ The Seinäjoki Centre is also the most completely realised of the Aalto atelier's urban environments and its lengthy gestation and construction from 1951-88 offers an opportunity to look from the last years of the Aalto atelier, back to its most prolifically inventive period in the 1950s, and hence to earlier thematic formations. Finally, it is somewhere with which I feel a considerable affinity having visited the Centre several times, in all seasons, over the course of 22 years, with most visits taking place because of a regular need to change trains at the station while working in Finland from 1994-2000.

The Seinäjoki Centre was conceived in two overlapping stages. Firstly, beginning in 1951 with the design of the Church and its accompanying Parish Centre and churchyard; and secondly, beginning in 1959, a civic centre with a *Kansalaistori* (Citizen's Square) surrounded by a Town Hall, Library, State Office Building and Theatre. As the

commissions for these schemes came through competitions it will be, in part, possible to place the work amongst its peers; however no records appear to exist of the 1959 competition.⁵ Extensive design and production information, along with correspondence, is kept in the archive of the Alvar Aalto Foundation; and this is augmented in my own description and analysis by the Seinäjoki Town Archive and a comprehensive condition survey and documentation of the Seinäjoki Centre carried out by Jaakko Penttilä for the Alvar Aalto Foundation in 2003-4.⁶ Interviews with members of the Aalto atelier who worked on various parts of the Centre give an invaluable first-hand description of its design and construction.

Seinäjoki Town Council describes the “Aalto Centre” as ‘the pride of Seinäjoki’, but architectural appreciations tend to consider it one of the atelier’s lesser works.⁷ What reputation it has is controversial. In terms of post-modern typological urbanism it has been criticised as a set of ‘leaky’ spaces subverted by a road at the centre of the scheme. Tide Huesser, one of the Aalto atelier’s site architects for the Theatre, referred to the Seinäjoki Centre as a memorial to the act of enlightened, if absurd, hubris of Alvar Aalto, in trying to create a European civic space within the non-place of a town accidentally formed by the crossing of two railway lines (figs 4.2a-b).⁸ Others, conversely, have seen it as dignifying a provincial town and district that was otherwise but a set of instrumental components set on a windy, flat plain.⁹

In 1875 Zacharius Topelius described the region:

“The entire Ostrobothnian plain was once the bottom of the sea, which dried as the land rose. Its soil was originally silt [...] The sea bequeathed fertile clay soil to South Ostrobothnia, and man has ploughed it to make the fields of Isokyrö [the area around Seinäjoki forms part of these]. The forest left these plains long ago, retreating to the horizon. Here and there are scattered boulders, in all shapes and sizes, sometimes

isolated, sometimes gathering into enormous piles. The roads wind amongst fields, meadows, fences and handsome, well-built houses with large windows. Not a single hill is to be seen in this vast plain. Yet its surface is not quite flat, for spring streams have made deep furrows in it, and a wide river has dug its channel into the soft clay [Seinäjoki – literally ‘wall-river’ refers to this]. The land, then, is flat and monotonous, but its fertility and cultivation arouses the traveller’s admiration. As far as the eye can see, the corn ripples in the gentle July breeze, like a green sea. Remembering all the toil and tribulation faced by our people in the many impoverished inland regions, the traveller is chastened to see the abundant crops God raises here near the coast of Ostrobothnia” (figs 4.3a-b).¹⁰

The origins of Seinäjoki lie south of its current centre, by the Tikkukoski rapids, where a settlement grew to support the Östermyra Ironworks, founded in 1798. The area, now called Törnävä, grew through the 19th century and in 1825 Finland’s first gunpowder factory was constructed supplying the Imperial Russian Army, as well as the locality. In 1863 a gunpowder magazine of the works was converted into a church with the addition of a tower, and in 1866 a parish was formally established. In 1868, when the population of the parish had reached 1800, Seinäjoki began to emerge from its factory origins with the granting of municipal status. However 186 inhabitants died in the great famines of 1866-8 and this, together with the decline of the Östermyrä works and emigration to North America, meant growth was stymied.¹¹

When the railway came in the 1870s, a railway junction was built four kilometres to the north of Törnävä at the crossing of the Helsinki-Oulu and Jyväskylä-Vaasa lines, and a rudimentary town grid was laid out around the accompanying station; this later evolved to become the present Seinäjoki. There were only approximately thirty houses here at this time, and proper growth only began in the 1910s and 1920s. In 1931 Seinäjoki was given borough status (Finnish *Kauppalä*), a title that acknowledged its importance in trade, but bore none of the civic import of a town. From the 1940s the borough began to lobby the government in Helsinki for town status and at the same time to buy

farmland to the south of the town grid on which to build future civic structures. It was finally granted town (Finnish *Kaupunki*) status in 1959.

In 1951, Seinäjoki's main church was still the converted magazine building at Törnävä and the Parish was agitating to build a new church in the new town. Coincidentally the established State Lutheran Church decided to create a new diocese of Southern Ostrobothnia, with the seat either in a new cathedral in Seinäjoki, or C. L. Engel's cruciform church (1827) in Lapua, twenty-five kilometres to the north (fig 4.4). The Seinäjoki Parish proposed an invited competition for this new church, or cathedral, on land purchased from the Larvala farm, just to the south of the central grid plan. A Building Committee was established which declared it wanted a "real church, not one of those functionalist boxes", and after visiting churches throughout the country, invited a mixture of older traditionalist and modernist architects, Alvar Aalto, Elsi Borg, Erik Bryggman, Eero Eerikäinen, Bertel Lindqvist and J.S. Sirén, to take part.¹²

In discussions with SAFA however, the competition was changed to an open one so as to attract a wider and younger group of participants. The competition brief stated that whereas the Törnävä church only sat six hundred people, the new church should accommodate twelve hundred in case it gained cathedral status. In addition it should include an organ and choir loft for seventy singers and have a separate chapel. An accompanying Parish Centre should have a two hundred seat Parish Room together with a Sunday School, Kitchen, Refectory, Offices and Rectory - and it should "preferably", have a tower. Entrants were to submit a 1:500 Site Plan and Model, 1:200 Plans, Sections and Elevations, and perspectives of the interior and of the exterior. The deadline for submission was 1st October 1951 (figs 4.5a-b).¹³

Alvar Aalto already knew Seinäjoki well, as it lies approximately 60 kilometres west-south-west of his parents' home in Alajärvi. Alvar Aalto was well placed to find work in Seinäjoki in the 1920s. He was a native of Ostrobothnia, a former White soldier (the headquarters of the White Government had been in Ostrobothnia) who had already built a number of buildings in Alajärvi, and his father was a civil servant. The Aaltos designed the Seinäjoki Defence Corps Building in the prevailing neo-classicism of the time. The buildings have a clear debt to Asplund's Lister Courthouse Courthouse (1917-21), and were also the Aaltos' first composition of a group of buildings (figs 2.19b-d).

Forty-five architects took part in the Seinäjoki Church competition and the jury did not award a first prize but divided the prize money between three schemes, all by architecture students, Pekka Pitkänen and Olli Vahtera, Christer Bärlund, and Eero Eerikäinen and Martti Jaatinen as well as three purchases, including that of Alvar Aalto, *Laskeuden Risti* (the Cross of the Plains, figs 4.6a-e).¹⁴ The Jury Report however made it clear that *Laskeuden Risti* was judged the best entry, but that it had to "be removed from the competition because its church is placed over the given building line by 20 metres".¹⁵ This infringement was a consequence of the Aalto atelier including an inclined grass enclosure capable of accommodating 8,000 worshippers in response to the Ostrobothnian tradition of holding open-air religious gatherings through the summer. This was an external space that Alvar Aalto's written submission also stated could be capable of being joined to the interior of the church.¹⁶ This *de facto* churchyard was entered through a vomitory accessed through an opening in the Parish Centre that surrounded it on three sides, the fourth side being the west front of the church. The church itself was a basilican hall church with nave and aisles of equal height, entered through a narthex below an organ and choir loft (figs 4.7a-c).

The Finnish competition system ostensibly encouraged free experimentation, and yet senior members of the architectural profession connected to SAFA were usually the most critical members of the jury. As all entrants knew the identity of these jurors before a competition began, they could take their design predilections into account. Paul David Pearson has noted that when Erik Bryggman, Yrjö Lindgren or Martti Välikangas was on a jury the Aalto atelier often did well. Välikangas was one of the two SAFA representatives for the Seinäjoki Church along with Viljo Rewell, an ex-member of the Aalto atelier, and there can be little doubt that both these jurists recognised the Aalto atelier's scheme as a derivation of their earlier first-prize winning, but unbuilt, entry 'Sinus' for the Lahti Church competition of a year earlier (figs 4.8a-b).¹⁷

As no first prize was awarded the Parish was under no obligation to build any one scheme. Following over a year's consideration, in 1953 the Parish began negotiations with the Aalto atelier to construct their design, and there is no evidence that any of the prize-winners complained. The most pressing issue for the Parish was the cost of the Aalto atelier's proposal to clad the church in black granite, a material that Alvar Aalto claimed was becoming of a cathedral and that would reinforce the silhouette of the tower when seen from afar, across the flat plain against the vault of the sky.¹⁸ By 1955 Alvar Aalto had modified his stance and offered three cladding options: black granite, red brick, and white thin-wash plaster. He declared that he favoured a "black and white church", with the "tone" of granite, restricted to the foundations, combined with a thin-wash plaster body, and the Parish approved this combination.¹⁹

In October 1955 the decision to build the 'first phase' of the church, chapel and tower was taken. In spring 1956 the national government awarded the Bishop's seat to Lapua rather than Seinäjoki, but work continued unchanged and production information was

ready for construction to begin in May 1957. Jaakko Kontio was appointed as site architect, K. N. Koskinen as main contractor, and Magnus Malmberg as structural engineer. The church was completed in May 1959 and in the same summer the stepped grass bank was also completed. The Parish Centre was not constructed until later owing to a shortage of funds (figs 4.9a-c).²⁰

The Town Council had considered holding an invited competition for a new town hall (*kauppalantalo*) in 1956, but discussions were inconclusive. In 1958 a three-phase programme was devised for an open competition on another field of the former Larvala farm, across Koulukatu from the Church.²¹ The first phase included the Council Chamber and municipal offices, the second a mother and child clinic, and the third a library to be built as a separate wing or building. Entrants were also to indicate where a future theatre and state offices might be sited. Olli Kivinen and Erik Kråkström were appointed as the SAFA representatives on the jury and entrants were required to submit a 1:500 Site Plan on the supplied map, and a massing Model, 1:200 Plans, Sections and Elevations, as well as a written explanation of the design. The deadline for submission was 6th October 1958.²²

There were forty-two entries, but no first prize was awarded in the final Jury Report of 4/5th November 1958. Second prize was shared between Mona and Lars Hedman, Timo Penttilä and Kari Virta, with Erkki Pasanen receiving third prize. Alvar and Elissa Aalto's and Pekka Pitkänen's entries were purchased.²³ The jury recommended a second competition limited to these top five entries, with a deadline of 8th December 1958. This time first prize was awarded to Alvar and Elissa Aalto, with Timo Penttilä and Kari Virta placed second and Erkki Pasanen third; a pre-conceived outcome according to

Per-Mauritz Ålander “because they recognised Alvar’s project, and, because they wanted him, they chose him”.²⁴

In the first competition the Aalto atelier placed a roof-lit council chamber above an open portico facing the church, with an adjoining L-shaped building for the municipal offices to the west, and a further L-shaped building beyond that for the second phase clinic (figs 4.10a-b). The building materials were indicated as brick, “red or white like the church”. Along the southern side of the building was a stepped grass mound, intended as a civic “garden for the town’s representatives and for receptions”. This dropped down to a fountain and traffic free *Sisätori* (Inner Square). Neither the garden nor the square were a requirement of the brief. The Library was sited on the southern side of this space and a theatre along its western edge, closing the square “*alla Cappella Pazzi*” (a reference to Brunelleschi’s 15th century Pazzi Chapel in Florence). In praising the scheme the Jury Report particularly admired the Inner Square and its relation to the existing church, and although the designs of all the buildings changed significantly before they were constructed, this basic layout did not. As Alvar Aalto wrote:

“the internal division and use of the site at the Seinäjoki Town Hall are considered mainly in terms of respect for the church opposite and the rhythmic planning of its surroundings. The general plan of the Town Hall’s surrounding is deliberately designed so that there are no inappropriate secular buildings disturbing the church opposite”.²⁵

In the second competition the Aalto atelier drew the site plan with south at the top of the paper, something they would also do on future occasions because, as one of the Library’s site architects, Jaakko Suihkonen recalled:

“It was horrible. North and south got mixed up. It happened because when we arrived in Seinäjoki on the train, I always thought north was the direction we walked from the station. [...] But in fact it was the other way around. So on the drawings I got north and south mixed up. [...] The big windows [of the Library] are south-facing. Alvar noticed

the mistake. The *Mestari* (Alvar Aalto) suggested big louvres here, fantastic horizontal louvres. The *Mestari* was a saviour. And improved the building" (fig 4.11a).²⁶

In the new plan the main changes were the siting of two new buildings on Koulukatu to the north of the site that acted as a frame and point of compression before entering the space between the Town Hall and the Church. The Inner Square became gated, with a tall, perforated fence dividing it from Koulukatu, and the Library gained an entry loggia. The perspective of the Inner Square looking towards the church shows, however, how little the external spaces had changed from the original proposals (figs 4.11a-e).

The Town Hall has more or less retained the form it took on at this stage, with the council chamber above the loggia now integrated into the body of the municipal offices. The chamber itself changed from a fixed space to one that could be combined with the surrounding foyer space with sliding walls, and consequently organised in differing configurations suitable for concerts, conferences and exhibitions. Horizontal lines on the elevations indicate brick was to be used. However by late 1959 cobalt blue ceramic sticks bonded to concrete were proposed (fig 4.12). Inspired by the traditional Arabic tiles that Alvar Aalto saw on his 1956 visit to Baghdad, where their use was proposed for the unrealised Post Office designed in 1957, the tiles ultimately derived from smaller ceramic sticks first used in the National Pensions Institute interior, which were enlarged and given a more robust glaze for external use.²⁷ The high cost of these tiles led to a debate within the town council before a majority backed Alvar Aalto's argument that a public building should be distinguished from private structures by higher quality materials.²⁸ Construction of phases one and two began in February 1961 and the Town Hall was completed in July 1962.²⁹ The fountain was constructed at the same time, while the grass terraces and flowerbeds were ready by the summer of 1963 (figs 4.13a-e).

In both the competition entries the Library, phase three, was a variation of the Viipuri Library with a top-lit reading room lit by circular rooflights (fig 4.14a). In autumn 1960, however, a *parti* of 'table and flowers' was established.³⁰ This endured a series of reiterations necessitated by changes in area requirements required by a new national Library Law of 1961 and, in 1962, governmental advice on the ratio of population to library size:³¹ Jaakko Suihkonen recalls:

"Kale Leppänen will very likely have done the sketches [...] Aalto's small town library design is beginning to show. It is an interesting and beautiful *schema*, with quite a straightforward reading room and an office wing. The reading room ceiling is fairly free-form (figs 4.14b-l)".³²

In autumn 1963 the building's height was raised so that a clerestory-lit basement could be inserted, which could, if needed, form an extension to the Library in the future. In 1963 the town council purchased the Keskimaa farm to the south of the Library site allowing the Library to be moved 9 metres to the south of its original position, thus widening the Inner Square and opening it up in relation to the Church; something that Alvar Aalto declared "resolved the whole plan" (figs 4.15a-d).³³ Construction of the Library began in spring 1964 (figs 4.16a-c).³⁴ The buiding was completed in time for the 1965 centenary celebrations of the founding of the first Seinäjoki library (figs 4.17a-b).³⁵

The Parish Centre had formed part of the Church competition entry but it was not until 1962 that funds were found to build it. Revisions to the competition entry in 1962-4 were small with the addition of a loggia at first floor level in 1962 and a more individualised Parish Room at the south-west corner in 1964. A bolder change in 1965 saw the abandonment of the vomitory, along with the 1962 pergola, and the insertion of an open, stepped route leading into the churchyard (figs 4.18a-l).

The State Offices, although built for a separate client, accorded with the overall plan approved by the Seinäjoki town council. Detailed plans were developed from 1962-5 and final drawings made ready at the end of 1966, the only significant change being the abandonment of an underground car park, the ramps to which the Aalto atelier gave gestural curving concrete canopies. As well as offices for branches of the civil and military services, the building includes a county court and a police station. Work commenced in February 1967 and the building was completed in December of the same year (figs 4.19a-j).³⁶ The site architect Jaakko Suihkonen states:

“He [Alvar Aalto] did say that the office building would be the backdrop to the centre. And that it would be monochrome as he called it, white. I took that to mean that it would be a calm building. But the room programme is such that it would easily have become a systematic façade. The other piece of instruction he gave me was to mix up the windows as much as possible, to avoid it being systematic.”³⁷

In the competition schemes the Theatre, like the Library, began as a cipher; an irregularly formed enclosure to close the west end of the Inner Square. Its various iterations show the difficulty of relating a building to the Inner Square while having to place its main entrance adjacent to the bus and car park to the west of the Centre, a requirement of the building’s role as a regional theatre, with the greater part of the audience arriving by car or bus. No professional theatre company existed in Seinäjoki, so that even when the first considered design for a 350-seat theatre was made in December 1961, Alvar Aalto still had to ask the Town Council as to the exact brief. In particular as to whether it was to be just a theatre or whether it would serve as a concert hall as well.³⁸ Seen from the Inner Square this first design gave the appearance of being built on a hill, with large picture windows from the upper foyer opening onto a terrace overlooking the Square (figs 4.20a-c). Internally the auditorium was asymmetrically

disposed around a circular *orchestra* with elements reminiscent of the Essen Opera House design (1959-88) forming the walls and ceiling.

In 1963 a music institute was added to the brief and a design for a combined theatre and concert hall was presented to the town council, but the town's financial commitments, in part to the building of the library, precluded construction. The concert hall element necessitated the abandonment of the *orchestra* and a more conventional, if asymmetrical auditorium (figs 4.21a-b). In 1965-66 the auditorium expanded to 550 seats and one version proposed sliding rear walls that would have allowed seating to overflow into the foyer when needed (figs 4.22a-d). In 1967 spaces for Yleisradio, the Finnish Broadcasting Corporation, were incorporated. A design of May 1968 had two auditoria, one of 500 seats and one of 150 seats, to enable congresses to be held in the building. By November this had changed to a single 500-seat auditorium (figs 4.23a-b).

Economic stagnation and the cost to the town of building a swimming pool, brought development to a halt. In 1974 the Town Council proposed extending the Town Hall and the Library, but the economic situation precluded this. In 1981 the Council again considered extending the library and Elissa Aalto stated that the building's "architectonic form is such that it is not possible to join a larger extension to it." She proposed building an extension to the south of the 'library park' on what is now Alvar Aallon Katu, but no plan has as yet been carried out.³⁹

After an interruption of twelve years, in 1980 the proposal to build a Theatre was again taken up, on the basis of the May 1968 design (figs 4.24a-b). The design was now to be a combined theatre, concert, congress hall with a 429-seat auditorium and 120-seat small stage for which Production Information was ready in February 1982. Until this moment,

the Aalto atelier's designs had proposed white render walls with a copper-sheathed auditorium, however in 1968, white ceramic sticks had been proposed as a possible alternative to copper for the external walls of the auditorium. Some members of the Town Council now wished to have this material extended to the entire building, partly owing to the ease of maintenance it offered, but more because of its status as an 'Aaltoesque' material.⁴⁰ Elissa Aalto pointed to the role that render would play as a "modest surface" within the wider composition, but in March 1984 the Town Council voted 36-5 in favour of the ceramic sticks, although the auditorium cladding remained as copper.⁴¹ Construction began in January 1985 and the Theatre opened in August 1987 (figs 4.25a-f).⁴²

Throughout the period of the design and construction of these individual buildings, the design of the Inner Square went through a number of iterations. In 1966 the Aalto atelier proposed closing Koulukatu to vehicular traffic, so as to allow for a purely pedestrian linkage between the Inner Square and the churchyard (figs 4.26a-c). This was abandoned in 1969. The Inner Square remained unsurfaced until the completion of the Theatre in 1987 when it was completed on the basis of drawings from 1966, which illustrated a grid pattern of light grey and black granite extending across Koulukatu as a pedestrian crossing. This was realised in 1988 (fig 4.27).

Since the Aalto atelier commenced its work Seinäjoki has greatly expanded and the population has doubled from approximately 18,000 in 1960 to almost 37,000 today. From the time the Church was officially finished, the Aalto atelier has carried out modifications and renewals to its fabric and spaces. The most significant of these was the building of extra accommodation on the terrace of the Parish Centre in 1977 (figs 4.28a-b).

Chapter 5 MORPHOLOGIES

“To try to analyse the elements of (Frank Lloyd) Wright’s architecture would be like dissecting [...] flowers. I like flowers too much to dissect them”.

Alvar Aalto¹

The Aalto atelier adopted two major formal approaches when building in rural settings.

In the first instance, they disported white rendered forms in the landscape, with a minimal disruption to the existing environment, that respond to seasonal changes through contrast in the summer, and merging in the winter (figs 2.5a-b). In the second instance, they deployed picturesquely varied forms and unmediated materials that from afar suggest a unified silhouette, but close to appear as fragments almost indistinct from the landscape (fig 1.10c). Similarly, the Aalto atelier developed a responsive approach in urban context. The Academic Bookshop (1961-9) in Helsinki inflects not just its form to its corner site, but also its two copper elevations, to the tone of the two streets on which it sits (figs 5.1a-c).

The barely defined townscape of Seinäjoki offers none of the certainties of these rural or urban site conditions. Nevertheless, the Seinäjoki Centre embodies the Aalto atelier’s belief in building as an act of harmonisation with an extended environment, and as a contributing part of an urban continuum. Theirs was an architecture that reflects on art as a second nature, and their approach was in opposition to the modernist idea that a building can be conceived or experienced in isolation. However in the less than picturesque circumstances of Seinäjoki something more was required than the “few well placed, forceful accents” that had sufficed in other locations.² Instead the Seinäjoki Centre achieves Alvar Aalto’s aim of generating harmony through constructing a “synthetic landscape”, akin to that of Mantegna’s Paduan frescoes, that expresses a

balance between civilization and the natural world; an intention that is most forcefully expressed by the artifice of piling tons of earth upon the Ostrobothnian plain.

The only hills in Seinäjoki are the artificial mounds of the “Aalto Centre”, but so natural do they seem now that most citizens and visitors have assumed they were always there.³ They are present in even the earliest sketches of the Seinäjoki Centre, and give the illusion that the buildings were designed on existing hillsides (figs 5.2a-c). The hills appear as an indissoluble inclusion of nature, which is further communicated by the contained topographies of the Inner Square, churchyard and principal interiors, as well as through the linkages to a wider landscape.⁴ A conception that mirrors Alvar Aalto’s observation of Oscar Niemeyer’s house in the hills of Rio de Janeiro in 1954:

“It cannot be photographed, as its multi-dimensional forms call for an art that simultaneously captures the whole valley and interior and exterior of the house”.⁵

The desirability of rising ground for urban design is explained by Alvar Aalto’s declaration of 1924, after viewing Mantegna’s Padua frescoes that:

“the rising town has become a religion [...] a disease, a madness, call it what you will: the city of hills, that curving, living, unpredictable line which runs in dimensions unknown to mathematicians, is for me the incarnation of everything that forms a contrast in the modern world between brutal mechanisation and religious beauty in life. It is an everyday yet wonderful form of art” (fig 3.11a).⁶

In their drawings the Aaltos would, on occasion, therefore seek to exaggerate these qualities, as with their sketches for the Taulumäki church (1927) and the Lyngby cemetery (1952, figs 5.3a-b), which increase their sites’ gradients. Where they were presented with even the slightest hilly topography, they were adept at emphasising it through countering it with resolutely horizontal forms, as at the Tiilimäki atelier and the House of Culture (fig 5.3c). Earthworks, however, had also formed part of the Aalto atelier’s repertoire of materials since the grassy mound, sourced from Japanese

examples, which was counterpoised to the free-form swimming pool and rustic fence of the Villa Mairea (fig 5.3d). With the design of the Säynätsalo Town Hall, where a grassy plateau is held within the building, structuring its basic *parti*, they became fundamental to their designs.⁷

At Seinäjoki, as at Säynätsalo, these earthworks are invisible to the spectator until they enter into the proximate environment of the space, at which moment the landscape asserts itself, not as a mere 'view', but as the dominant element of the place (figs 5.2b-c).

In placing a garden at the centre of the city, Alvar Aalto bonded the man-made and the natural in the same metaphorical and experiential context he had celebrated in Fra Angelico's *Annunciation* (fig 3.24a):

"There are many examples of pure, harmonious, civilized landscapes in the world; one finds such gems in Italy and the south of France. Not an inch of ground remains intact, yet no one can complain of a lack of scenic beauty. The landscapes we meet [...] no longer consist of untouched nature anywhere; they are a combination of human work and the environment".⁸

Built on a featureless field on the edge of a featureless town, the Seinäjoki Centre possesses an ambiguous *malerisch* (painterly and picturesque) that underlies every aspect of its environment. It is an ambiguous and naturalistic rendering of a topography and institutions that is open to interpretation and yet affecting and suggestive to the spectator. No one interpretation asserts itself.⁹ Through the persuasive nature of the Seinäjoki Centre's landscape and buildings, the Aalto atelier sought to create affinities with the town's inhabitants, as Alvar Aalto stated:

"Architecture never exerts its influence all at once, in the form of a single impulse, provoking an immediate reaction in people. It acts slowly, its influence becomes engraved in peoples' mind so that they hardly notice it, gradually, over the lifetime of many generations".¹⁰

As well as a balance between civilization and the natural world, the artifice of this “synthetic landscape” was also intended to provide a supportive environment for public life within, but distinguished from, the everyday conditions of modern life. Because, in Alvar Aalto’s words:

“In every case opposites must be reconciled... they may even be mutually contradictory, and yet we must generate harmony from them. This harmony alone can produce culture and continuity in society”.¹¹

The Seinäjoki Centre’s stepped landscape has a political role as a civic “garden for the town’s representatives and for receptions”, a concept that was first conceived in Alvar Aalto’s and Albin Stark’s scheme for Avesta Town Centre (1944).¹² In addition to which, in an early version of the design, the garden was also conceived as seating for viewing public performances within the Inner Square in an *orkestra* (orchestra) denoted by a concave space ‘carved’ out of the east elevation of an early design for the Theatre.¹³ In contrast to this dynamism the churchyard is an open expanse whose calm ambience is only interrupted by the occasional summer festivals. Another feature of these adaptive landscapes is the deportment of the view as meeting place; at the summit of the stepped garden adjoining the council chamber, and on the terrace at the top of the steps leading to the churchyard from Koulukatu (figs 5.4a-b). Apart from these, steps and staircases integrate the buildings and landscape throughout the Seinäjoki Centre, while balconies and terraces disclose views beyond the confinement of the Centre’s boundaries to the wider landscape; features that are repeated in the level changes, staircases, balconies and placement of openings in the interiors.¹⁴

Alvar Aalto’s travel sketchbooks record buildings as fragments of wider landscapes, their affecting qualities derived from their interaction with their location; while his writings declare an equal interest in the phenomena of nature and architecture, and their effect on the spectator. For Alvar Aalto, as with Burckhardt’s and Goethe’s descriptions

of Italy, which entwine their observations of culture with the processes of nature, it is the artist's experience of the processes of the natural world that is its measure. Alvar Aalto's rejection of what he saw as the superficiality of Jean-Jacques Rousseau's (1712-1778) aesthetic, rather than psychological, view of nature reflects this, and reiterates Goethe's assessment of Rousseau's 'general derangement' as caused by his being only grounded in nature - not grounded by nature.¹⁵ In Goethe's observation such a grounding was to be found in the relationships between phenomena, not the objects themselves:

"In nature we never see anything isolated; everything is in connection with something else which is before it, beside it, under it, and over it. A single object may strike us as particularly picturesque: it is not, however the object alone which produces this effect, it is the connection in which we see it."¹⁶

This ideal of continuity became the basis for the projects that the Aalto atelier undertook from the mid-1930s onwards, and it is most apparent as an overriding concern in their designs for industrial buildings that were undertaken on a purely beautifying basis. Typically, as at the Sunila cellulose factory (1936 onwards, fig 5.6a), where the client's engineers set the brief and dimensions for the structures, and the Aalto atelier's role was to ameliorate the effect of building on the landscape, or even to accentuate it, through skilful dressing and entwining with the *topos* of the site. By the 1950s Alvar Aalto was wholly confident in his use of picturesque topological devices to evoke atmosphere, and had evolved an approach that was second nature. The earliest sketches of the Seinäjoki Centre describe the buildings as volumetric gestures in which, although their briefs were barely known, their basic disposition was already determined with the programme fragmented into its constituting components which then coalesce to form a unifying whole (fig 5.5b). This fragmentation, re-assemblage and merging of

landscape and building, is later repeated in the manipulation of the sections of exteriors and interiors.

The placement of the buildings in oblique relationships to each other, and their emphatic asymmetry, also has the effect of accentuating the shifting relation of the individual to the whole. An affiliation of environment and spectator that mirrors the aesthetic experience of the forest in which Alvar Aalto grew up where “the distancing that is so important a part of traditional [aesthetic] appreciation is difficult to achieve when one is surrounded by the ‘object’”.¹⁷ The same experience was also a feature of the weather-beaten towns the Aaltos visited and admired throughout their lives, from the Old City of Riga to the ghost towns of the California gold-rush: and above all to the towns of Italy, the ambience of which became, on frequent visits during the 1950 and 1960s, part of Alvar Aalto’s (and presumably Elissa Aalto’s) *ympäristökäisyys* (environmental make-up).¹⁸ It is no coincidence that Alvar Aalto’s most famous essay *Archittetura e arte concreta* (Architecture and Concrete Art, usually rendered as ‘The Trout and the Mountain Stream’ from its subsequent Finnish title *Taimen ja tunturipuro*) coincided with the Aaltos first journey to Italy for twenty-five years. This essay explores the empathetic and intuitive response of design to the relationship of inhabitant and site; and stresses the experience of spatial strata – the horizontal layering of space – over the interplay of solid objects (see Chapter 7).¹⁹

The stress on personal / physical experience and ambience in Alvar Aalto’s writings relates in part to the work of the writers and painters who mediated the Aaltos’ firsthand experience of these environments, and of their history. These included Goethe and Anatole France, past painters such as Fra Angelico and Mantegna, and contemporaries, or near contemporaries, both at home and abroad, such as Ragnar

Ekelund, Eero Nelimarkka, and Cézanne whose compositions illustrate an equality of land and built form and milieu in which individual elements “readily accept [...] the whole, each playing the foot-soldier”.²⁰

Unusually for modernist architecture there is little interest in literal transparency at the Seinäjoki Centre; rather the relationships between its constituting elements, and the overlapping of its spaces with one another, represent a phenomenal transparency.²¹ The interior worlds surrounding the Inner Square and the churchyard are withheld until the spectator can physically engage with them. Only the Theatre restaurant directly addresses the Inner Square. It is therefore the journey of the spectator, in which kinetic, tectonic and temporal experience synthesises the building’s various elements into a complete image that forms the Seinäjoki Centre’s basic structuring device.

In relation to the spectator traversing the space and occupying its various settings, the Seinäjoki Centre is apprehended as a structure upon which “a number of possible coherences glitter separately without a unifying common law”.²² Approaching under the pergola of the Theatre, the Town Hall’s council chamber roof and terraces are set off by the linearity of the Library, and the entire Inner Square is cast as a frame to the Church and Tower (figs 5.6a-e). Moving into the centre of the Inner Square the hovering flank of the Town Hall, the council chamber roof and rising terraces of the civic garden dominate the space, while the low wall of the fountain and the planting confuse the boundary of building and square. Upon crossing Koulukatu, and ascending the steps into the churchyard, a similar coalescing of building, terrain and planting is observed, but to a deliberately more muted end.

The Seinäjoki Centre embodies the Aaltos' rendering of history as a series of affective environments, reiterating Armas Lindgren's teaching of "depth and content" as the critical elements of history rather than any concern with stricter formal criteria of appearance or chronology (see Chapter 3). The Seinäjoki Centre's ambiguous and dynamic scene is informed by the syncopated spaces of the Baroque, or more accurately, the scenographic interpretations of the Baroque that were made by Gustaf Strengell, A. E. Brinckmann and others, following on from Wölfflin's 1888 conception of the Baroque as a separate experience from the Renaissance.²³ These writers described environments that formed a whole through correspondence with the occupant, reminiscent of early 20th century *Einfühlungstheorie* (empathy theory).²⁴ To quote Paul Frankl (1878-1962) in his 1914 book *Die Entwicklungphasen der Neueren Baukunst* (Principles of Architectural History, see Chapter 6):

"As we walk around a building or any three dimensional object not only does it become distorted or altered as a whole, but its internal relationships are constantly shifting [...] To see architecture means to draw together into a single mental image the series of three dimensionally interpreted images that are presented to us as we walk through interior spaces and round the exterior shell. When I speak of the architectural image, I mean this one mental image" (fig 5.7).²⁵

In Finland this reading of the Baroque continued to inform architectural conversation into the 1950s, with, for instance, Nils Erik Wickberg describing, the "proto-modern flows" of Francesco Borromini (1599-1667, fig 5.8).²⁶ These empathetic qualities were also seen to be present in the experience of the spaces of the Baroque city, in particular the three-sided square. For Strengell, the Baroque's inclusion of nature into its dynamic order and its "yearning for light, air and freedom", made it as worthy of study as the mediaeval townscape. In addition to which, borrowing from Sitte, he cited the 'false' perspectives of the Piazza S. Marco in Venice, the Piazza del Popolo in Rome, and the Place Dauphine and the Place Quatre Nations in Paris as three-sided spaces that

simultaneously suggest closed and open space, and in which vistas are not just scenic, but effectively orient the citizen towards the places of congregation.²⁷

In the earliest surviving sketch of the Seinäjoki Centre, the buildings are set obliquely to one another and a square is set up so as to frame a view looking east across Koulukatu to frame the tower and a part of the west front of the church (fig 5.9a). The square itself is L-shaped; akin to what Strengell saw as the proto-Baroque Piazza S. Marco and Mole (the space between the Piazza S Marco and the waterfront) in Venice (fig 5.9b). As the Piazza S. Marco and Mole, the square at Seinäjoki can be read as unified or separate space; and as the Mole opens to the water, so the square in Seinäjoki opens to a park. In addition, staircases are already indicated as an integral part of the composition, giving subsidiary points of access and binding the buildings and landscape.

Another aspect of the Baroque city singled out for praise was a wider continuity of the urban fabric, as for instance in Brinkmann's *Stadtbaukunst*, which illustrates the 16th-18th century city as a unified cultural entity, and where there is a dynamic but contained movement. This ranges from the the continuities of Baroque Rome, to the topographic dimensions of Bath's crescents, to the continuous scene of J. F. Blondel's 1768 *Korrektionsplan* for Strasbourg (fig 5.10). While Brinkmann lauded the freestanding buildings of Michelangelo's Campidoglio, he chose not to illustrate it with the conventional stereo-metric view of the main piazza and staircase, but with views of the obliquely sited secondary staircases that form an adaptive continuity between the wider topography and the piazza. An emphasis in turn taken up in Strengell's praise of the Baroque city for its plastic and harmonic totalities, and relating of contrasting spaces to one another.²⁸

This ideal of a matching topographical and cultural continuity was first seen in the work of the Aalto atelier in their self-solicited design for three squares in Jyväskylä (1926, fig 5.11). Architecturally this scheme is treated neo-classically, but the paired buildings of its main square, are reminiscent of the twin chapels of the Piazza del Popolo sited at the apex of a trident of streets, or of the twin casinos of Vignola's Villa Lante gardens (1564 onwards) that suggest an architecture split asunder by the force of nature. After the Second World War the *Forum Redivivum* (1948) competition scheme in Helsinki for the National Pensions Institute extended this privileging of the urban fabric over the individual object, in the design of a sequence of stepped spaces running over the existing topography to form a series of connected courtyards, staircases and podia that join the Market Square of Töölö to Töölönlahti bay (fig 5.12).

While the Seinäjoki churchyard was maintained as a separate space from the gated Inner Square in the entry for the Seinäjoki Town Hall competition, with the later expansion of the north-south dimensions of the site by nine metres, the Inner Square developed into a clearer 'three-sided square' with a more assertive relationship to the Church. Correspondingly, the design drawings document the iterative erosion of the architectural enclosure of the churchyard's surrounding podium and cloister until, as built, the upper 'cloister' disappeared and only a vestigial canopy remained around the roof of the Parish Hall, and a clean break was established leading into the churchyard (fig 4.18a-l). What had been a purely visual linkage between the Inner Square and the Church, as shown in the perspective sketch of the competition, was now a spatial one. Following this, the proposal of 1966 offered the most complete vision of any of the schemes; a completely unified centre achieved by the closure of Koulukatu to vehicular traffic and the removal of Kirkkokatu to the north so that the park could advance to meet the church (fig 4.26a). This would have created an 'Outer Square' on the axis of Koulukatu, between

the Inner Square and the Churchyard linking the civic and religious domains, each of which in turn would have backed into extended naturalistic landscapes. It would also have strengthened the west to east route that runs through the entire composition (figs 5.6a-e).

As built, the Seinäjoki Centre has a dynamic character and spatial fluidity but never becomes an overwhelming totality as its buildings possess contrastingly restrained architectural forms. The Seinäjoki Centre is mannerist, in the sense of Pope Sixtus V's Plan of Rome (1585-90), in which the fabric of the city is rendered whole by a series of straight streets linking significant monuments. However, these axes align themselves with obelisks placed in front of the monuments, and not with the monuments themselves. In this way, the individual is directed to the monument but is left to establish his or her own relationship with it.²⁹ A similar experience is repeated at the Seinäjoki Centre. From afar the buildings' silhouette clearly denote the 'event' spaces to the spectator, but then, once they enter into the unifying milieux of the Inner Square or churchyard, they are left to establish their own individual associations with the representationally important buildings.

This scenic apprehension of a contiguous environment unfolding around the spectator is also reminiscent of the work of the Finnish geographer, Johannes Granö (1882-1956), whom the Aaltos knew while living in Turku.³⁰ For Granö the perceived environment was as much a natural science as physical geography and equally suitable as a subject for geographical research. In the 1920s he developed a theory that the apprehended world fell into two distinct entities quantified on the basis of our sensual engagement.³¹ Firstly, he proposed that a distant environment, the landscape (locality), perceived by sight alone and dependent on the altitude of the spectator's vantage point and the

topography. Secondly, a proximate environment (vicinity) that is perceived by all our senses and our bodies, and that relates to a:

“close, intimate world, which we always inhabit and in which context we perceive our geographical object with all our senses [...] the area corresponding to proximity could be called a vicinity, and that corresponding to landscape [...] a locality” (figs 5.13a-b).³²

A comparable duality is apparent at Seinäjoki. As a locality the Centre is rendered as an enclosure made up of distinct silhouettes set against the low horizon that both emphasise the vault of the sky and orient the spectator (fig 4.6f). From afar the Church tower is legible, while closer to, the emblematic signs of the Town Hall council chamber, Theatre auditorium and Library reading room can be clearly comprehended.³³ The council chamber form is perhaps the most remarkable in that it is shaped to perform according to the spectator’s local or proximate relationship to it. Seen from the amorphous street-space of the town centre its profile is an asymmetric figure above the low horizontal line of the building’s two storey mass and of the land itself, reminiscent of the vast granite boulders left by the retreating ice-sheet that Topelius noted as such a characteristic of the Ostrobothnian landscape (fig 5.14a). Viewed from across Koulukatu the Town Hall has a straightforward frontality (as does the west front of the Church, fig 5.6e), although any mirror symmetry is countered by the curve of its northeastern corner (fig 5.14b). When seen from within the churchyard, with its ground plane and portico hidden, this same view takes on the character of a dark mass that broods over the scene (fig 5.2b). While, contrastingly, once within the the vicinity of the Inner Square the council chamber becomes part of the morphology of the space; a fractured, verdigris form that slopes up from the terraced terrain to face the church and its tower, and which in the earlier sketches is impossible to differentiate from the stepped garden (fig 5.14c).

Granö's conception, that an individual's relationship to the various depths of perceived space was a natural science, would have struck a chord with the debates concerning 'Vitalism' and the 'Unity of Science' in the 1930s. Aino and Alvar Aalto participated in this discussion, and Alvar Aalto's repeated use of biological analogies and metaphors are symptomatic of it. The protagonists involved in this discourse fell into three categories: the supporters of pure causality who explained biological design and functioning through mechanical laws (Darwinists); the supporters of pure design who explained design and functioning through the self-lawlessness of organisms (Vitalists); and an intermediate approach which explained design through the specific laws of organisms and functioning on the basis of laws analogous to those of machines (Machinalists (sic)).³⁴ The relationships between these groups were blurred, particularly when being dealt with through the analogous gropings of artists and architects rather than scientists.

As Adrian Forty has said:

"The success of the most common scientific metaphors is not just to do with their being scientific, but because they reinforce certain other perceptions of architecture, perceptions which may be rooted in social or psychological desires".³⁵

Alvar Aalto read Granö's fellow Turku Professor, the philosopher Eino Kaila's (1890-1958) *Sielunelämä biologisena ilmiöna* (1920, Spiritual Life as a Biological Phenomenon), which links the vitalism of Henri Bergson (1859-1941) and mechanism.³⁶ However at the time the Aaltos overlapped with Kaila in Turku, Kaila had already moved away from this position and was a contributor to the logical-positivist philosopher Rudolph Carnap's (1891-1970) *Erkenntnis* journal and was a frequent visitor to the *Wiener Kreis* (the Vienna Circle) of philosophers.³⁷ The Aaltos, and their architectural contemporaries, mirrored this oscillation and for every move they made towards a vitalist position they made a counter-move towards a rationalist position. Erik Bryggman's library contained works by both Henri Bergson and the Turku born evolutionary psychologist Edward

Westermark (1862-1939), Professor of Sociology at the London School of Economics (1907-30).³⁸ The journey of Joseph Frank from the logical-positivism of his native Vienna to his “accidentalist” design, which stressed the immediacy of the human figure in sensual unity with its environment, following his move to Sweden, is another example of such an overlap.³⁹

Biological justifications also abounded at this time in organisations such as CIAM, so that at CIAM 2 (1930) and CIAM 5 (1937), both of which Alvar Aalto attended, “biological needs as standards” were extolled along with the “biological advantages of the new urbanism”.⁴⁰ László Moholy-Nagy explored the individual’s sensory experience and the “biological integration” of man as the basis of art, as well as the basis of the *Workurs* he delivered at the Bauhaus.⁴¹ The use of fragmentary space of form, colour and contour at the Seinäjoki Centre is close to the compositions of Moholy-Nagy in which a “cubist” form made “subject-matter” a side issue, and in its place created a kinetic space at the centre of which was the occupant and their movement. Apart from the directional space of the Church, spaces in the Seinäjoki Centre are built up of multiple dualities to produce qualities analogous to Moholy-Nagy’s “force-field” of constant fluctuation. A structuring of space as a continuum that was also a feature of Frederick Kiesler’s de Stijl ‘City in Space’ installation at the Paris Exposition of 1925 (figs 5.15a-b, see Chapter 7).⁴²

This material was made available to the Aaltos through face-to-face meetings and in the books Moholy-Nagy’s gave to the Aaltos. In particular, Moholy-Nagy interpreted his fellow Hungarian, the biologist Raoul Francé’s (1874-1943), ‘bio-technics’ as a conscious and unifying approach to design that extended the functional to include the psychological, social and economic conditions of a given period. He quoted Francé:

“All technical forms can be deduced from forms in nature [...] Every bush, every tree, can instruct him, advise him, and show him inventions, apparatuses, technical appliances without number”.⁴³

As Moholy-Nagy cited Francé so he quoted the forty-four definitions of “experiential” space from Rudolf Carnap’s book *Der Raum*.⁴⁴ A spatial conception that reflected Carnap’s ‘Unified Science’ in which individual experience was the sole source of knowledge and the source of a unity in which there were no metaphysics and no “national” conceptions. As Carnap remarked to Moholy-Nagy on his 1929 visit to the Bauhaus: “I work in science [...] and you in visible forms; the two are only different sides of a single life”.⁴⁵

In the United States the ideals of Moholy-Nagy’s scientific art would accord with the pragmatic positivism of John Dewey in which material phenomena were assessed through their interaction with the individual user. When Moholy-Nagy established the New Bauhaus in Chicago in 1937 he added ‘Science’ to Walter Gropius’ original Bauhaus formula of ‘Art and Technology: A New Unity’, recruiting Charles Morris, a colleague of Carnap at the University of Chicago, as a teacher. Through Moholy-Nagy, as well as Kiesler amongst others, Alvar Aalto’s interest in the empirical traditions of America in the late 1930s and 1940s thus linked back to the biological motivations of the 1930s, and a wider interest in the evolution of form and its role in forming an *Umwelt* (surrounding world).⁴⁶

What was critical to the work of the Aalto atelier was not the veracity of, say, Henri Bergson’s *élan vital* (vital impetus), Carnap’s ‘Unified Science’, or John Dewey’s pragmatism, but their stress on the unity of nature and the primacy of individual experience. Furthermore, such theories suggested an alternative to a purely instrumental view of nature and what Alvar Aalto called the “the excessive logic of western

development".⁴⁷ Of the numerous theories concerning the unity of the environment and perception that were 'in the air' in the 1930s, however, the one closest to Alvar Aalto's intention at the Seinäjoki Centre of establishing a set of public spaces and institutions which would both affect and in turn evolve from the citizen's interaction with them, is that of the Estonian evolutionary biologist Jacob von Uexküll's (1864-1944) *Umwelt* (surrounding world).⁴⁸

Uexküll distinguished between a purely physiological ordering of nature according to causality and a biological order rooted in *Zweckmässigkeit* (purposive intention). He pioneered a semiotic approach to biology that was capable of including the subject itself; in which the *Umwelt* was the "phenomenal world embracing each individual like a 'soap bubble'".⁴⁹ Within this apprehended environment the organism relates to the world in a closed loop of interactions in which the *Merkwelt* (operational or effect world) acts upon the organism, but is in turn, acted upon by the organism through the *Werkwelt* (perceptual or sense world).⁵⁰ As with Granö's conception of a perceived environment in which the individual defines a local or proximate reality according to position, what might seem a mechanistic and purely spatial analogy is overcome by the temporal nature of organisms, in which the feedback of the cycle evolves into the *Umwelt* (surrounding world).

Uexküll's reflexive structure in which "each *Umwelt* forms a closed unit in itself, which is governed, in all its parts, by the meaning it has for the subject", is strikingly close to Alvar Aalto's stance at the time of the construction of the Seinäjoki Centre in which: "Just as in nature every cell is related to the whole, so in architecture the parts must be 'conscious of the whole'".⁵¹ An ideal that incidentally reiterates the classical thought of Vitruvius in which, in a perfected building, the parts relate to the whole.

The conception of an *Umwelt* (surrounding world) not only fitted with Alvar Aalto's regard for the value of nature as a dynamic whole, but also gave his regard for architectural history and the collective wisdom embodied in tradition a new role as biological imperative. Hence Alvar Aalto's paradoxical quotation of Nietzsche; "nur die Dunkelmänner blicken Zurück!" (Only men of the dark look back!) when his own practice was immersed in the past.⁵² As Bergson noted:

"Duration is not one instance replacing another [...] Duration is the continuous progress of the past which gnaws into the future and which swells as it advances [...] The piling up of the past upon the past goes on without relaxation. In reality, the past is preserved by itself, automatically. In its entirety, probably, it follows us at every instance [...] Doubtless we think with only a small part of our past, but it is with our entire past, including the original bent of our soul, that we desire, will and act".⁵³

An understanding that had underscored the Helsinki Polytechnic's teaching of history with its admittance of German, in particular Goethe's *Naturphilosophie* and its stress on the natural formations of the vernacular.⁵⁴ Indeed Uexküll's approach matches the unifying ideals of Goethe in accepting nature as an organism and rejecting the pure empiricism of Linnaeus and Newton.

From the 1950s onwards the duration and *Umwelt* (surrounding world) of the vernacular, stripped of any nationalist associations, pre-occupied the Aaltos in the "sensory experience" of cities like Venice or "the mediaeval towns of northern Spain, which are like bacterial cultures, [that] function precisely as settings for human life" (fig 5.16).⁵⁵ In formally evident terms, the Seinäjoki Centre most obviously emulates the comparatively modest environments of the western Finnish farm vernacular tradition in which unified, autonomous buildings loosely girdle and informally describe a space, without ever deforming themselves to enclose its corners, so creating an 'open and closed' environment (fig 2.9c).⁵⁶

While the ambience of vernacular environments captivated the Aaltos, when Alvar Aalto wrote on political organisation, and the construction of a democratic environment, it was to Hellenic Greece that he turned to, for example the Achaean Sea League (fig 5.17). There was an overlap between these two environments, however, that is evident in Alvar Aalto's own classicising writings about the small-town life of his Jyväskylä childhood; texts that echo Georg Simmel's (1858-1918) observations in *The Metropolis and Mental Life* (1903) in which "The ancient polis seems [...] to have had a character of a small town".⁵⁷ This linkage has a particular resonance for Seinäjoki, both because of its small scale, and because the same farming economy that had created the aforementioned Ostrobothnian farmhouses also supported a series of topographically responsive villages that presented a unified wooden townscape of houses with courtyard enclosures. At the time of the Seinäjoki Centre's construction, however, these were being systematically destroyed and redeveloped; the spatial specificity of the Seinäjoki Centre thus acts as a reproach not only to the crude industrialised development of the town itself, but also to the loss of humanised environments which had formerly endured in this part of Finland.⁵⁸

Like Goethe, Alvar Aalto idealised Ancient Greek society for its concept of *sophrosyne*, a "balanced co-ordination of all human faculties" achieved through persistent struggle and reconciliation.⁵⁹ An harmonious state brought about through the interplay and congruence of opposites leading to the creation of a 'higher third' which, in turn, revealed these oppositions to be one and the same, that is 'indifferent' (in the manner of Friedrich Schiller's 'Play Impulse', see Chapter 7). Heraclitus of Ephesus' notion of harmony as *harmozein* (fitting together, becoming engaged) expresses this; "That which

differs within itself is in agreement: harmony consists of opposing tension: like that of the bow and the lyre".⁶⁰

In formal architectural terms these conceptions had been given their clearest expression in Wölfflin's 1915 *Principles of Art History. The Problem of the Development of Style in Later Art*, in which he categorised the experience of art into five dialectical pairings (planar / dynamic; tectonic / atectonic; elemental / unified; clear / obscure; delineated / painterly, primarily based on his differentiation between the experience of the Renaissance and the Baroque (see chapter 5).⁶¹ The Aalto atelier's works, from the Jyväskylä Civil Guard House to the Finlandia Hall, make use of such dualities, but in an increasingly non-dogmatic way. In the early neo-classical works of the atelier, dualities are plain to see in the plan of the Seinäjoki Defence Corps Building and the Jyväskylä Workers Club (fig 8.12c).

Unfortunately the collision of the unyielding Euclidean geometries of these forms is so crude and graphic that there is no experience of an ambiguous 'third space' between them. It was, formally, in the sinuous line that forms the Savoy Vase's boundary that the Aaltos' employment of dualities evolved into something more lyrical (fig 5.18). In this no one radius conjoins another, instead each curve is separated from the next by an orthogonal section, endowing the piece with a captivating tension.⁶² It was at the Baker House dormitory at MIT, however, that the Aalto atelier's use of dualities asserted itself spatially, in the contrast between the undulating contour of the students' rooms and the orthogonal pavilion housing the social spaces (fig 5.19).

By the time of the Seinäjoki Centre's design such formal and spatial dualities had become the critical trope for making the individual the measure of the space, and allowing for the

possible formation of an *Umwelt* (surrounding world). At the Seinäjoki Centre these vary from bold contrasts to thematic variations. The dynamic Inner Square is set against the gentle terraces of the churchyard, within the Inner Square the mute white wall of the Library contrasts with the highly modelled Town Hall, and in the churchyard the Parish Centre is treated as datum to set off the greater gesture of the Church. The buildings themselves all employ a dualistic *parti* of 'table and flowers', in section and elevation, to denote the hierarchy of their activities within. The 'event' spaces: the council chamber, reading room, basilica, parish room and auditorium are displayed to the town as shapely masses denoting their importance to civic life. The public foyers that join this landscape to the interiors are contrastingly fluid and ambiguous. At one level they act as incorporative scenes to unify building and landscape, in the manner of Fra Angelico's *Annunciation*, and Le Corbusier's *Pavilion L'Esprit Nouveau* (figs 3.24a-b). At another, they act as thresholds that inform the transition from the unregulated external environment to the determined programmes of the 'event' spaces (see Chapter 6). Each of which in turn possesses a double shell construction so as to enable a correspondingly defined interiority to be shaped independently of the exterior form.

The most extensive foyer is that of the Theatre. While it is not as sophisticated as the constructs of the Finlandia Hall and Essen Opera House, it shares their morphology in relating the exterior and interior worlds. In these works the external wall of the foyer is treated as a veil, with the rear wall of the auditorium being presented as the 'real' elevation of the building so that the foyer therefore becomes the 'inner' part of a continuous landscape that extends beyond the building. The architect Juha Leiviskä has pointed out an analogy with the ambiguously bounded courtyards of eastern Finnish farmsteads where only a lightweight fence mediates between inner and outer worlds (figs 5.20 and 3.7a).⁶³ The Seinäjoki Theatre foyer emphasises its connections to the

Inner Square with the only large scale use of floor-to-ceiling glazing in the Centre, and the deployment of a grey limestone floor that relates to the square's granite cobbles (figs 5.21 and 4.25a-b). During design development in the 1980s, a picture window was planned for the top of the foyer staircase to give the audience an aspect of the Inner Square just prior to entering the inner world of the auditorium, but this was omitted from the constructed Theatre.⁶⁴

In contrast to this expansiveness, the narthex of the Church is a shallow space compressed by the overhead organ loft, which is entered through massive copper clad doors, slits above which provide the only lighting (figs 6.11a-b). Entering from the relative darkness of this space into the white basilica exaggerates the luminosity and scale of the space. The basilica possesses an almost scale-less unity, with a lack of any overt gestures and the expansive surfaces of the white-painted vault, narrowing sidewalls, sloping terracotta floor and pale wooden pews. The 'Cross of the Plains' reredos is the only figurative motif of the interior and restates the relation of the church to the landscape outside, whence from afar the tower is viewed against the the sky (the vault) and above the grain fields (the pews, fig 5.22).⁶⁵ The most complex relationship of foyer and 'event' space is at the Town Hall where the entry sequence includes the everyday urbanity of the external loggia at street level and the more rarified civic garden at first floor level. The council chamber is only divided from this space by acoustic sliding screens, which, pushed aside allows for a unity of the political representatives, citizens and nature.

The design of the external surfaces of the buildings reflects the experiential duality of locality and vicinity articulated by Granö. Seen from a distance, as part of the landscape, they appear as unified surfaces. The blue ceramic sticks of the Town Hall, and the matt

copper of the Theatre auditorium counterpoint the unifying white of the Church, Parish Centre, Library, Theatre foyers and State Offices, which in turn are either set off by the surrounding green swathes of summer, or merge with the snow-covered winter landscape. Once within the proximate space of the Centre however, the reflective, curved ceramic sticks of the Town Hall become a myriad of “cinematic” effects that move with the spectator (as, more chastely, do the white sticks of the Theatre). In contrast, the Church possesses a massive tectonic, its matt thin-wash plaster surface revealing its underlying rough-coursed brickwork.⁶⁶

The surfaces of modern buildings posited a quandary for the Aalto atelier, as the places the Aaltos most admired were shaped and adapted over time by inhabitation, as well as by weathering, so that a variety of aesthetically expressed intentions were present; notions idealised by Strengell and Sitte.⁶⁷ From early on in his career Alvar Aalto identified the patina and “signs of wear” as intrinsic architectural values and later stated that “what matters is not what a building looks like when it is new but what it looks like thirty years later”.⁶⁸ At the Baker House Dormitory, Alvar Aalto urgently pursued the most variable quality bricks to achieve the qualities that he found on a 1948 trip to Italy; “I have just returned from Rome – damned good brick stuff in the Palatino and on the Via Appia”. Additionally he proposed aluminium trellises to be constructed within the concave parts of the brick elevation so as to break-up the building surface and amalgamate it with the environment, although these were not carried out (fig 5.19).⁶⁹ The use of highly modelled and textured surfaces, as well as materials that reveal their ageing and the invitation to plants to entwine themselves with the buildings, also serves a political end, repudiating what Elias Canetti has described as the:

“smoothness [that] has conquered our houses, their walls and all the objects we put into them; ornamentation and decoration are despised and regarded as a sign of bad taste. We

speak of function, clarity of line and utility, but what has really triumphed is smoothness, and the prestige of the power it conceals".⁷⁰

Excepting the Church, the buildings at Seinäjoki self-evidently do not suggest such a softly textured or ruinous patina as Baker House. But neither do they aspire to the smooth power of the 'glass wall' or the fraught brittleness of the 'white wall' of modernism.⁷¹ Their surfaces are disposed hierachically, and demonstratively express the participatory spaces, such as the Town Hall, Theatre auditorium and the Church, in contrast with the mute rendered surfaces of the Library, Parish Centre and State Offices that hint at more intimate natures. It was the threat to this balance that made Elissa Aalto so resistant to the use of ceramic sticks on the body of the Theatre itself.

In relation to the environment the surfaces are cast as foils to reveal the diurnal and seasonal cycles. The rounded cobalt blue ceramic stick surface of the Town Hall is in itself reminiscent of the "incrusted" surfaces of Venice that the Aaltos knew well.⁷² But its form also inflects to the time of year and time of day, the sun's angle of incidence, the solar path and humidity, as well as the presence, or absence, of reflective snow (figs 5.23a-b,e-f). In the words of Jaakko Suihkonen: "dark blue, cobalt blue. In some lighting conditions it looks a boring grey. But when the sun shines on it, it is beautiful [...] a bronze colour".⁷³

In contrast to the dynamic surface of the 'democratic' Town Hall, the Church is constructed of a thin-wash of rendered, roughly coursed brickwork, which; "even if it wears off, according to Alvar a naturalisation takes place with the red brick showing from underneath".⁷⁴ The matt surface seemingly absorbs light and turns to a glowing pink in the lingering sunrises and sunsets of this latitude (figs 5.23c-e). Both spiritual

space and recognisable archetype, the processes of nature and the dimensions of time affect it alone, and its modest white veil weathers away to reveal the material beneath.⁷⁵

A corollary to the Aalto atelier's treatment of the surfaces described above, was a shapely form that Frankl had expressed in his remarks on the Baroque:

“The tectonic shell, which forms a continuous boundary for the enclosed spatial form, a skin so to speak, is so thoroughly modelled that it is possible to sense tactually everywhere beneath this skin the solid skeleton with all its joints”.⁷⁶

The most immediate source of this formal approach would have been the works of Gustaf Nyström, which mirror Otto Wagner's composition of buildings with a sectional depth approached through a shallow but articulately modelled elevation; a form of “dressing” that reaches back to Goethe's *Von deutscher Baukunst* (On German Architecture, 1772).⁷⁷ The theatricality of the Town Hall in particular recalls the Semperian classical tradition in its conscious pursuit of drama to sever the viewer's 'normal' expectations. A more immediate formal source would have been the Nordic Classicism of the 1920s that made use of textured renders and pigmented colours, as well as decorative motifs, to create highly expressive surfaces at a time of material austerity.

Structure played a secondary role, and Alvar Aalto saw the invention of modern structural techniques as reducing the importance of the frame to allow concentration on other “basic elements in the architectural process”.⁷⁸ A pragmatic and experiential attitude is applied to structure that in the design of a rooftop terrace at the Nordic Bank surprised Eric Adlercreutz:

“At around this time Alvar also drew columns up there. It would have been a small arcade, a temple motif. But he wasn't convinced about it himself. He asked Malmberg to design it so that the pillars were not load-bearing, so that they could be removed. At that time, in the early 60's this was a shocking thing to suggest because all the young architects

were into puritanical constructivism. He noticed I was a bit surprised about his little Erechtheion up there. He looked at me with raised eyebrows and said: *Vi ska inte vara dogmatiska!* (We do not need to be so dogmatic!)”⁷⁹

As the Aalto atelier’s work evolved, the relationship between structure and surface became increasingly ambiguous. Even the apparently ‘rational’ gridded elevation of the Rautatalo in fact barely relates to its structural grid. Its every gesture is rather a classical response to the cityscape and the inhabitation behind (figs 5.24a-b). At the House of Culture (1952-8) Alvar Aalto’s increasingly painterly approach saw the ‘skin’ freed entirely from the concerns of structure to become a material veil, a feature that was repeated at the Seinäjoki Town Hall. The later works of the Aalto atelier are compositions of freely disposed surfaces in which, as Harry Mallgrave says of Semper, the intention was “no longer the construction of an edifice, but rather the masking of constructional parts in a dramatic conundrum or artistic play”.⁸⁰

The Aalto atelier’s treatment of one of the emblems of modernism’s representational rationality, the grid, further provides evidence for this. At the National Pensions Institute in Helsinki the building is sited on a triangular plot and utilises a concrete frame as its structure. The frame is then simply cut away, or reconfigured wherever necessary; in relation to the nature of the site or inhabitation, or at edges where hierarchies of space change, so that in all there are eight different formations of columns and grids (fig 5.25). As Tide Huesser said: “When making a dress [form] you do not cut around the flowers [pattern]”.⁸¹

At Seinäjoki the ten columns that support the council chamber of the Town Hall are not structurally necessary; indeed, they are not even contiguous with the council chamber above. Their role is simply to form a portico to act as a threshold and meeting

space that connects the building to the town. Six of the pillars are circular and four ovoid, the latter are at the front of the building and facing the churchyard, creating a dynamic relationship with the Church (figs 5.26a-c). Elsewhere in the Town Hall the concrete frame is barely noticeable, serving only to allow the flexibility of non-loadbearing partitions.

This approach extended into the way columns are clad, apparently informed by Alvar Aalto's Semperian statement about the Ionic column in 1948:

“the marble product is not a naturalised copy of the original process. Its polished and stabilised forms embody human qualities that the original constructive form did not have.”⁸²

Columns are never shorn to the self-referential status of Le Corbusier's *pilotis* or Mies van der Rohe's I-section columns that reify new structural methods and materials for their own sake. Instead, their surfaces are wrapped to inform the overall ambience.

From the Villa Mairea onwards this expressive cladding seems to have been most directly derived from Japan, as mediated through Tetsuro Yoshida's illustrations, with references to tri-partite classical columns appearing following the Aaltos 1947 trip to Italy (figs 5.27a-c). The Town Hall portico's columns are clad in granite panels while the Town Hall and Theatre columns of the lobbies are clad in rounded ceramic sticks, which ‘unravel’ to form humanised wall surfaces. They are in contrast to the simple white painted columns of the Library reading room, the unadorned slenderness of which is played against the massively formed vaults.⁸³

Where the impact of a ‘great’ structure is a necessity, as at the Church, its dynamic and sculptural possibilities are celebrated. The columns of the Church have an expressive cross section that receives the rhythmic vaulting, and their inner face inclines as it brings the dynamic of the vault down to the eye-level of the congregation (figs 5.28a-b). The

vault here, and in the Library, is treated as a continuous surface with a muscular structural lightness to its modelling; this possesses a tectonic strong enough to enclose the space but without drawing attention to itself.

The corollary of the tectonic of these surfaces is their illumination. Externally, this is implicit in the modelling of the surfaces, where Alvar Aalto used mass to achieve the desired effects. Internally, there is a freeing of colour and contour, as well as relief, to both break up and intensify the light falling on to it. Surfaces are expressionistic and relate to what Moholy-Nagy had pointed out as the “sensorily perceptible result” of the “surface aspect”, and which he defined as a separate category of materiality from those of texture and massing. Moholy-Nagy’s *Licht-Raum-Modulator* (Light-Space-Modulator, 1922-30) and photographs revealed the possibilities of light for generating form, and Aino Marsio-Aalto’s photographs similarly emphasised the effects of illuminated materials.⁸⁴ Critically, however, while Moholy-Nagy’s effects were generated through the manipulation of artificial light sources, those of the Aalto atelier were primarily based on daylight and were equally concerned with orienting the interior, and the spectator, to the natural world. At Seinäjoki therefore, openings are carefully shaped to admit light in relation to the animation of interior surfaces, the orientation of the spectator, and the framing of specific activities. A precise, incidental illumination that again contrasts with the unifying, but generalising, horizontal ribbons of glass that typified modernist architectural practice. In the basilica direct and indirect light sources are used dualistically. With the vault supported on columns an almost continuous clerestory washes light across the vault of the nave, while the choir is lit by heavy lidded windows that focus light on the cross leaving the walls on either side in shadow.

The plastic and communicating surfaces of the basilica, the reading room and the council chamber interiors are lit, in part, by hidden sources, another debt to Moholy-Nagy and more directly the Baroque. Together with the *poché* of their double-shell construction, a device first deployed by Alvar Aalto at the New York World's Fair Pavilion (1938-9), these reinforce the autonomy of the interiors as 'worlds apart' (fig 5.29). The use of louvres over the major and minor windows, and as screens and room dividers, is a conspicuous feature throughout the Centre. Alvar Aalto wrote that the aim of lighting was to create a mood as much as illumination. Veli Paatela commented how Alvar Aalto was determined not to "snap" the light in the design of the windows of the Baker House Dormitory's student rooms, and, making reference to the plants and the lace curtains of his Aunt's house in Loviisa, deliberately softened the junction between inside and out.⁸⁵ The blurring of openings and solid walls, as well as the ambiguous degrees of enclosure louvres allow, are also reminiscent of Tetsuro Yoshida's Japanese examples and Moholy-Nagy's work, although, again, the Aalto atelier softened Moholy-Nagy's materials and forms whilst retaining their effects.⁸⁶ The council chamber's internal concrete louvres shade, and reflect, light to create a subdued environment, and the illumination is further absorbed by the textile-clad walls and sliding screens (figs 5.30a-b). The external louvres of the reading room reflect light up on to the vaulting to reflect onto to the readers below, for whom the finest of gaps between the louvres allows a glimpse of the trees outside (figs 5.31a-c).

A consequence of this approach is that there are few dramatic, and dramatically uncomfortable, contrasts of light and dark in the Centre. The design employs a 'painterly' variation within a narrow spectrum, a theme that is continued in the artificial lighting in which a number of different lamps, producing relatively low light levels, combine to create an overall ambience. The clearest influence on the lamps is that of

Poul Henningsen's mass-produced 'PH' series. At Seinäjoki Henningson's principle of reflecting the light off variously shaped surfaces was maintained but with an extended repertoire of louvres, grilles and rods to distribute the light: the Aalto atelier never used fabric lampshades, as passing the light source through a membrane flattens the light (figs 5.32a-b).

These lamps are contextualised for specific rooms. The 'crown pendants' of the basilica are the only lamps that are designed with a concern for their formal appearance as well as illumination. Their scale and brightness against the matt white interior recalls many of the Protestant churches of both Ostrobothnia and Scandinavia (figs 5.33 and 6.20b). In contrast, in the Library reading room a whole variety of lamps are deployed solely according to the tasks they illuminate and the resulting ambience this describes. Up-lighters, in concert with the clerestory window, the vault, and pendant lamps, illuminate the functional areas of the library such as the control desk. Picture lights wash the faces of the books on the shelves, and individually adjustable desk lamps illuminate the upper level reading desk while brass desk lamps light the tables in the reading well (figs 5.34a-c). This attention to comfort is continued at the small scale, with black tiles used for many windowsills and black linoleum for tabletops to reduce glare; the linoleum also possesses a warmth and softness to touch.

The dominant finish of the interiors of the Centre is of white painted plaster, brick and concrete. This has the effect of reflecting and revealing light sources most effectively, particularly the delicate variations of light and shade that the windows and lamps produce. It also frames the occupants and their activities, and in the Library, the books as well. This structuring device would later reach its epitome in the foyers of the Aalto atelier's theatre and concert hall foyers (see Chapter 6). Where colour is introduced it is

mostly embodied within the materials themselves, as with the terracotta, birch and brass of the basilica, or it is introduced into the manufacturing process of a material, such as the glaze of the tiles or the ‘milk’ varnish of the furniture. The tonal range is restricted and the predominant use of birch avoids the rustic effect of knots and strongly marked grain, and so gives the furniture a calm, unified surface. Consequently, set against this foil, or boundary, moments of strong colour become highly charged, as with the stained glass window in the Chapel or the artist Juhana Blomstedt’s (b.1937) stage curtain (figs 5.35 and 4.25d).

Interior architecture became an integral part of the Aalto atelier’s work once Aino Marsio-Aalto provided leadership. This imbued their buildings with a comfort alien to so much of modernism, the atelier designing, or selecting from Artek’s catalogues, the soft furnishings that are necessary to inhabiting a space (figs 5.21 and 5.36). The Aaltos extended the ‘comfortable room’ of National Romanticism into the Classicism of the 1920s, with Alvar Aalto writing of how neo-classicism restored the interior to architecture as part of an integral whole, not as separate decorative taste.⁸⁷ The moment that the spectator physically engages with the Seinäjoki buildings are highly articulated to form sequences of touch, and it is possible to imagine Goethe’s ‘blindfolded man’ being able to sense the hierarchies and flows of the spaces at Seinäjoki through their tactile connection to the buildings:

“It might well be thought that, as a fine art, architecture works for the eye alone, but it ought primarily – and very little attention is paid to this – to work for the sense of movement in the human body. When, in dancing, we move according to certain rules, we feel a pleasant sensation, and we ought to be able to arouse similar sensations in a person whom we lead blindfold through a well-built house”.⁸⁸

Floors are consequently carefully wrought. The massive and roughly cast terracotta tiles of the basilica reinforce its suggestion of an exterior space until countered by the marble strips of the choir floor (figs 5.37a-d). The Town Hall's surfaces form a sequence that begins with the rough granite of the loggia, and continues with the smooth terracotta tiles of the lobby and stairs, before culminating in the intricate and highly polished parquet oak floor of the council chamber. Where the hand is in contact with the buildings, materials are richest and most refined. Staircase handrails are moulded to receive the hand and the supporting brackets are designed to ensure the hand does not have to be removed, even at junctions, strengthening the flow of the spaces. As with the furnishings, the handrails are considered in terms of thermal comfort and tactility. In the Theatre the wrapped leather surface of the handrails 'gives' to the touch of the hand and the striations endow a rhythm to the spectator's progress. The auditorium doors have black leather handles set against a sheer surface of black horsehair (figs 5.38a-b).

The Aalto atelier endeavoured not to use highly processed materials as they can obscure the 'essential' material nature and the marks of the hand that crafted them. Instead, they would use these traces to give a scale of human understanding to the space, most notably in the formwork revealed by the board-marking of the reading room vault, and the free variations of the Theatre's limestone floor.⁸⁹ Variations within the manufacturing process of standard elements, such as those in the glaze of the ceramic sticks or the wood of the Artek chairs, match the repetitive basis of their "elastic standardisation" to that of, as Alvar Aalto put it, "the blossoms on an apple tree [that] are standardised, and yet they are all different".⁹⁰

The majority of furnishings and details are built from a taxonomy of "elastic standards" (see Chapter 8). The bronze door-handles first designed for the Rautatalo are used for

all the main entries and where the flow of users is greater they are stacked on top of each other to respond to the wider variety of entrants, the burnishing of the bronze marking the passing of people over the years (figs 5.39a-b).⁹¹ Lamps, table, chairs, desks, grilles and so forth are all equally standard elements that the Aalto atelier evolved over the years and adapted to their specific location.

Chapter 6 TAXONOMIES

“Look upon these walls, these towers, these belfries and roofs, which rise above the verdure [...] They constitute a town, and, without seeking to know its name or know its history, it befits us to reflect upon it as one of the most worthy subjects of meditation that can be offered us on the face of the globe. Indeed a town of any kind affords the mind subject for speculation. The post-boys tell us this is Montbard. The place is unknown to me. Nevertheless, I do not fear to affirm, by analogy, that the people who dwell there, like ourselves, are egoistic, cowardly, treacherous, greedy and debauched [...] These ingenious animals, having become citizens, willingly impose on themselves privations of all kinds, respect the property of others ... and observe a modesty, a common but enormous hypocrisy, consisting in rarely speaking of what they think of continually”.

Abbé Coignard.¹

Abbé Coignard was the ironical hero of Anatole France’s *La Rôtisserie de la Reine Pédauque*, a book Alvar Aalto took on his own travels.² In a 1926 speech, *Abbé Coignard’s Sermon*, Alvar Aalto singled out Coignard’s suggestion of the scene of the traditional European City as a metaphor for the tradition of democracy and civic life; in which architecture could take the place of action and become a humanising cultural factor. As Alvar Aalto said, “Where the form is good, there the activity will usually also be good”, a situation that would only come about if, in their “honour and responsibility”, both artist and patron treated that fabric as a work of art.³

Like Coignard, Alvar Aalto accepted how his, and his fellow citizens’, failings could be redeemed by such a social construct; and like Coignard he accepted the enduring European city as a (divine) mystery under which laws governing public relationships created an harmonious city, “a city of the poor where the workman and the prostitute will not be put to shame by the Pharisee”.⁴ The Aalto atelier’s public works establish continuity with the traditional city and its public and civic life. In so doing, and acknowledging “a reliance on foreigners” for a sense of self, it repudiated modernism’s

anti-urban bias and its lineage dating back to Rousseau, whose arguments Alvar Aalto saw as superficially aesthetic (see Chapter 5).⁵ Whereas modernism oscillated between the domestic scale of housing and the abstractions of large scale urban planning, the Aalto atelier sustained the social dimensions of urban space, such as the city centre and the neighbourhood. A ‘middleground’ (what we might now call ‘urban design’) that has, for the most part had to be re-learnt in the post-modern era, but which for the Aaltos was a continuity of their education.⁶

Alvar Aalto argued that:

“Urban architecture still has an important task in reflecting the inner life of cities. It must ensure that the buildings represent that shared public life and the citizens’ shared spiritual needs – the needs to which a city owes its very existence – also form the city’s inner silhouette”.⁷

In their statement to accompany the Avesta city centre design (1944), Alvar Aalto and Albin Stark wrote of the need for public buildings to bind the townscape “together in a visual and representative manner – into an organic unit”.⁸ Their proposition was echoed in Alvar Aalto’s 1953 article, *The Decline of Public Architecture*, where he bemoaned the loss of the recognisable city centre that contained:

“the government offices to which all citizens had access or to which they were obliged to go [...] the community institutions, such as bathhouses, libraries, museums and, of course, all places of worship and sacred areas, churches, etc. Perhaps most important of all, they contained public areas open to all, squares, parks, and covered galleries in which all the citizens could gather, without segregation. These sites naturally included symbolic and representational public monuments and other such works. This immemorial Continental order has now been lost”.⁹

In the un-built sequence of the Oulu (1943), Avesta (1944) and *Forum Redivivum* (1947) plans, the attributes of Abbé Coignard’s dream were explored in a *malerisch* (painterly and picturesque) disposition of form and materials that structured an *Umwelt*

(surrounding world) of linked public spaces and diverse public activities over a unifying topography (figs 6.1a-c). With the construction of the Säynätsalo Town Hall (1949-52) the Aalto atelier achieved the ambience that Alvar Aalto hoped the citizen would recognise as part of a shared continuum of pre-industrial European civic life (fig 6.1d). An ambience that was structured by an architecture of convenience that suggested not how the local population lived, but rather how they might aspire to live. As Alvar Aalto quoted Abbé Coignard:

“what makes us joyful in seeing this town must be something other than its quarrelsome and ungracious inhabitants. My son, here is something that has come from above, which atones for the imperfections of the inhabitants”.¹⁰

Mirroring the morphological conception of its buildings, a dualistic structure of penetration and representation informs the design of the Seinäjoki Centre. The citizens of Seinäjoki experience the character of traditional public life in conjunction with their (idealised) participation in a number of (idealised) public activities. While the Inner Square is under the watchful eye of its surrounding institutions, equally it is a ‘public heart’, from which those public bodies derive their authority. Participation by the public is encouraged through the careful orchestration of their movement through the square and its circumscribing activities. A structure that is found throughout the Aalto atelier’s public works; for example at the National Pensions Institute in Helsinki where a public path runs through the building and its garden, to bind the ministry to the city and the neighbouring public park. In addition, the cafeteria, sited in an apparently freestanding building, was originally intended to be open to the public (fig 5.25).

While in principle such penetration exists in the Seinäjoki Centre, its location (over which the Aaltos had no control) at a remove from the existing commercial town centre to some extent reduces its influence; although the Theatre restaurant is open to all at

lunch-time and the Library, state and local offices provide a consistent non-commercial usage even when the 'event' spaces are not in use.¹¹ However it is consistent with Alvar Aalto's idealisation of the representational role of the town centre, in:

"Ancient Greece there were two agorae, one for the people and another for the traffic, horses, burros, etc., which were not allowed to come to the citizen's agora".¹²

Throughout the Aalto atelier's work there is little interest in the ordinariness of the street, or the socialised spaces created by modern patterns of consumption. Instead they idealise the civic and the domestic, and their associated public and private life; a dualistic structure that Alvar Aalto maintained in his own life. He lived and worked in the 'villa district' of Munkkiniemi by the Helsinki shoreline and then socialised in the institutions of Helsinki; reflecting the *elegantiae publicae, commoditati privatae* of Burckhardt's Renaissance.¹³

The Seinäjoki Centre's heightened representational status is as a set of public buildings built on the edge of the urban fabric from which anything profane is excluded. It is therefore the idealistic quality of the Athenian Acropolis, and that of the Piazza del Duomo in Pisa, that make them the most resonant of all the analogies that have been made in relation to the Seinäjoki Centre (figs 6.2a-b).¹⁴ The Acropolis, seen as an exalted city set above the everyday city, was a classical theme common to 1920s Scandinavia; and it was the silhouette of the Acropolis Strengell had identified as an ideal unifying the sky and the earth.¹⁵ In addition the west to east route that runs across the Seinäjoki Centre can be experienced analogously to the ceremonial and unifying Pan-Athenian Way (figs 6:2b and 5.6a-e).

This idealisation meant that Alvar Aalto seemingly contradicted what he had earlier praised in his experience of the Market Place of his childhood in Jyväskylä, and on his honeymoon in Italy:

“Arriving at daybreak in a town in which we have never been before, we realise that there are laws, traditions, customs and details in this hustle and bustle [...] If we make a cross-section of a hundred European towns, we find a thin thread running them which, in one way or another, follows the law of cause and effect. [...] Trading [...] could give rise to the phenomenon of culture”.

Alvar Aalto also recalled the ‘anarchic’ life of the Jyväskylä market square: “you Helsinki people can’t imagine the atmosphere that surrounds an autumn fair in a small town”.¹⁶

This evocation is, however, of an idealised vision of commerce, and one that pre-dates the anonymous consumerism of industrial cultures. A vision that the Rautatalo addresses through its repudiation of the wider commercial street space of Helsinki in favour of its civilizing framing of the casual encounters of urban life of its ‘hill-top’ *piazza* complete with a *café* and fountains. None of which were uncalled for in the original competition brief: “to everything its proper place” (figs 5.24a-b).¹⁷

The frequent use of Latin for the mottoes of the Aalto atelier’s competition entries communicates this honorific intention. The Säynätsalo Town Hall was called the *Curia*, and as already mentioned, the National Pensions Institute was called the *Forum Redivivum*. The building types that preoccupied the Aalto atelier after the Second World War were places of congregation or participation; libraries, churches, theatres, concert halls and town halls bound into the wider environment through a taxonomy of squares, arcades, loggias, plateaus and staircases. More specifically, it is the weathered condition of these types that Alvar Aalto appreciated; a state that made the formal informal, and hence more approachable, and that exaggerated the binding of the man-made and the

natural. William Curtis is therefore right to say that Alvar Aalto admired the Ancient Greek theatre as:

“the most ‘democratic’ of ancient building types, and for its essential ambiguities: civic, yet part of the landscape, communal, yet attuned to the individual figure; unified, yet linked to the wider world of nature”.¹⁸

But it is specifically the ruined state of theatres, bleached, fragmented and forming a material extension to their site, that he encountered and sketched on his travels that Alvar Aalto valued (figs 6.3a-c and 4.17). Consequently, such ‘amphitheatres’ appear in projects as diverse as the Helsinki Polytechnic, Aalborg and Baghdad Art Museums, and the Tiiimäki atelier (fig 9.2a). This is a lineage to which the stepped civic garden above the Inner Square at Seinäjoki also relates.

Alvar Aalto frequently added public spaces to the briefs of buildings even when they were not called for, so that the original *Forum Redivivum* version of the National Pensions Institute included an unsolicited auditorium to be shared with the adjacent Sibelius Academy. Similarly more informal gathering spaces appear in almost every proposal, for instance in the Rautatalo offices and the competition entry for the Vogelweidplatz Sports Hall in Vienna (1953), in which the Aalto atelier’s entry was the only one to provide a public square.

The Aalto atelier’s aims are modest, precise and, above all, pragmatic in trying to restore public life in the midst of a burgeoning industrial culture that seemingly no longer demanded it. Rather than trying to overcome and transform the conditions of modernity, the Aalto-atelier constructed ‘clearings’ within, or adjacent to, the socialised spaces of industrial life. When in 1952, Alvar Aalto ridiculed the much-praised new town of Vällingby (1952 onwards) in Sweden, it was to stress that it was not enough to empirically assess and mollify industrialised life, through either the singular gesture of

comprehensive development or the analogies of normative aesthetics, as so many postwar architects and townplanners attempted to:

“A great scientist [...] is taking his afternoon nap in an armchair at his exclusive club. He is awakened by a ray of afternoon sun, and finds himself face to face with a gentleman who is utterly unknown to him. Dr. *honoris causa* gets up, and still barely awake, bawls out thunderously: ‘Can you save me from Vällingby, sir?’”¹⁹

Rather, spatial patterns had to be created where people could be amongst others, recover their right to speech and action, locate their commonality and be reconciled with each other: an ideal that Alvar Aalto expressed through August Strindberg’s poem:

<i>Guldpudra vid järnkällan</i>	“Gold powder in an iron deposit
<i>kopparorm under silverlind</i>	copper snake under a silver linden
<i>det är buldrans gåta</i>	this is the wood nymph’s riddle.
<i>Det är din och min</i>	‘This is yours and mine’. ²⁰

At a time in the 1950s and 1960s, when the dimensions of mass-housing, and of production and consumerism, were beginning to dominate the planning of all aspects of Finland, Alvar Aalto’s reflective position in many ways matches Hannah Arendt’s later argument in *The Human Condition* (1958) in which she contrasts *animal laborans* and *homo faber* with the free citizen who participates in the *vita activa* of the city.²¹ At the Seinäjoki Centre, the Aalto atelier ignored those socialised spaces within which *animal laborans* and *homo faber* lose their self-determination. Instead, within the legible hierarchy of the city, they attempted to dominate them through forming idealised territories within which the citizen could partake, and evolve, a full public and private life. An *Umwelt* (surrounding world) comprised of the *vita activa* of the institution and the square, and a corresponding *vita contemplativa*, housed in fully private spaces.²² As Alvar Aalto put it in 1953:

“According to the traditional European view, cities were divided into two parts: on the one hand, housing districts, the name of which defined their function, be they of whatever quality, from slums to aristocratic neighbourhoods; and on the other hand, areas that were common to all, from the proletariat to the senators”.²³

The city centre was therefore vital, not only as the place from which all other areas of the town received their identity, which in part accounts for the (Semperian) ‘theatricality’ of the Seinäjoki Centre in relation to the rest of the town, but also as the place that restores the equality of participation in modern life to all citizens. The importance of these dimensions is reinforced by the Aalto atelier’s lack of interest in the anonymity of repetitive office or factory work.²⁴ In the office wings of the Seinäjoki Town Hall, Library and Theatre, as well as the State Office Building, the working environment is carefully executed, but is still similar to contemporary Finnish practice, with small offices opening off an artificially-lit central corridor (figs 6.4a-c and 4.19g-h). The Aalto atelier had a similar lack of interest in factory design: they were content to only shape the envelope and not to influence existing working patterns (fig 5.6a). It is only through the insertion of idealised public space, or connection to the natural world, that such activities can be ‘redeemed’, as at the Rautatalo in central Helsinki, where the inversion of a modern office building is reconnected to public life by wrapping it round a public square.

For Alvar Aalto the idealised nature of these ‘clearings’ where a public life would flourish had to be distinct from, yet form a continuity with, its physical and social contexts; justifying Robert Venturi’s remark that his work consisted of a “barely maintained balance” (see Chapter 8).²⁵ While the Aalto atelier’s consistent raising of its public spaces on a plateau above its surroundings might initially suggest a linkage to the *Stadtkrone* of Bruno Taut’s ‘Alpine Architecture’, they are not posited as alternative visions to their surroundings, but as extensions to them (figs 6.5a-c).²⁶ As the Chairman of SAFA, and with his conception of a “stewardship” of architecture as the defining responsibility of the architect, Alvar Aalto could equally hardly repudiate industrialised society and its consequences. Although he used his chairmanship to criticise politicians

and property speculators whom he saw as undermining the cultural value of architecture and public life, he understood the danger of thinking power over the built environment should only rest in the hands of architects. It was to architects that he addressed his remark about Modernism, that like any revolution it “starts with enthusiasm and it stops with some kind of dictatorship”.²⁷

Alvar Aalto saw reform coming through a wider consensus brought about through the values, and experience, of art:

“I have a feeling that there are many cases in life where the organisation of things is experienced as too brutal. The architect’s task is to make our life patterns more sympathetic”.²⁸

A statement he reinforced with his comment that “This harmony cannot be achieved by any other means than art”.²⁹ An aestheticism rooted in its persuasive capacity to affect the political, which Schiller articulated:

“I hope to convince you that this subject is far less alien to the need of the age than to its taste, that we must indeed, if we are to solve that political problem in practice, follow the path of aesthetics, since it is through Beauty that we arrive at freedom”.³⁰

And which, in terms of the natural sciences advocated in the 1930s, Moholy-Nagy reinforced:

“The biological base of space experience is everyone’s endowment [...] The definition of course must be tested by the means by which space is grasped, that is, by sensory experience”.³¹

Goethe’s opinion that only the artist, and artistic process could reveal harmony, was reinforced by the Finnish philosopher Yrjö Hirn (1870-1952), whose ‘theory of play’ Alvar Aalto uniquely credited as a direct influence on his work.³² In *The Origins of Art* (published in English, 1904) Hirn wrote of how art was a bodily, not a solely cognitive, experience in which the spectator imitates before they comprehend; and in which form takes on the role of a gesture to which a socially expressive response is a fundamental

impulse. This was a physiological apprehension of space of which, in relation to the city, Sitte had also written, and that was a feature of Walter Rathenau's *Die schönste Stadt der Welt* (The Most Beautiful City in the World, 1899) in which Rathenau argued that the total effect of the cityscape should be based on an intention to sway the conceptual existence of the spectator.³³

In the case of Seinäjoki this meant 'clearings' defined as much by the custom and habits of the citizens, and their capacity to shape the same, as by any formal aesthetic structure. A sublimated pattern in which the experience of enduring social institutions and spaces structures, informs and frames public behaviour; an environment in which socially beneficial patterns of behaviour are either encouraged to happen, or are represented in some way, and therefore legitimised and encouraged. A conception analogous to what Henri Lefebvre would later call 'social space':

"at once both work and material – a materialisation of social being [...] Architecture produces living bodies, each with its own distinctive traits. The animating properties of such a body, its presence, is neither visible or legible as such, nor is it the object of any discourse, for it reproduces itself within those who *use* the space in question, within their lived experience".³⁴ (Lefebvre's italics)

The Aalto atelier attempted to create such an *Umwelt* (surrounding world) through evoking a milieu that lies "between inventory and memory"; the uniqueness of which is discovered through the accretion of experiences acted upon it.³⁵ Activity was therefore central to the conception of their works; a correspondence between form and convenience that Alvar Aalto was aware of as early as 1925:

"Erecting a building without a real function is an act of monumental tastelessness [...] It can never be beautiful, for the beauty of a building does not depend on a set of proportions that happens to be in fashion and is considered monumental, but on a correspondence between form and purpose. A building must serve either god or man; it cannot be the shell of an idea, least of all an allegory".³⁶

An echo of Goethe standing in front of the aqueduct at Spoleto; “I always detested arbitrary constructions [...] Such things are still born, for anything that does not have a true *raison d'être* is lifeless and cannot be great or ever become so”.³⁷

Alvar Aalto agreed with Goethe about the need for function, but equally, like Goethe, he was equally opposed to a wholly teleological understanding of its nature. Art and nature have a sense of necessity. “The rational cannot always be said to be beautiful; but the beautiful is always rational”, but it is not an immediate purpose that defines them, for “Whereas the necessity of nature is a must, that of art is an ought”.³⁸ Function is not just the mechanistic *Sachlich* (“thing-ness”) but more a *Zweckmässigkeit* (purposive intention) that forms a setting for, and frames, human activity; something that is premised on an active relationship between the spectator and the object.³⁹ A staircase can be just a functional means of getting from one level to another, or, a structure that binds buildings and topography, conditions the individual’s approach and experience of the building, and acts as a place for social encounters.

In Paul Frankl’s *Die Entwicklungphasen der Neueren Baukunst* (Principles of Architectural History) *Zweckmässigkeit* (purposive intention) forms an aesthetic category alongside those of spatial composition, treatment of mass and surface and optical effects. These four definitions are based on those elaborated by the Viennese Alois Riegel in his influential 1901 book *Spätromische Kunstindustrie* (Late Roman Applied Arts) which placed art in the service of idealism and in which:

“the work of art can be seen as a result of a definite and purposeful *Kunstwollen* (immanent style force), which makes its way forward in the struggle with function, raw material and technique”.⁴⁰

This conception led Frankl to categorise a history of architecture based on a chronology of four phases, each defined by a unique *Kunstwollen* (immanent style force) that was a:

“spatial organisation [that] creates personified forms capable of their own movement or stasis independent of and obviously superior to the action we may choose within the building”.⁴¹

This impressionistic interpretation, and definition of architectural history in terms of what buildings effect in the spectator, rendered the Baroque as the second phase of the Renaissance; as a period in which the spectator is caught up in a “whirl” of movement that displaces the “happiness” of the calm, static first phase.⁴² It therefore, quite logically, recast Andrea Palladio (1508-1580) from the Renaissance to the Baroque; for while his buildings might be geometrically chaste, their fugal sequence of spaces shares an underlying *Kunstwollen* (immanent style force) with the more sculptural works of Borromini.⁴³

Camillo Sitte reinforced this interpretation in his writings on the city, a view that was taken up by Strengell, amongst others.⁴⁴ The separation between effect and appearance was critical to the Aaltos’ formation of an architecture and urbanism that could restore the traditional patterns of European civic and public life, but that could take advantage of the possibilities of modernism’s compositional freedom. This differentiation between object and intention coloured the Aalto atelier’s approach to other issues such as physical and historical context, artistic signature and architectural ideologies. An individual building could be of little consequence to overall experience on its own, it was only through designing in harmonious relation to circumstance that an empathetic environment could be created.

Alvar Aalto could be brutally indifferent to the fate of individual buildings if they were no longer ‘fit for purpose’ as it followed that, once the original purpose of a building or space was superseded, it lost part of its aesthetic for the contemporary spectator. He therefore supported the demolition of Mammula, the house he had designed for his

parents in 1918, and the Kinopalatsi, an historic cinema on the site of what is now the Academic Bookshop in Helsinki, as in his opinion their loss did not affect their overall milieux.

In contrast, in consideration of the wider environment, the Aalto atelier's designs were carefully nuanced in their siting in relation to their hierarchical role. Even apparently autonomously composed buildings such as the Viipuri Library and Enso-Gutzeit headquarters reveal this. The former cubic forms were modelled to imply an implicit relation to the neighbouring (and since destroyed) Cathedral's apse and transept (fig 6.6). The latter, overlooking Helsinki's South Harbour was kept deliberately low, despite the building permit allowing for an additional two storeys, so as to act as a 'table' to set off the 'flowers' of the Orthodox Uspenskij Cathedral, a building that Alvar Aalto purported not to admire, but whose urban role he acknowledged (fig 8.1b).⁴⁵

The Aalto atelier regarded the role of the public institution in the life of the city as primarily that of a social phenomenon, and they attempted to turn it into a fragment of an extended city fabric; a series of settings and representational spaces within which the citizen acts, and is acted upon. From the 1924 entry for the Finnish Parliament onwards, the Aalto atelier broke down design briefs into their major constituting elements (figs 6.7 and 6.24a). Each of these elements equated to a major public role (debating chamber, library and so forth), which were then assigned to independently expressed masses that would be arranged so as to describe, and in return receive a grounding from, a public place which invariably incorporates the natural world as well. The most sophisticated example of this was previously mentioned *Forum Redivivum* scheme in Helsinki for the National Pensions Institute, which dissembled an entire ministry into the tissue of the city (fig 5.12).

At Seinäjoki, the hierarchically important closed forms of the ‘event’ spaces are offset and framed by less important and indeterminate structures that, malleable and expandable, locate the ‘event’ spaces in precise relation to the public space of the Inner Square and churchyard, thereby orienting the individual. The one major space that does not conform to this, but nevertheless confirms the humanist intentions of the Centre, is the District Court Room housed in the State Offices building. This remains undeclared to the Inner Square, an apparent sympathy with those attending the court taking precedence over any expressions of the ‘dignity’ of the law (fig 6.8a-b).

The Seinäjoki Centre’s townscape is at one level simply a declaration of *Zweckmässigkeit* (purposive intention) to create an *Umwelt* (surrounding world) in which socially beneficial patterns of public life would burgeon: there are no allegories, just the visible world made legible; which precludes attempts to analyse it solely on the basis of its phenomenal and compositional aspects, which can only suggest a syntax but no sense of propriety.⁴⁶ As Demetri Porphyrios has written:

“Aalto’s buildings always pointed to the realm of the befitting: the socially befitting, the befitting of customs, traditions, aspirations, ideas, beliefs, mythologies or dreams; that immaterial realm of ideologies without which we would be incapable of reflecting upon the material modes that sustain our lives”.⁴⁷

Through the weighting of their presence, the buildings’ relation to each other and the city extends the “synthetic landscape” into the social dimension.

Consequent to this, the public spaces imply as much as they describe and forms are cast to suggest purpose rather than mimic function. A persuasive ambience structures the ‘event’ spaces of the Seinäjoki Centre. None affords a view out, so that the focus is entirely on the activity, and on the citizens engaged in that activity.⁴⁸ Introspection is

coupled with hidden light sources, sparse and austere decoration and finishes that act as a mute backdrop to the colour and animation of the spaces' users; ranging from the subdued textiles of the council chamber to the matt white of the Library reading room to the bright white veiling of the basilica to the black of the Theatre auditorium.

Qualities of concentration and plainness that recall Goethe's instruction to the architect stimulated by the ruins of the amphitheatre in Verona:

"When something worth seeing is taking place on level ground and everybody crowds forward to look [...] some stand on benches, some roll up barrels, some bring carts [...] some occupy a neighbouring hill. In this way in no time they form a crater [...] To satisfy this universal need is the architect's task. By his art he creates a crater as plain as possible and the people itself supplies its decoration. Crowded together, its members are astonished at themselves [...]. this many-headed, many-minded, fickle blundering monster suddenly sees itself united as one noble assembly, welded into one mass, a single body animated by a single spirit".⁴⁹

The 'event' spaces may have a connection to Goethe's instruction, but it is in the manipulation of the foyer spaces of the Seinäjoki Centre as frames for human activity that the Aalto atelier attempts to make this "noble assembly" most aware of itself, and the public-minded spirit which has formed it. The most elaborate is that of the Theatre which was the last of a sequence of theatre foyers designed by the Aalto atelier around the ritualisation of the simple acts of removing one's coat and taking one's seat (figs 4.2d-e).⁵⁰ On entering the foyer a sinuous cloakroom bench sets off the Euclidean geometries of the auditorium's rear wall and the foyer's external wall (fig 6.9a). Spectators disrobe and hand over their coats before entering the large scaled social spaces overlooking the Inner Square to socialise, eat and drink, before ascending to an upper foyer in preparation for entering the auditorium itself. The light-coloured surfaces of the foyer are painted and constructed in a narrow tonal range of whites and greys, to

act as a foil to the brilliant colours of the audience and its dress, as well as to foreground its behaviour. In addition it contrasts with the dark colours of the auditorium.

This conception of the foyer as an incorporative “synthetic landscape” that merges institution, city, landscape and social assembly is more convincingly realised at the larger scale of the Finlandia Hall (fig 6.9b). There, after divesting themselves of their coats, the audience mount an exaggeratedly wide staircase that merges with the inner landscape of the main foyer, over which, as at the Essen Opera House, the upper balconies of the auditorium project to emphasise the equality of the theatrical and social performances of the two spaces (figs 6.10a-c).

The abrupt threshold formed by the narthex of the church is in complete contrast to the expansive Theatre foyer. An interstice between two worlds, it is a sharply defined break between the churchyard and basilica whose power is commensurate with its contrast to the scale of both, as well as its emulation of the tight, and often unlit, entry spaces of traditional wooden Finnish churches (figs 6.11a-c). This tension is augmented by the sensuality of its treatment; the floor is flat and is therefore experienced as a ‘landing’ between the sloping surfaces of both the churchyard and the basilica, while the massive copper-clad doors, the roughly textured floor and darkness all involve bodily senses in marking the transition.

In the basilica itself, the rhythmic form of the ‘acoustic’ vault, derived from the 1930 competition entry for the Tehtaanpuisto Church competition in Helsinki and repeated in the Lahti Church competition of a year earlier, emphasises the directionality of the space. This is an example of Alvar Aalto’s desire to achieve a visualisation of acoustics so that the occupant can experience, and empathise with, the ‘sounds’ of the space even

when there is silence; as Kalle Leppänen the site architect of the Finlandia Hall (infamous for its poor acoustics) commented, “Aalto said, a human hears with his whole body”. Unfortunately, and perhaps predictably, in serving this intuitive idea, the acoustics within the Seinäjoki church have dead-spots.⁵¹ But Alvar Aalto was not interested in correcting the fault, as this would have disturbed the visual, that is, architectural acoustic, to quote Manu Kitunen, site architect of the House of Culture: “They could have built the acoustic reflectors already in those days, but Alvar didn’t approve of them, of ‘adjustable architecture’”.⁵²

The insistence that just as the visual world can be made legible, so the invisible can become visible, corresponds with the persuasiveness inherent in the conception of a *Kunstwollen* (immanent style-force). It also recalls the last act of Goethe’s *Italian Journey* in which Goethe paid homage to Raphael through studying his skull. Goethe declared how all lovers of Nature would wish for a cast of something “wonderful to look at – a brainpan of beautiful proportions and perfectly smooth.”⁵³ More immediately it may reflect Albert von Thimus’ *Die harmonikale Symbolik des Altherthumss* (1868) with its concepts of *akustische anschauung* (acoustic seeing) and *audition visuelle* (visual hearing) that was known in Finland in the 1950s, and that was a particular influence on Alvar Aalto’s colleague Aulis Blomstedt’s Pythagorean harmonies.⁵⁴ Alvar Aalto had used light rays to test acoustics ever since the Viipuri Library, even though they perform entirely differently to sound waves. It is where such visual analogies are pursued in the face of contradictory sensual or empirical evidence that the major functional failings of the Seinäjoki Centre, and that of other buildings of the Aalto atelier, occur (figs 6.12a-b).

The Aalto atelier’s attempts at ‘traffic solutions’ are a similar misapplication. Alvar and Elissa Aalto adopted the liveliness of the crossroads in Palermo’s Quattrofontane

square as an analogous justification for a “star-shaped motor square” that was proposed for the crossing of Koulukatu and Kirkkokatu in Seinäjoki which if built would have been a deserted (as well as wholly unneeded) traffic junction (fig 6.13).⁵⁵ The unbuilt Helsinki Centre Plan (1959-73) is seemingly a result of Alvar Aalto’s repetition of Le Corbusier’s analogy of Venice as a city with a perfect separation of vehicular and pedestrian life.⁵⁶ The design is committed to the complete removal of the car but in so doing creates vast, empty pedestrian terraces and a tortuous and space-consuming series of vehicular underpasses, ramps and car parks (figs 6.14a-b).

That this does not occur more frequently in the Aalto atelier’s deployment of historical precedents, on which so much of the Seinäjoki Centre’s is premised, lies in the Aaltos’ belief in the metaphoric capacity of historical forms to convey ambience. The treatment of auditoria is revelatory of this. At the Helsinki Polytechnic in Helsinki the realised, and ‘iconic’, form is wholly different from that of the original 1949 competition entry. In the competition drawings the auditorium was an enlarged version of the Säynätsalo Town Hall council chamber, and its realised form only emerged in the mid-1950s, apparently stimulated by Alvar and Elissa Aalto’s visit to Delphi in 1953 (figs 6.15a-d).⁵⁷ The slippage between the forms, and the immediate function of the space that they enclose, was clearly of no concern to the Aaltos. What prompted the change from the original to the realised form was an understanding that the citation of the participatory space of the Greek theatre could, in the context of the academic audience of the Polytechnic, contribute to the honorific *Zweckmässigkeit* (purposive intention) of the institution more effectively than the original.⁵⁸

Seinäjoki presented a very different audience from that of the Polytechnic and similar classical citations would serve little purpose. But while there are no direct references to

Ancient Greece, the auditorium is devised to evoke the interaction that characterised the Hellenic theatre, or more precisely the supposed ambience of that theatre that its ruins suggested to the mediated gaze of the Aaltos and their peers. In the various versions designed between 1961-8 the Seinäjoki auditorium has a tight radius and marked asymmetry so that the spectator would have a different experience each time they visited, and be as aware of their fellow spectators as they were of the stage (fig 4.17a). The earliest versions wrap the audience around an *orchestra*, or thrust stage, and even in its more conventionally realised form, the proscenium is suppressed to merge the audience and actors. This dynamic atmosphere is further charged by the treatment of the auditorium ceiling as a night sky hovering above the highly sculpted wooden forms of the walls which can be read as the canopy of trees arising over stone buildings (fig 6.16a). In addition to allusions to Greece, the fragmented nature of the space relates to the Finnish tradition of outdoor summer theatre and auditoria, a number of which the Aalto atelier had earlier designed (fig 6.16b). It is the loss of these metaphoric qualities that underlies the flatness of the experience of the realised Seinäjoki Theatre auditorium.

As it engaged with *Zweckmässigkeit* (purposive intention) and the existing milieu, so the Aalto atelier's conception of the *Umwelt* (surrounding world) is engaged with the past as tradition. That is to say, with patterns of collective wisdom that have evolved over time, be it at the scale of a Karelian farmstead, the Greek agora or the milieu of the Italian hill-town. It is the typicality of use that those places embody that is valued, not the historicist value of their appearance. As Alvar Aalto put it:

“Both modernism and traditionalism thus operate in their different ways beyond the pale of topical issues, and any attempt to set up either as the mirror of its age is futile. By the same token, their real significance to society and its form world is negligible”.⁵⁹

The forms of architectural history were valued as a means through which the spectator can establish continuity with an earlier stage of historical development, but only if their

Zweckmässigkeit (purposive intention) still sways the spectator. For Alvar Aalto the relation between ambience and necessity were complementary. If a place still has an affective grip on us, so it must fulfil a continuing need, as with:

“Siena’s ‘three lions’ – the narrow Town Hall tower, the black and white façade of the *Duomo* and, highest up, the *Fortezza* - give the city a face that contributes to making life for its people more pleasant”⁶⁰

This partial, and pragmatic, view of history allowed the Aalto atelier to stay within the evolving narrative of history, that is within humanity. This contrasts with those 20th century architects who, rejecting or accepting history as a totality, were thereby restricted to the use of either subjective or supposedly normative aesthetics in relation to it.⁶¹ In assessing Le Corbusier’s *Pavilion L’Esprit Nouveau* with Fra Angelico’s *Annunciation*, Alvar Aalto chose to simply ignore their chronology and praised them as incorporative spaces that act as frames to their inhabitants, and as “latter day classicism [...] the formation of these elements [...] gives the human figure prominence and express her state of mind” (figs 6.17 and 3.24a-b).⁶²

Many of the sources through which the Aaltos’ view of history was mediated were similarly idealising and pragmatic. But whereas Burckhardt and Goethe had taken history for granted as a part of architecture’s compositional constitution, the modernist and painterly Alvar Aalto was unbound compositionally. He was interested only in a conformity of sensations and sentiments that made history a felt present.⁶³ A key influence from the late 1940s onwards was Ernesto Rogers, the editor of first *Domus* and then *Casabella* (to which he had appended the suffix *continuata*). Rogers articulated the necessity of a dialogue between past and present and the rooting of architecture in *continuata*:

“a dynamic carrying on, not a passive imitation [...] No work is truly modern which is not genuinely rooted in tradition, while no ancient work has a modern meaning which is not capable of somehow reflecting our modern temper”.⁶⁴

When Rogers commissioned the first of two essays from Alvar Aalto, *Archittetura e arte concreta* (The Trout and the Mountain Stream) in 1947, it was as the leading article for his farewell (*saluto*) edition of *Domus*. In contrast to the professionally oriented *Arkkitehti*, Rogers' *Domus* freely mixed the past and present, sculpture, poetry, theatre, literature, music, painting and townscape to suggest the ambience of a particular way of life; the *Zweckmässigkeit* (purposive intention) of the European City.⁶⁵ The critical aspect of the history of the city was not its physical context but the experience of an “historical continuity manifested by the city and existing in the minds of its inhabitants” which Ernesto Rogers called the *preesistenze ambientali* (surrounding pre-existences). It was a theory that endowed the legible forms of the city with the role of anamnesis and, more than any conscious cognition, brought to mind the sensual and immediate apprehension of a common ambience.⁶⁶

It was in shaping these sentiments into an empathetic experience that the task of modern architecture lay, rather than in any individual aesthetic conviction. *Viaggio in Italia* (Italian Journey, a self-conscious echoing of Goethe), the second article commissioned from Alvar Aalto by Rogers, was published in *Casabella-continuata*, and it was illustrated by examples of the Aalto atelier's work that seemingly exemplified Roger's argument of *continuata* (fig 6.18). Unlike in post-war Finland, the life of the Italian towns that Alvar, Aino and Elissa Aalto experienced on their trips still matched their mediated ideal of the “sacred order of the Continent”. They exhibited an historical continuity, a living mine of *preesistenze ambientali* (surrounding pre-existences), from which to fabricate the *Umwelt* (surrounding world).⁶⁷ Alvar Aalto wrote:

“Neither the sentimentalism of so many critics nor my studies have sent me on my Italian journey. [...] For me Italy means primitivism unexpectedly qualified by an attractive form on a human scale”.⁶⁸

Despite the adoption of the principles of the CIAM Athens Charter in many quarters, the generalised Mediterranean hill-town also survived in differing forms in sections of post-war architectural discourse. For instance, Lewis Mumford continued to refer to the Italian hill-town as an archetype, and Eliel Saarinen’s *The City* (1943) was illustrated with silhouettes of Italian hill-towns similar to those in Sitte’s work, albeit linked to studies of biological tissue. By the time the Aaltos visited Bergamo with Ernesto Rogers in 1947, following their attendance of the May CIRPAC meeting in Zurich, it had also reappeared, alongside the issue of the “core” of the city, at the centre of CIAM’s concerns amid worries about the absence of a “solace of suggestiveness” in the functionalist city. The immediate cause of this seems to have been the reconstruction of the centres – the historic public areas - of so many of Europe’s war-ravaged cities. A task which the doctrines the Functional City seemed alien to.⁶⁹ At CIAM 6 in Bridgewater in 1947 “the man in the street” was already being mentioned, and four years later at CIAM 8 in Hoddesdon the title of the conference was ‘The Heart of the City’. Rogers led a session entirely dedicated to Italian Piazzas and (re)introduced the idea of the *flâneur* to the Functional City.⁷⁰

In his introductory speech to CIAM 8, José Luis Sert quoted Ortega Y Gasset on the need for “natural elites” (that is, architects) to determine the “rebellious field” of the square as a communal space to accommodate men “freed to themselves”.⁷¹ *Archittetura e arte concreta* (The Trout and the Mountain Stream) made plain, however, Alvar Aalto’s opinion of the limits of the architect’s emancipated knowledge in formulating designs that would include a sense of continuity and common recognition. Any political volition

willed by the artist needed to be balanced with, and communicated through, the materialist and experiential freedom of the individual experiencing the public space.

Thus in Seinäjoki there is none of the overt paternalism that Sert promoted, an approach that would in any case be self-defeating as it would either impress a pre-conception and past forms of congregation, or abstracted and subjective new ones. Reconciliation had to be left to individuals and their interaction with each other and the environment.

Alvar Aalto was frank about his inspiration for the Seinäjoki spaces, which were familiar from his own experience, and that of Goethe and Abbé Coignard; “We find the most original and strongest forms in Delos and Athens, the Roman Forum and nearly all Italian and most French towns”.⁷² The loose precincts of discontinuous individual structures surrounding the churchyard and the Inner Square are akin to the experiential qualities of the Hellenistic *agora* and *acropolis* than a more geometrically defined square or forum. Hellenic Greece provided a democratic structure to match the values of the post-war Second Republic. This is a reading reinforced at the Seinäjoki Centre by the way that hierarchically important spaces are presented as closed objects equivalent to *cella*, which are then reconciled with the external public space through foyers equivalent to the *pteron*. The inclusion of landscape in turn is a reminder of the Greek *agora* and *acropolis* as topographical compositions. The entire composition can be seen as an expression of *sophrosyne* (balance) where autonomous buildings sited on a *temenos* are in precise relation to their site, other buildings and the personified landscape. “Know thyself” and “nothing in excess” expressed in an architecture of dialogue and reconciliation in which a free distribution of regular buildings is equivalent to individual values in a generalised system.⁷³

Complementarily the formation embodies the harmony of the Italian mediaeval townscape or mediaeval Porvoo. There is nothing in the freedom of its modernist appearance that dictates to us what it might stand for. An attitude that was most succinctly expressed by Tetsuro Yoshida's invoking the poet Matsuo Bashō; "One should never imitate what has been inherited from one's forbears, but should strive after that for which one's forbears strive".⁷⁴ There is no question that the inhabitant of the Seinäjoki Centre is part of an identifiably civic place that forms part of a tradition of topographically responsive democratic urbanism, and that it is a precisely composed and no mere 'accidental' assemblage. But the *Zweckmässigkeit* (purposive intention) is only implied and is completed by the spectator's presence and interaction. A tradition that would have been more successfully conveyed if the Theatre had been constructed according to its original design in which the main foyer opened onto a terrace overlooking the Inner Square (fig 4.20c). This terrace would then have formed a third hill, or at least foothill, that taken together with the stepped garden of the Town Hall would have formed an informal "crater" akin to that advocated by Goethe. Once this terrace and its supporting earthworks were removed the difficulties of facing the Inner Square with a closed, if partially transparent wall, led to the least satisfactory relationship of any of the buildings to the external spaces.

In addition to the scenic qualities of the Aalto atelier's work at Seinäjoki, the consistent recurrence of type is the clearest indication of how Alvar Aalto maintained history as a source for architecture. The Aalto atelier's use of type is not so much an example of typology, of the use of 'general types'; whose abstraction would be at a remove from the experience of most citizens. Rather it is the evolution of forms in relation to typicalities of use and inhabitation as part of an emerging *Umwelt* (surrounding world). Type is therefore located in the social sphere, even if it was to be through aesthetic, or rather

bodily, apprehension that they would be experienced. The Aalto atelier accordingly developed a taxonomy of types and stylistic tropes that, according to their location, could be experienced through conceptions of thought, social relationships and physical experience; a “dynamic stimulus” that revealed new contents (see Chapter 8).⁷⁵

The liturgical ritual of the Lutheran Church was the least modified over time of any of the programmes at the Seinäjoki Centre and hence its form is little changed from the traditional forms of that rite. The scale of the tower is visible from tens of kilometres away. A form that, together with the large scale of the Church, matches the experience of the Finnish Lutheran practice of building a single large church to serve an entire district with a dispersed rural population, rather than many smaller ones. A church, basilican or cruciform in plan that, together with a freestanding belfry, acts as a crown to the *kirkonkylä* (church-village) and the surrounding district of smaller villages which it serves.⁷⁶ Likewise the simple volumetric geometry, sparse decoration and restricted palette of greys and whites reflects many of the other churches of Ostrobothnia, including that of C. L. Engel at Alajärvi, which Alvar Aalto had painted repeatedly and in obeisance to which the Aalto atelier designed the Town Hall (figs 6.19a-b). Internally the rhythmic concrete vault of the Seinäjoki Church relates to the rhythmic wooden vaults of the same buildings, and like them the complexity of its interior shell is in contrast to the simplified exterior form, and so heightens the drama of passing from the locality of the exterior into the vicinity of the interior (figs 6.20a-b).

It is notable that the Church is the only space at the Seinäjoki Centre to employ mirror symmetry; and that it is those congregational elements of the space not ‘directed’ by the clergy, the narthex, organ and choir, that reassert asymmetry (fig 6.21a-b). For Alvar Aalto, who never went to church, the Church’s importance was as a social

phenomenon, which made the *kirkkonkylä* (church village) churches even more appealing to him (see Chapter 9):

“In ancient days building a church was a major event for the whole parish. Such an undertaking required considerable economic effort. The crafts were not as specialised as they are today; every citizen had something of the builder and artist in him. In other words, everyone knew what it was all about. It was easy to point out the man who was best suited to direct the work. The result was therefore a real work of art”.⁷⁷

A view he inherited from Goethe:

“Religion [...] stands in the same relation to art as any of the other higher interests in life. It is merely to be looked upon as a material, with claims similar to those of any other vital material [...] A religious material may be a good subject for art, but only in so far as it possesses general human interest”.⁷⁸

From the unbuilt Jämsä church project (1925) onwards, the Aalto atelier utilised the brief of a church and its ancillary parish rooms as an opportunity to create a civic place (figs 6.22a-d). At the Seinäjoki Centre the churchyard and the Parish Centre bind the mass of the church to the site and, as recast by the subsequent construction of the Inner Square, places it between the secular world of the city and the natural world of the park. This would have been even more powerfully achieved in the proposal to close Kirkkokatu and create a third space between the Inner Square and churchyard (fig 4.26a).

Internally the splayed lateral walls, in combination with the sloping floor, have the effect of exaggerating the length of the church when looking towards the altar and pulpit. In contrast, in turning to face the rear of the church, the space is foreshortened. While bringing the communal element of the choir loft into a more intimate contact with the congregation might be intentional, the distancing and aggrandising of the priest and sacrament make it seem that the effect of the splayed plan might be an error of believing that the funnel shape of the plan would foreshorten this dimension, when the reverse is the case. A result perhaps of an hubristic attachment to a self-declamatory ‘acoustic’

form the Aaltos developed for their first functionalist church designs in the late 1920s, which two surviving early sketches indicate Alvar Aalto also investigated for use at Seinäjoki (fig 6.23).

The type and typicalities of use available to the design of the Church, Theatre or Town Hall did not exist for the Seinäjoki Library. Although Alvar Aalto believed that “the place of libraries in our civilization remains constant”, a new type was needed for a modern public lending library that nevertheless evolved from an understanding that:

“The problem of reading a book is more than a problem of the eye [...] Reading a book involves both culturally and physically a strange kind of concentration; the duty of architecture is to eliminate all disturbing elements”.⁷⁹

The first library designed by the Aalto atelier had formed part of their entry for the Finnish Parliament competition of 1924, and was apparently modelled on the *ekklesiasterion* at Priene; a citation that reappeared in 1951 in the ‘model’ classroom designed for the Jyväskylä Pedagogical Institute (figs 6.24a-b). Along with Asplund’s Stockholm Public Library (1924-8), this type informed the competition-winning scheme for the Viipuri Library. Allied to these formal elements the atmospheric qualities of the Viipuri Library’s “interior landscape” of an illuminated ceiling (the sky) admitting ‘shadow-free’ light onto the bookshelves and various reading levels (plateaus and ravines) below, stems from more metaphoric correspondences (fig 6.25). The act of reading a book in the open air, under a tree or in the top-lit grove suggested by Henri Labrouste’s Bibliothéque Nationale in Paris (1862-8).⁸⁰

The reading room of the Library is the most sophisticated space of the Seinäjoki Centre. A landscape in which reading is the vision of the library and the building type possesses no autonomy from that experience; a convenience implied by the absence of picture windows from the reading room. Through a deliberately mute entrance screen set into

the 'table' of the building the reader enters a low-ceilinged terracotta-floored hall, adjacent to which the newspaper room, the most casual of the reading spaces, is set. At either end of the 'table', set quietly apart, are placed the music room and the children's library. Crossing the hall the reader encounters the reception and control desk and then emerges into the fan-shaped reading room, the 'flower', a transition marked by the terracotta-tiles giving way to a polished wooden floor. While the position of the desk is a pragmatic necessity for surveying spaces and lending books, the experience of the desk is more ambiguous than the panoptical qualities implied by the building's plan (fig 4.16c), as it is open, even vulnerable, to the surrounding space with a low 750mm counter height (figs 9.7a-c). Overhead a concrete vault is sculpted into three forms, each with its own surface treatment. The first of these, smoothly plastered, sweeps 'back' over the control desk to a small north-facing roof window that spills even light onto the surface and onto the desk below. The next two sections of the vault are supported on a regular radius of columns that meet the louvred clerestory window of the cranked and irregular south-facing wall (fig 6.26). The louvres prevent any glare, while admitting southern light onto the vaults, which is then reflected down onto the readers below. Their spacing however permits the sun's rays, when it is just above the horizon, to strike the vault surface, animating the space and reconnecting it to the natural world (figs 5.31a-b). These sections of the vault have white painted board-marked concrete surfaces. Beneath, in the shadow-free illumination, are the settings within which readers situate themselves to match their particular relationship to the books. Radial wooden bookcases form three-sided cells for browsing. These open to a continuous reading desk for casual reading that surrounds a reading well, entirely walled in books, that is let into the reading room floor for more concentrated reading; whilst a door to the side leads to a dedicated study room (figs 5.34a-c).⁸¹

Chapter 7 PLAY

“Modern society is characterized by an exaggerated worship of theory, an attitude that reflects the human predicament and insecurity. We think that in it we can find salvation from the threat of chaos. But we must realise that pure theory without feeling cannot create anything. You cannot set up series of methods applicable to the most varied circumstances; only intuition can help here. Let me put it this way: theory and methodology should form a basis for an intuitive working method. The question is not which dominates the other, but how to co-ordinate them.

Method is not the antithesis of art, not its enemy but its prerequisite”.

Alvar Aalto¹

It is a received wisdom of much architectural practice and criticism that design consists of two distinct stages; firstly the exploration of a project’s content through various forms of sketching (*poiesis*), and then a further productive phase in which content is dissolved and technique achieves an autonomy in which “only what can be produced is real” (*techne*).² The Aalto atelier was, to a significant extent, able to avoid this split and to retain its representational practice as part of a continuous process of cultural formation. It is this practice that the next three chapters set out to describe. A suggestive approach to practical situations in which the situated knowledge that underwrote the convenience of a scheme, as described in Chapters 5 and 6, was never allowed to be overcome by productive forms of knowledge. This was an approach in which the Aaltos engendered experimental opportunities and ‘play’ to explore communicative environmental relationships, from which they then developed types and tropes that could be adapted to varying circumstance (Chapter 8).

The Aalto atelier’s approach to representation and design was rooted in the representational conventions prevalent in Finland from the late 19th century onwards; conventions disseminated through the single Polytechnic school, architectural practice and above all through the opportunities that architectural competitions opened up. This

was an inheritance the Aalto atelier was highly skilled in manipulating, most obviously in the competitions that they entered. Unlike commissions, competitions promoted an autonomous description that freed the designer from detailed constraints, and matching this, when undertaking a competition, Alvar Aalto would select a small group of staff to work with him, usually in the atelier at the Aaltos' home on Riihitie, a five-minute walk from the main atelier at Tiilimäki. Competitions would be carried out in "idyllic and calm conditions" away from everyday bustle, reinforcing their special status as moments of pure design skill.³ Another consequence of the competition system was to produce an idealised client from the hopes and needs sparsely described in the competition brief. In the case of public buildings, the Aalto atelier's interpretation was to create an overarching *Zweckmässigkeit* (purposive intention), a social construct that guided their design decisions. At Seinäjoki this is evident above all in the Inner Square and churchyard, spaces which were incidental to the functional descriptions of the respective competition briefs.

Aside from undertaking the regular 'risk' of competitions, a chronological survey of the Aalto atelier shows it marked by periods of productive work and by distinct phases of exploratory and experimental work that previous studies of the Aalto atelier have overlooked. Firstly, because the experiments were material rather than theoretical in nature, and secondly they were directed towards the Aalto atelier's constructions rather than any independent architectural theory or body of knowledge. Indeed, the pragmatic nature of these phases is stressed by their coming about as much as a response to circumstance, rather than because of any pre-meditated consideration (see below). Secondly, because of the 'tidying up' of the narrative of Finnish architectural history which has stressed the unified certainties of a continuously unfolding architectural production (see Chapter 1). I will argue that, instead of attempting to identify Alvar

Aalto's career as one of a linear development to a consistent 'mature style', it is more helpful to see it as an artistry reflexive with circumstance, and to accept the vagaries and complexities that go with this. I will also argue that the Aalto atelier's work is characterised by distinct rhythm of periods of play followed by periods of architectural realisation; rhythms which amount to a praxis of the exploratory and the prolific, and which are rooted in a materiality and play common to both.

The first experimental phase was the period from Independence to Alvar Aalto's move to Jyväskylä in 1923. A period that included his education at Helsinki Polytechnic, but that was characterised by his work as a painter and as an art critic, with only sporadic architectural projects. It was from these activities, together with the mediations of his teachers, painters, and architectural peers, as well as his travels to Sweden, that Alvar Aalto conceived of a politically and emotionally charged humanised landscape; which the work of the first atelier in Jyväskylä characterised in the scenographic neo-classicism of projects such as the Jämsä church (1925) and the League of Nations entry (1926, fig 5.17).

The second experimental phase followed the Aalto atelier's victories in the Viipuri Library and Paimio Sanatorium competitions in 1927 and 1929. With the onset of the economic depression of the 1930s, other than the realisation of these two projects, the Aaltos' had very little architectural work until 1936. The period was marked out by renewed international travel and a determination to connect to the modernist architectural movement, while domestically the Aaltos sought out artistic and intellectual avant-gardes beyond the then relatively conservative field of Finnish architecture. Primarily influenced by László Moholy-Nagy's theories and work with students at the Bauhaus (see later in this chapter), the Aaltos' experimented with the properties of

wood in a sequence of reliefs and furniture, as well as designing theatre sets and exploring the mediating role of illumination as a basis for architecture. The exploratory nature of this period is also conveyed by the fact that whereas the Aalto atelier won a great number of competitions with highly resolved schemes in the years 1927-8 and again in 1947-52; between 1929 and 1936 the atelier entered 22 competitions without success. Jury reports for these competitions relate that the Aaltos had demonstrated both insufficient attention to the functional planning of the designs, as well as proposing bold and untested formal and technical ideas which failed to convince the jurors.⁴

It is in the light of this phase that the achievements of the years 1936 to 1939 make sense; particularly as the three major buildings of these years, the Villa Mairea, the 1937 Paris World Exposition Pavilion, and the 1939 New York World's Fair Pavilion were experimental projects with none of the parameters of more conventional structures. The Villa Mairea was as an almost budget-less “large vacation house”, whose form, materials and spatiality the Aaltos derived from their own 1935-6 experimental house at Riihitie, and the latter two were temporary exhibition structures. Additionally, all three buildings were planned to communicate a particular image of Finland: the Paris and New York pavilions by definition, and the Villa Mairea more subtly. Sited at the Ahlström Company headquarters in Noormarkku, the Villa Mairea was used by Harry Gullichsen for hosting receptions for Finnish industry. The vast scale and demonstrative character of the living room, in concert with their remarkable modern art collection around which it was formed, relates to these occasions at which Harry and Maire Gullichsen hoped to communicate the progressive vision for Finland's future formulated by the *Nysténin piiri* (see Chapter 2).⁵ Indeed the ‘progressive’ work that the Aaltos undertook from 1935 onwards for the Finnish forestry industry, and for Ahlström in particular, endorsed a

similarly experimental approach. This was expressed in the construction of idealised “company town[s] on a monumental scale” over which Alvar Aalto and his patrons had complete control, producing new standards of housing and public buildings, for example at Inkeroinen and Sunila.⁶ The 1935 manifesto of Artek, equally reinforced a self-conscious, and self-consciously important, experimental and ‘progressive’ approach.

Whilst these three works stated a new poetic and material expression, their accomplishment did not presage a period of steadiness in the Aalto atelier’s work, but had to be immediately reconsidered in the circumstances of the Winter and Continuation Wars, and the ensuing years of austerity and reconstruction. Göran Schildt erroneously describes the apparently unproductive years of the 1940s as a period of “comparative failure” for Alvar Aalto. However, when seen as a further period of exploration, they were hugely rewarding.⁷ Within the privations of wartime Finland, Alvar Aalto helped to establish the SAFA Standards Office and, again with the patronage of the Gullichsens, to instigate both “elastic standardisation” for housing reconstruction and Regional Planning. Contrastingly, in the relative freedom of the United States and Sweden he was able to explore longer term ideas for the construction of the postwar world. Two differing forms of working, one contingent and one explorative, that overlapped in the manner he described in his 1921 article, *Our Old and New Churches* (see Chapter 8); as for example was the case with the relationship between the SAFA Standards Office and his work in the AFBF laboratory of building technology at MIT.

In neutral Sweden, in collaboration with Albin Stark, Alvar Aalto designed the city centre plan for Avesta and the campus of the Johnson Institute, and he also developed his enduring ‘fan-plan’, apartment block design, intended to give inhabitants both

privacy and an unmediated contact with the landscape, in his project for the Nymnäshamn apartments (1946, figs 7.1a-c). Designs in which Alvar Aalto restated his (classical) belief in the traditional European city centre and private dwelling, premised on the creation of external congregational spaces of piazzas, gardens and theatres, after an interregnum dating back to his neo-classical works in Jyväskylä. In reclaiming the *Umwelt* (surrounding world) of the European city, and its representative institutions, and recasting them within contemporary circumstances, these schemes set out the agenda, as well as the major topographical and morphological tropes, that would endure in the Aalto atelier's work until its closure.

At the end of the war the Aalto atelier completed its first buildings abroad, structures whose material and spatial expression would set out the atelier's agenda for the rest of its existence. Firstly, the Hedemora Pavilion (1947) built from rough sawn timber boards freely assembled with an inventive wit, unmediated materials, an elaborate route articulating the space and complex roof-lighting (fig 7.2a). Secondly, the Baker House Dormitory at MIT, built with a brutal brick materiality and engagement with the social life of its inhabitants and with its site (fig 7.2b). Significantly it was in these same years that Alvar Aalto returned to painting, a habit he continued until his death.

As the Aalto atelier's buildings of 1936 to 1939 formed a continuity with the experimental years preceding it, so those from 1948 to 1952 both extended and consolidated the exploratory work of the war years in a sequence of public projects, of which the Seinäjoki Church forms a part. From 1952 onwards, the year that Alvar Aalto formed a new partnership with Elissa Aalto, the Aalto atelier took on an ever-increasing scope and scale of work through competitions and commissions; an uninterrupted flow of work which would last until Alvar Aalto's death (see Appendix 1). To some extent

this vast productivity precluded the experimentation that characterised the Aalto atelier's earlier years. Alvar and Elissa Aalto did not however altogether cease purely experimental work. Alvar Aalto continued to paint and sculpt and the summerhouse at Muuratsalo (1953-4) and atelier at Tiihimäki (1954-6) were designed as test-beds, as Alvar Aalto explained:

“Experiments in ordinary assignments [...] must remain at a modest level of a few percent of the whole. [...] In our own ‘playhouse’ we wanted to conduct experiments whose percentage of rationality could not be determined in advance”.⁸

Intimate associations were critical to Alvar Aalto in evolving his concepts, as they allowed ideas to be developed and tested within the nuance of conversation, rather than being sourced from contextless authorities. Alvar Aalto's collaboration with other artists and artisans, which was pre-eminent in all these exploratory periods, is another narrative lost to those who reduce him to an autonomous and productive artist. In part this oversight was encouraged by Alvar Aalto himself, for instance, in his willingness to credit the older philosopher Yrjö Hirn as an influence on his wood reliefs, when his contemporary, the designer László Moholy-Nagy, was his principal inspiration in this regard.⁹ A wish to preserve his apparent exceptional genius has also led to celebrated figures being mentioned merely as ciphers denoting Alvar Aalto as a cultivated and well-connected personage, rather than as possible influences or collaborators (see Chapter 1).

Alvar Aalto's wider view of the value of art and the artist in the forming of a *Zweckmässigkeit* (purposive intention) was however also influenced by the mediations of more distant sources, in particular those of Goethe and Friedrich Schiller (1759-1805). Schiller's theory of the *Spieltrieb* (play-drive), expounded in, *On the Aesthetic Education of Man* (1794), a treatise intuited from Schiller's own artistic experience, postulates that it is

only the artist who, by simultaneously reconciling the opposed *Stofftrieb* (sense-drive) and *Formtrieb* (form-drive) through the operation of a play-drive, can achieve true freedom.¹⁰

In Schiller's argument the *Stofftrieb* (sense-drive) is based in the physical and temporal existence of man and his sensuous nature, whereas the *Formtrieb* (form-drive) derives from human reason and an absolute notion of humanity beyond immediate experience. Asserting that sensation precedes consciousness, Schiller argues that while ideas may be conceived within the timeless realm of reason, it is only through engaging in the temporal flux of the senses that such ideas can be actualised. It is through balancing the two competing drives that the *Spieltrieb* (play-drive) emerges, an intuition of a complete human nature that releases man to his freedom and to his humanity:

“The mind, then, passes from sensation to thought through a middle disposition in which sensuousness and reason are active at the same time”.¹¹

Alvar Aalto knew, and directly acknowledged, the Finnish philosopher Yrjö Hirn's analysis of play whose interpretation, while founded on a more anthropological basis than Schiller's, was essentially derived from his argument.¹² Hirn's work on play include *The Origins of Art* (published in English, 1904) and *Barnlek / Leikkiä ja taidetta* (Child's Play, 1916). The former is self-descriptive, while the latter is a more didactic book for teachers and parents of the poetics of children's play and games and their relation to the adult world. Hirn acknowledges the universality of Schiller's *Spieltrieb* (play-drive), and of the possibility of abolishing the distinction between art and life through rooting our experience in art, and its underlying “play impulse”.¹³ This impulse is not a solely cerebral activity, it engages our entire body; so that as Hirn states, in the instance of flying a kite, the physical connection of holding the string extends the psychological fascination with flying into the physiological experience of the kite-flyer.¹⁴

Hirn furthers this by stating that aesthetics is a form of historical, social and psychological inquiry, as opposed to one of metaphysical theorising, and he rejects both philosophical and transcendental considerations:

“Beauty cannot be considered as a semi-transcendental reality, it must be interpreted as an object of human longing and a source of human enjoyment”.¹⁵

The stress on enjoyment is significant, and it is this, together with an understanding that through play an aesthetic sense can be divined in works that do not serve an aesthetic purpose, that recommended it to Alvar Aalto as a source for the pragmatic nature of architectural design. For Alvar Aalto, echoing Hirn, while the art impulse is individual, it innately serves the social purpose they identified as endemic to the practice of art, and it is play that unifies these. Form is crystallised only after consideration of the situated knowledge of the act. There is no pre-conception as to an aesthetic outcome; art itself is a condition of intuition.¹⁶

Alvar Aalto articulated this linkage when he stated that solutions to problems might be rational, but the process of finding them was not:

“in the midst of our labouring, calculating, utilitarian age, we must continue to believe in the critical significance of play when building a society for human beings, those grown-up children. [...] A one-sided concentration on play, however, would lead us to play with forms, structures and eventually, the body and soul of other people; that would mean treating play as a jest. But Yrjö Hirn was a serious man, and he treated his theory of play with a deep seriousness”.¹⁷

Play was rooted in its location, and was not an exercise of either the autonomous artist whose “illuminated eye” is separate from the “scientific eye” of actuality, or of the mysticism evident in the vitalist ideals of Henri Bergson’s ‘creative evolution’.¹⁸ Instead it represented an approach to an artistic unity formed around perceptions derived from direct observation, that precluded hasty teleological judgements which would block the

artist's receptive faculties and distance their work from society. In contrast to Rousseau's model of autonomous creative genius, play offered the artist, in a manner advocated by Goethe and Simmel, an inventive approach with which to undertake a restorative mapping of fragments sourced from the world as found.¹⁹

In his most famous essay on his approach to design, *Archittetura e arte concreta* (The Trout and the Mountain Stream, 1947), Alvar Aalto described a process that he aptly calls "child-like".²⁰ In the essay he stated how, with no *a priori* concept of space or functional purpose, he was free to play with all causalities. A way of working in which he assembled "a maze of possibilities" and problems into a coherent design while allowing each constituting element of the design to express itself. A play in which precisely articulated elements, derived from more emancipated knowledge, were brought together and intuitively played with until they suggested a single unifying approach.

Far from producing the "organic and [...] irrational" outcome that Giedion identified, for Alvar Aalto the resultant form was natural and purposive, and capable of forming part of an *Umwelt* (surrounding world) as it was formed from the world, not projected onto it.²¹ Alvar Aalto only used the term 'organic' to describe his working approach, and his distinction between performance and product separates the Aalto atelier's work from the expressionism of Hugo Häring's (1882-1958) *Leistungsform* (performance form) and the latter's self-conscious, and hence self-limiting, urgency to determine an *Organwerk*.²² This 'organ-work' was an architectural "organism" that Häring believed arose through a study of function and which effected play with consequent forms rather than with formative ideas. A formalism that accounts for the low regard members of the Aalto atelier had for the works of 'organic' architects such as Häring and Hans Scharoun (1873-1972); citing the latter's Berlin Philharmonie as an example of what they

considered a forced “onomatopoeic expressionism” achieved at the expense of the surrounding environment.²³ While the form of Häring’s Gut Garkau Farm (1924-5) might be taken as a product of the Aalto atelier, neither the associated dogma, nor the dogmatic inflexibility of its plan would (figs 7.3a-b).²⁴

Alvar Aalto repudiated any approach in which the *technē* of an architect’s emancipated knowledge, primarily expressed through techniques of representation, might overwhelm the *poiesis* of their response to the situated knowledge of the project. A danger that is common in much modern modern practice. As Dalibor Vesely puts it, architects:

“replacing architectural reality as a whole by aesthetic or scientific fiction and, by manipulating that fiction, believing that we are manipulating or even creating reality itself”.²⁵

Members of the Aalto atelier have commented how Alvar Aalto rarely spoke of specifically architectural problems, but rather of how people intuitively engaged with the world. In his design studio teaching at MIT in the 1940s, rather than correcting students’ work in terms of its formal characteristics, he discussed the project with the students, illustrating with anecdotes what the experience of the project might be for those who inhabited it.²⁶ Equally, he stated that it was the experience of space that mattered as, when sitting on an architectural jury reviewing a student’s work during this period, he sarcastically asked a student whether in the litany of ‘problems’ that the student had claimed to solve for a hospital design:

“You seem to have neglected one possibility after all: how would the building and young patients in it react if a lion jumped in through the window?”²⁷

Alvar Aalto’s intention was phenomenological rather than instructive; involving the spectator through the ambience of the resolved construction, not impressing them through the spectacle of geometric gesture. The design process that achieved this was an

inventive approach drawn out of its contexts. Indeed any attempt to anticipate the outcome of a project would interfere with the stimulation of an artistic response that matched the nuance and particularity of the situation; play was an intervention, a rearrangement of the familiar that privileged experience and circumstance over theory and abstraction. This led to Alvar Aalto's protestation against any over-arching method that might in any way compromise discovery, "technique is only an aid, not a definite and independent phenomenon therein"²⁸ The disinterested aesthetic of play turned instinctive activities into art; just as in the urban vernacular, the "clothes-line classicism", that the Aaltos idealised in the life of Italian towns.²⁹

Play highlighted the experience of space. It was the synthesising moment whereby design achieved the informed intuition that Goethe expressed as the pre-requisite for genius; "if the soul speaks, then alas! It speaks no longer".³⁰ In Hirn's terms, Alvar Aalto's working process was as innate and intuitive as the performance of a trapeze artist, when rationalising the act would be fatal.³¹ It is simply, but not simplistically, the relation between idea and circumstance, akin to when a child *plays* in an unfamiliar room; a child won't say he or she can't *play* because some element is missing from a fixed idea of what *play* is, but will *play* with what is there. For Alvar Aalto playing as "unhindered children" unconcerned with pre-reflective geometries, ensured an outcome that manifested its content; a foreign purpose that made it humanist in its orientation, rather than reproductive of its own, or the artist's, self purpose. It is only when a consciousness has emerged from the spontaneity of play that reflection and, thence articulate discussion, began.

What disciplined the process was direct observation, filtered through a visual sensibility of sketching and painting; as Alvar Aalto explained, "contemplation is Man's first free

relation to the universe which surrounds him".³² From Goethe onwards there had been a legitimisation of an artistic process rooted in an attentive but objective observation in which the artistic, or poetic, production was an outcome of dispassionate studies in natural science that matched any subjective expression with an objective restraint.³³ A *zarte Empirie* (delicate empiricism) of knowledge "won" of the "truth" of the natural world in which things are perceived through extended attention to their qualities; that is to say they are seen precisely and as though for the first time.³⁴ This thinking became a structuring narrative of Goethe's *Italian Journey*, as W.H. Auden and Elizabeth Mayer, who translated the book into English, have written:

"Goethe was not a scientist by vocation but a poet; scientific knowledge was essential to the kind of poetry he wanted to write [...] To look at a cloud without wishing to know meteorology, at a plant without wishing to know any botany is to imprison oneself in the subjective aesthetic".³⁵

This precision of perception informed the works of the Aalto atelier at both the macro and micro-scale, as an overall apprehension and as unconscious engagement.

Unsurprisingly, therefore, the intimate consideration of the human body is a consistent quality of the Aalto atelier's works. Alvar Aalto illustrated this with an anecdote from Dante's *Inferno*, in which the most frustrating aspect of hell was that the going and the riser of the steps had the wrong proportions in relation to each other.³⁶ As Sverker Gardberg recollected:

"It was interesting to hear how Alvar explained his design process. He used natural images: when we were drawing a bridge over a railway, he said it should cross diagonally, because when you cross a ridge on foot, you cross it diagonally".³⁷

This dependency on our senses for the "raw materials" on which we base our thought might be thought of as reminiscent of Rousseau. However, unlike Rousseau, Alvar Aalto made clear the senses must remain our servants and in the service of our human

laws of evolution or culture, of our “instinct and reason”. His position is more reminiscent of Schiller’s distinction between the state of nature that we are born into, and that which we form “in idea” through our independent experience.³⁸ An *Umwelt* (surrounding world) both shaped by, and shaping, its inhabitants. It is within this understanding that particular observations can form the basis for an idealising perception - and in which Alvar Aalto’s sketchbooks need to be comprehended. The sketches of Italy from the 1920s have none of the archaeological accuracy that the paintings of Erik Bryggman record, or that the measured drawings of Hilding Ekelund reveal (figs 3.10 a-d). Rather they are metaphors for the ambience that Aino and Alvar Aalto experienced and willed on the place. Similarly the photographs Aino Marsio-Aalto took on their return to Italy in 1947 are mementoes of the same qualities; leading to the qualitative relationship between the covered staircase of the Piazza Vecchia in Bergamo and that of Baker House in MIT designed a few months later, as well as that between the Pazzi Chapel and the Seinäjoki Centre (figs 7.4a-b).³⁹

Alvar Aalto’s sketches reveal the observation of milieux in which no one thing appears in isolation, and in which even the most monumental of constructs is seen as a fragment of its situation and of the wider experience of the place. St. Mark’s Cathedral in Venice is drawn as glimpsed by Alvar Aalto as he emerges from the *Mercerie*. A framing of a major building, seen obliquely, repeated in both the Seinäjoki Town Hall competition perspective and in the placement of buildings such as the Finlandia Hall where the buildings are placed aslant to the line of people’s movement and are thus engaged with, through the spectators’ experience, together with their surroundings (figs 7.5a-b and 5.6a-b).

There is a corresponding attention to the merging of building and landscape in both formal and temporal dimensions; the invading nature being recorded as attentively as the building which it is bringing under its hegemony. Under the seemingly direct influence of Tetsuro Yoshida's *Das Japanische Wohnhaus*, trellises first tentatively appeared at the side of the entrance to the children's library at Viipuri before appearing as integral parts of compositions such as the Villa Mairea. With renewed visits to Italy and the sites of Antiquity, planting begins to suggest an overcoming of the architectural order in the unrealised trellis at the Baker House Dormitory at MIT and the planted grass slopes of Säynätsalo and Seinäjoki (figs 7.6a-c). Alvar Aalto's exasperation with MIT's failure to execute what he saw as an integral part of the composition is evidenced in correspondence to Veli Paatela, to whom he wrote "the hovel will be too bare without it".⁴⁰

As Alvar Aalto's observation and discriminatory perception owed to Hirn's, as well as Goethe's and Schiller's viewpoints, so the second element of his praxis, that of a free experimentation with those perceptions, was rooted in the commitment of an artistic practice working within the *Zweckmässigkeit* (purposive intention) and what Alvar Aalto termed *materia*.⁴¹ This approach is most recognisable in the influence and work of the Aaltos' friend László Moholy-Nagy. In the first instance, Moholy-Nagy brought to the Aaltos an attitude of approaching a local context with the clarity of a self-consciously radicalised European technique along with a connection to a unique biography of involvement with anti-individualist and self-consciously experimental groups from the Dadaists to the Constructivists. Together this augmented the more observational sensibility of the Aaltos' sketches and paintings. In the second instance, Moholy-Nagy's work in Britain, and particularly the United States, brought a connection to a largely

Anglo-American empirical tradition; a tradition to which the Aaltos were exposed on their visits to the United States (see chapter 3).

What made Moholy-Nagy's approach of particular value in both instances, and which matched Alvar Aalto's sensibilities far more than the ideological rationalism emanating from much of contemporary Central Europe, was that Moholy-Nagy's work was underscored with a Goethean belief in the 'natural science' of contemplative judgement and the supremacy of art; a way of attaining all-embracing objective ideals through penetrative study and the spontaneous discovery and synthesis of artistic experimentation. On establishing the New Bauhaus in Chicago in 1937, Moholy-Nagy had added Science to the basic elements of Gropius' formula of Art and Technology that framed the original Bauhaus, balanced by hiring artists to teach it. Moholy-Nagy's intent was to unify laboratory and studio methods to produce 'objective' art conceived as a frame for, and a foil to experience; as with his *Licht-Raum-Modulator* (fig 7.7).⁴²

Courses in the physical, life, human and social sciences, coloured the New Bauhaus with a combination of Goethe's *naturphilosophie* and John Dewey's 'pragmatics'.⁴³ Dewey, the author of *Art as Experience* (1934) had met Moholy-Nagy in New York in 1938, and his work helped move the New Bauhaus away from its Dessau parent towards a relativism based on situation and interaction in which "no human phenomenon can be considered without its general physical and social environment".⁴⁴ For Alvar Aalto this attitude would have resonated with his upbringing (see Chapter 3). A memory of which he kept alive in the drawing of a repeater rifle designed by his grandfather, Hugo Hamilkar Hackstedt in 1867, that he kept above his desk (fig 7.8). Although brutally functional, the exquisite mechanism is in some ways an allegory of Alvar Aalto's own work, a precise form that is an inadvertent outcome of an attendance to its situation.⁴⁵

It is an ‘artistic’ approach, close to that advocated by Herbert Read (1893-1968) that, synthesised with Goethe’s belief in an art rooted in observation, is most recognisable in Alvar Aalto’s attitude to design.⁴⁶ Once again, Moholy-Nagy forms a link, as he knew Read from at least as early as 1933 when he had helped to procure the illustrations for Read’s *Art and Industry* (1934), for which he chose one of Alvar Aalto’s experimental wood reliefs as the dust-jacket (fig 7.9). Read, like Alvar Aalto, described himself as an anarchist, and like Alvar Aalto he shared the same belief in being able to influence industrial standards with an argument solely related to use rather than profit. *Art and Industry* attempted to seek a solution for new aesthetic standards for industrial production through the artist working in industry, through becoming “the designer”.⁴⁷ It would follow that while society would establish what was needed, and industry furnish the means, the key to the creation of new standards would be reliant on the “unconscious” process of the artist:

“It is my belief that this preliminary laboratory phase should be as free as possible, often actually free from utilitarian ends, for the desired results to be attained”.⁴⁸

The closeness of Read’s analysis to Alvar Aalto’s working process described in *Archittetura e arte concreta* (The Trout and the Mountain Stream) is seen not only in the confidence of neither approach possessing an obvious methodology or binding procedure, so much as their embracing an approach that promises a diversity of output while accommodating a unifying *Zweckmässigkeit* (purposive intention) to the experience of the individual:

“the autonomous mental activity that is constantly at work transforming the multiplicity of visual impressions into apprehensible unities, forms that intuitively reflect our feelings.”⁴⁹

The “apprehensible unities” for Read, as for Alvar Aalto, were the loss that society, in the guise of the artist, had been striving to recover since the Renaissance. While in the 1930s Alvar Aalto articulated this endeavour in terms of the artist wresting control over technology, from the mid-1940s onwards this was largely superseded by the symbolic and experiential values of the ‘traditional’ townscapes of Europe, and their makers, represented, as Read quoted Alberti “*il bene e beate vivere*, (a serene and happy life) where *bene* and *beate* are indissolubly linked”.⁵⁰ It is this that characterises the change in the Aalto atelier’s work from the 1930s to the 1950s, a shift that in many ways culminated in the Seinäjoki Centre. A confirmation of the *presistenze ambientali* (surrounding pre-existences) that Rogers had identified, and that the Aaltos had imbibed in the towns of Italy, achieved through a playful approach to design derived from Hirn and Moholy-Nagy.

“Apprehensible unities” are forms that emerge in time, as Alvar Aalto expressed it in *Archittetura e arte concreta* (The Trout and the Mountain Stream) “just as it takes time for a speck of fish spawn to mature into a fully-grown fish”.⁵¹ Such a conception is easy to comprehend as part of an unconscious evolving vernacular, but in the context of industrialised culture it falls to the individual designer to form an artistic process to bring it about. Hirn had attacked the “intellectualistic (sic) illusion that every artistic representation has something to teach us about the essential nature of the things represented”, on the basis that it was unlikely that a direct correspondence could be reached between the artist and modern society. Instead it was the “poetical truthfulness”, the sincerity of a work of art, which was its measure; hence Alvar Aalto citing Hirn when referring to his feeling that artistic creativity was an erotic experience.⁵²

What may “appear to be playing with forms” is therefore an attempt to crystallise an architectural form that not only resolves the contextual issues, but infuses it with the “flow of purely human feeling” that the artist brings to it, and that the spectator experiences and recognises unconsciously as culture in the form of a pervasive ambience embodied in the *materia* and spaces.⁵³ It is not enough that certain symbols and forms are understood, obeyed and disported in the way typological analyses of Alvar Aalto’s design process insist. For Alvar Aalto, as for Goethe before him, they needed to be felt “like a gale wafting health from salubrious lands, and win them imperceptibly [...] into resemblance, love, and harmony with the true beauty of reason”.⁵⁴

Alvar Aalto’s belief in play promised that this emphatically artistic approach could be reconciled with the social scientific method that Read, Dewey and others were advocating. In his *Von Material Zu Architektur*, and his teaching at both the Bauhaus and the New Bauhaus, Moholy-Nagy had set out a tri-partite sequence to designing; of perception and measurement, exploration, and manipulation and action.⁵⁵ In turn Alvar Aalto’s stated approach demanded a scientific observation that privileged the “social, humanitarian, economic, and technological” requirements that form the myriad possibilities of a project, but it also demanded artistry. As Alvar Aalto expressed this:

“tangled web [...] cannot be straightened out rationally or mechanically [so as soon as] the feel of the assignment and the innumerable demands it involves have sunk into my subconscious [Alvar Aalto drew] quite childlike compositions, and in this way, on an abstract basis, the main idea gradually takes shape [...] to bring the numerous contradictory components into harmony”.⁵⁶

Working pragmatically with varying phenomena at the same time, play necessitates invention through its surveillance and perceptive enquiry of any given design context. It allows for all the elements that contribute to an environment to be considered, be they

visible constraints or invisible values such as “humanism and materialism” or “art and technology”.⁵⁷ As a saying of the Aalto atelier, *alla sommitelle* (never compose) implies, there is only ever one solution that can emerge, or crystallise, to precisely fulfil a particular aesthetic and practical purpose.⁵⁸ Design is therefore evolutionary, as Jaakko Suihkonen noted:

“Aalto never made alternative designs or sketches out of which the best would have been chosen. Instead he used the one design which was then developed”.⁵⁹

This comment on the Aalto atelier’s artistic practice mirrors Moholy-Nagy citing the Berlin based Hungarian philosopher Raoul Francé (1874-1943) in *The New Vision*; “There is for everything, be it a concrete thing or a thought, only one form that corresponds to the nature of that thing”.⁶⁰ The more interesting of the biological analogies that pervade Alvar Aalto’s writings do reflect the *biotechnique* of Moholy-Nagy who was, in turn, introduced to the concept through studying’s Francé’s *Die Pflanze als Erfinder* (The Plants as Inventors, 1920). Francé’s bio-technique was wrought from comparisons of plants and machines that stressed the teleological and evolutionary nature of design, a feature that was also common to Uexhüll’s work (fig 7.10). Francé argued that:

“techno-scientific knowledge and aesthetic judgement had to be developed and strengthened; they represented the human counterpart of nature’s time-consuming processes”.⁶¹

The reflexivity of play with its environment, guided by an underlying idea or ideas, the *Zweckmässigkeit* (purposive intention), seemingly offered a way of speeding such development and of constructing the *Umwelt* (surrounding world). To view Alvar Aalto’s approach too didactically would, however, be to overlook the critical skill, or rather habit, of his simultaneous play with the causalities and possibilities of its situation.

At Baker House, Alvar Aalto made a sequence of sketches that explored the site in relation to the programme, from which the building evolved almost exactly in the state in which it was built; a poetic, and purposeful, response to the Charles River, the MIT campus and the congregation of students, as well as a pragmatic attention to the need to minimise the need for costly lift cores. The realised building has two great staircases leading up from the entrance hall to generous landings created from the *poché* of the meeting of the sinuous river elevation and the more rigid geometry of the campus elevation (figs 5.19 and 7.2c). In addition, the entrance hall opens straight onto the more formal social spaces of the buildings, including a common room and dining room. This layout maximises potential encounters between students entering and leaving the dormitory and engenders the generous social spaces that Alvar Aalto saw as critical to university life.

However, in response to what he saw as reductive clients, Alvar Aalto drew up nine alternative designs, mainly variants of lamellar blocks and plinths, to impress the clients that he had ‘empirically’ evaluated all potential scenarios (fig 7.11);

“It was Alvar’s tactics to present it like he did. Had he presented a curvy building to begin with, it would not have passed in the building committee”.⁶²

The alternative designs show Alvar Aalto mocking the mechanist method of evaluating different possible solutions, and mimicking the approaches any number of his more functionalist contemporaries might have taken. However, they have been interpreted by a number of critics as evidence of an empirical approach to design.⁶³ A misunderstanding that stems from a lack of appreciation of the underlying *Zweckmässigkeit* (purposive intention) that guides the design of the Aalto atelier’s public works, and the play that generates the *Umwelt* (surrounding world) and reconciles it with pragmatic needs and economies.

This play is most vivid in the surviving ‘stream of consciousness’ drawings that can occasionally be found in the archives of the Alvar Aalto Foundation (fig 7.12a), such as one surviving from the design process of the Seinäjoki Church (fig 7.12b). What is intuited in one drawing is immediately checked from another point of view, and so on and so forth; fragments inform a whole, suggestions evoked in three-dimensions are then tested in two-dimensions, scale changes from the smallest diagram to the most precise detail. A concept, such as the trinitarian *schema* of vaults/domes that would become the basis of the church at Vuoksenniska is played with and then rejected. This is “the ricochet aspect of the creative process”, with as many dead-ends as free paths, born of an understanding of what Barry Gasson has stated as “the most difficult thing for the designer to accept is, that which is being designed, also has something to say” (see Chapter 9).⁶⁴

Alvar Aalto’s representations suggest, in even the slightest of sketches, the morphology of a poetic and communicative environment, whose ambience is generated from reconciling culturally charged spatial and material fragments into a sensual whole. Hence the rejection of the *schema* that would later reappear at Vuoksenniska; its sheltering form being more suited to the dense forest canopy of that site, rather than the expansive openness of the Ostrobothnian plain (figs 1:10g and 4.6f). This is an open-ended design process underpinned by an attitude of continuous iteration; in Hirn’s terms, an artistic process that availed itself of the play impulse through permitting the multiples of materiality, type and the *schema* to participate in “the slow construction of the narrative” in place of a singular pursuit of form.⁶⁵ The reality of any iterative process, particularly drawing, is that ideas come about through the process itself and, while it may be situated within a particular design approach, its suggestiveness cannot be overestimated.

The process might at times be kaleidoscopic, or resemble a collage, literally cut and paste, but the searching and deduction of a sustaining narrative in relation to the *Zweckmässigkeit* (purposive intention) of the project displaces any notion of collage as intention. Yet, while the hierarchies and taxonomies of the Aalto atelier are a long way from Max Ernst's citation of Comte de Lautréamont's definition of the beauty of collage as "the chance encounter of an umbrella and a sewing machine on a dissecting table", the juxtapositions of Alvar Aalto's compositional strategy do suggest the influence of his collaboration with Max Ernst and his knowledge of Braque's synthetic cubism.⁶⁶ That is, the placing of one object (a ready-made) against another to heighten the perception of one form or material through contrast with another; a deliberately revelatory, but hierarchical, manoeuvre. For instance, the House of Culture amplifies its hill-site on an arterial route in northern Helsinki through the deployment of an emphatically linear sixty metre long canopy that skims along the brow of the hill to reinforce the latter's form (figs 7.13a-b).

Despite any promises that, in the terms of 1930s biotechnique, play might have supplanted "nature's time-consuming processes", the duration of a project was critical to the Aalto atelier's work. Alvar Aalto's description of the design of the Viipuri Library in *Archittetura e arte concreta* (The Trout and the Mountain Stream) makes clear that emancipated knowledge can only become familiar, and thence intuitive, over time; and that it is only after these initial iterations, followed by a prolonged period of respite, that the final artistic crystallisation of the project can take place in a moment of intense application.

This praxis of reflection and action, is evidenced in the design process of numerous projects in the Aalto atelier's history, many contingent on the flexibility of the Finnish construction industry of the time (see Chapter 8). The Viipuri Library's final form was achieved after numerous permutations and site changes, and the foundations of the earlier 'Proto-Mairea' project had already been cast when Alvar Aalto arrived at the final design of the Villa Mairea. The House of Culture's final form was achieved in a three-month burst of intense designing in early 1955, after an interregnum of nearly three years following the design of the initial concept (figs 7.14a-b).⁶⁷ A design that was then further developed in a ten day period spent in New York in October 1956 with the American architect Wallace Harrison working on a design for the Lincoln Center Opera House, a design that became the model for the Essen Opera House (1959-88) and the Finlandia Hall (1962-70, figs 7.15, 1.11b and 1.11c).

At the Finlandia Hall, the hanging staircase that is so critical in visually binding the outcrop of the auditorium roof to the plinth of the main elevation was only arrived at after the building was on-site (fig 7.16a-c):

Heino Paanajärvi: "it's a brilliant solution. The façade is very long and the staircase breaks it up. A solution that was born out of necessity."

Tore Tallqvist: "Maybe he would have thought of something else."

Heino Paanajärvi: "You don't think of things unless you are under pressure, unless you have a motive."

Tore Tallqvist "I remember the day the news spread in the office."

Heino Paanajärvi: "It was like a revolution."⁶⁸

Lengthy design periods were also a product of circumstance, brought upon the Aalto atelier by the many inadvertent delays that Finland's small economy made to the execution of projects. This was the case with all of the buildings of the Seinäjoki Centre, whose forms and materials changed over the time it took the municipality to raise the funds for each of the projects (see Chapter 4).

As much as it depended on a sceptical, playful approach, carried out over time for its formation, the Aalto atelier's *Umwelt* (surrounding world) relied on an understanding of the materials through which it would be made, and the representational processes through which it would be rendered. Alvar Aalto recognised art, or *materia*, as a condition of intuition without which he could form nothing:

“the word *materia* means more to me, for it translates purely material activity into the related mental process [...] Not only do sketches and superficial similarities of form influence each other, but *materia* does, too, through a mental confrontation with the selected material”.⁶⁹

The Aalto atelier's approach has a free, even painterly, relationship to materials and tectonics, but one that is seemingly dualistic. In one instance treating them as mere supporters of the spaces, for instance in the great quantities of white painted or rendered concrete surfaces, and at another treating them with great reverence, as in the wooden panels and horse-hair doors. The design is conditioned by an understanding, similar to Johannes Granö's of landscape, of the differentiation between the experiential values of locality and proximity.

Materiality was, literally, malleable to the processes of play, and the Aalto atelier's work is dependent on, and exploitative of, the flexibility that only concrete frame construction could provide. The structural engineer Aarne Hollmén, who collaborated with the atelier from 1962 onwards, noted that:

“because these are in-situ structures - the compositional qualities of steel and concrete being very flexible - you can create shapes out of it, you can remove columns, you can hang structures from walls above. With pre-cast concrete elements that wouldn't be possible. So the use of in-situ reinforced concrete enabled Aalto's architecture”.⁷⁰

The use of a concrete frame gave the Aalto atelier a confidence that the morphologies of ideograms, sketches, and iterative development drawings, could be manipulated quite

freely with the possibilities of in-situ casting. Once this was established then the ‘details’ of the more considered materials and surfaces could ‘furnish’ the whole; an hierarchical and scenographic process. The Library and Church vaults, as well as the Town Hall council chamber at Seinäjoki, reinforce Hollmén’s understanding; the design of the free-form vault of the Library was a process of freely shaping the material to form the space beneath. Painted white, as was almost all the Aalto atelier’s concrete, the in-situ mass almost dematerialises, acting as a scene that frames the occupants and their activities. Within this, a lining of warmer and more tactile materials, such as the Library shelves, benches and tables, and the Church pews, mediate the occupant’s contact with the structure.

As with the structures at Seinäjoki, externally and internally, the Aalto atelier made use of a single material or surface to form the basis of almost any building, which then acts as a foil to its setting or its contained activities, and as a backdrop against which other, precisely valued, materials are counterpoint. This is not to say that the singular material or surface could not itself be without import. In his 1941 article on Karelian Architecture, “an architectural reserve unusual in Europe”, Alvar Aalto primarily communicated, in spite of its exaggeratedly nationalist tone, the affecting power of an environment in which a single material (timber) is the unifying feature; just, as he wrote, was the case with the marble of Ancient Greek ruins.⁷¹ A “poetic truthfulness” was revealed through a local material’s exploitation for all parts of the construction, in the case of Karelia down to the steamed spruce switches used to knot the fences together (figs 7.17a-c).

Within a particular context, a single material could also reinforce the thematic intention of a project. At the Säynätsalo Town Hall the varying intense hues of the bricks,

together with the deliberately variegated bonding, breaks up the surface into a faceted texture of light and shade to suggest an almost ruinous quality set against the surrounding wood. In contrast, at the urbane Helsinki Polytechnic the bricks are uniform in their smoothness and colour and present a massive and closed surface that is further accentuated through the minimisation of the mortar bed and the mixing of brick dust into the mortar (figs 7.18a-c).⁷²

Alvar Aalto's recognition of form as an expression of material activity originated in part from his childhood, and from the Ruskinian "cult of imperfection" and field trips of his education. However, it was Aino and Alvar Aalto's first-hand experience and experimentation with materials, following the precepts of Moholy-Nagy's and Josef Albers' work in the *Vorkurs* at the Bauhaus, which they knew from conversation with Moholy-Nagy, as well as the copy of *Von Material Zu Architektur* that he gave them, that was most important. Albers' and Moholy-Nagy's course was intended "to open eyes" with students spending time in the workshops making reliefs that tested a material according to its nature, rather than imposing conventional forms that had accrued around the material over time (fig 7.19). From these tests, or play, a new aesthetical sense would arise. In the words of Josef Albers:

"Any artistic creation must involve a consideration of the specific potentialities of its medium if it is to achieve an intrinsic, organic quality".⁷³

Aino and Alvar Aalto had sporadically experimented with bending and laminating timber before meeting Moholy-Nagy but, following his visit to Finland, the Aaltos began to systematically make a sequence of timber reliefs and furniture in the workshops of Otto Korhonen.⁷⁴ The reliefs mimic the process expounded by Moholy-Nagy, but in a more focused way (figs 7.20a-c). They relate to all aspects of wood and its

growth processes, and how it might be adapted and furthered through the use of modern glues and laminating techniques. Their outcome was the series of bentwood furniture designs (figs 3.28a-b).⁷⁵

While the Aaltos shared the same aesthetical pre-occupations, and the same ideal of discovering objective values and syntheses through spontaneous and free play as those reliefs produced at the Bauhaus and shown in *Von Material Zu Architektur*, what made their reliefs so different, and in so many ways more revelatory, is that their reliefs were a collaboration with a craftsman, Otto Korhonen. The Bauhäusler, with their determination to create an industrial aesthetic, had precluded smiths and craftsmen from their workshops, and hence severed the students from a tradition of craft.⁷⁶ The Aaltos had the input and technique of an entire artisanal factory, and the crafted qualities and innovations of the reliefs, and the furniture that they in turn led to, are equally a product of those skills as of the Aaltos intuition; and, in truth, Korhonen's death in 1935 marked an end to the Aaltos' innovations in furniture.

Without recognising it, Alvar Aalto had arrived at the "laboratory ideal" he would spend the next ten to fifteen years trying to persuade universities and governmental departments to furnish him with (fig 7.21a,b). A working ideal that Lawrence Kocher, architect of the remarkable 'Aluminaire House' (1931), laid bare in the accompanying essay to the Aaltos' retrospective show at MOMA in New York in 1938, an article seemingly born out of conversations with the Aaltos:

"after the first invention, imagination supplies intermediate steps. It is then that reason and science enter. They check and control the direction of intuitive thought [...] follow up [...] intuitions, using the laboratory and other technical means to control and develop concepts that at first were merely 'felt'".⁷⁷

A willingness to collaborate with artisans had marked the Aalto atelier's work from the time of their collaboration with the silversmith Paavo Tynell in the early 1920s.

Following their work with Korhonen, an evolution of earlier furniture designs continued in the Artek factory, albeit separated from the inspiration and serendipities of the workshop. The furniture throughout the Seinäjoki Centre is a mixture of bespoke designs, such as the pews of the Church, carried out in collaboration with a local master-carpenter, and standard solutions from the Artek catalogue adapted to the nuance of particular settings.⁷⁸ This is also the case with the lamps, which were worked on together with the lamp-maker *Lamppu* (Sparks) Hirvonen, as Kalle Leppänen recalled:

"It was another tradition, that a small workshop made lamps for Alvar, starting from the prototype. The first versions were always horrible and clumsy, but when he turned up with his prototype and displayed it on Alvar's desk, Aalto would change something. This is how the design process should work, rather than finalise designs on paper".⁷⁹

At Seinäjoki, the other most obvious products of collaboration are the cobalt blue ceramic sticks, created in conjunction with the Wärtsilä ceramic factory; which, as with almost all of the poetic standard forms of the Aalto atelier have a practical as well as an aesthetic dimension. The 'C-shape' of the sticks cross-section means that even in the event of an adhesive failure between the tile and bonding mortar, a mechanical fixing is maintained; and after forty-five years of the extreme climate to which they are exposed, there have been no recorded failures (figs 7.22a-b).

The wood reliefs and furniture also suggested a series of forms that, translated into the fluidity of in-situ reinforced concrete, gave Alvar Aalto a language of form that he exploited in projects such as the Seinäjoki Library vault. The relationship between Aaltos' play in *materia* and in collaboration, with the designs of the Aalto atelier's constructions was circular. The form of a building might derive from the play of the "free laboratory", but at the same time that resultant form might necessitate the

invention, in *materia*, of a new kind of component. The House of Culture auditorium, whose shape both describes the asymmetrical form of a Greek theatre ruin, and pragmatically utilises the square shape of its site, was clad in specially designed bricks capable of being “translated into a round, negative, convex, concave or square wall” (figs 7.23a-b). But it is impossible to gauge whether the form or the material was arrived at first; the two are symbiotic.⁸⁰

When Alvar Aalto wrote of the New York Pavilion’s form, however, he was being disingenuous:

“Someone once asked me: ‘Why don’t you work so much anymore with free form, as you did in the New York pavilion?’ The person who asked me this was an aesthetician. My answer was: ‘I don’t have the right material for it’”.

The New York free form was in fact a lining, with the wooden *aurora borealis* suspended from a framework (fig 5.29). The critical issue was its communicative modelling that suggested the same qualities as the more integrated structure of the laminated reliefs and furniture; just as similar forms executed in-situ concrete would later on mould space with an almost Baroque plasticity.⁸¹

Otto Carlsund and Fernand Léger had shown Alvar Aalto the possibility of combining a post-impressionist spatiality with an architectural scale (see Chapter 3), and in the New York Pavilion itself, Alexander Calder had designed an architecturally scaled copper installation. From these inspirations the Aalto atelier began to make their own architecturally scaled reliefs, beginning with those of the House of Culture (pragmatically necessitated by the need for acoustic absorbency) whose orthogonal nature plays against the curve of the vault and the building’s plan (figs 7.24a-b). At the Seinäjoki Theatre these are more elaborate and impressionistic forms, direct progeny of

the 1930s reliefs, which Alvar Aalto further invested with the metaphoric status of a night-time forest through painting them midnight-blue (fig 4.25d).

This ‘slippage’ between structure and skin, and concern with surface and materiality rather than mass, derives from the other formative influence on the Aalto atelier’s work in *materia*, that of Alvar Aalto’s *impasto* paintings from the 1940s onwards. In these paintings an architectural concern with materiality and depth of modelling conjured up what Alvar Aalto called “the mental image and that of [its] material implementation”.⁸² Alvar Aalto’s later paintings were not autonomous works of art for public show as his earlier works had been, and the first exhibition of them took place only after his death. But, unlike the earlier descriptive paintings, they were now an integral part of his architectural conception:

“I am moving towards a manner of working that closely resembles abstract art. I draw according to instinct, not architectural syntheses but compositions that may be even childish at times, and arrive in this way, from an abstract basis, at a main idea, a kind of general substance.”⁸³

Alvar Aalto wrote how freeing himself from the single vanishing point of painting had freed his architecture and that:

“Modern painting may be on the way to developing a set of forms with the capacity to evoke personal experiences in connection with architecture, superseding architectural ornamentation.”⁸⁴

His later paintings exhibit three major themes that bear on the architecture of the Aalto atelier; a treatment of the ground and the paint as topological strata and textures, an apparently free but measured assemblage of expressive shapes and a narrow colour, hue and tonal range. As Alvar Aalto said:

“Paintings and sculpture are part of my way of working. Therefore, I do not like to see them separated from my architecture as if they could express something beyond it and additional to it. [...] You might say that I do not regard these paintings and works of

sculpture as belonging to some separate professional domain. It is difficult to prove this in each case: for me these works are branches of a single tree whose trunk is architecture".⁸⁵

The paintings possess a mannerist structure in which the spectator's memory fills in the 'gaps' of suggestive compositions rather than being impressed by an all-embracing idea.

For, as Alvar Aalto expressed it, "Form in art should always allow the viewer to give it a personal content" and should therefore convey "a certain emotional value (fig 7.25a).⁸⁶

While the paintings are usually described as abstract, most are observational studies.

Some titles make this explicit, for instance the painting *Aurattu musta pello* (Ploughed Black Field, figs 7.25b-c). Others adopt a restricted palette of colours and tones to form morphologies that are typical of the Finnish countryside in each of the four seasons.

These include a number of 'white' paintings that posit relations of texture and form in isolation (figs 7.26a-b). Moreover, it is in this perception of the paintings as morphological and topographic figures that they are both most convincing and most moving. They also exude the restrained and empathetic naturalism of the Aalto atelier's buildings.

From their earliest work onwards the Aalto atelier's work relied on the mediated representations of varying artists, including Fra Angelico, Katsushika Hokusai or Paul Cézanne, and, more intimately, Eero Järnefelt, Tyko Sallinen or Fernand Léger (see Chapter 3). This was both for their compositional technique, and their rendering of the human figure, *topos* and architecture as moral landscapes. These qualities were also to be found in the fragmentary and diversified formations of the urban ideals sought by the Aaltos and their contemporaries in the Mediterranean. A mood of restrained naturalism is common to the work of the painters that Aino and Alvar Aalto admired and emulated, and there are affinities in his wooden reliefs and paintings with the

harmoniously balanced compositions of Braque and Calder.⁸⁷ The ultimate source of this seems to have been Alvar Aalto's teacher, Eero Järnefelt, who rejected the prevalent symbolism of 19th century Finnish art in favour of an argument that truth would be better served by an observational realism.⁸⁸ This quality is perhaps most noticeable of all in the work of Hélène Schjerfbeck who exhibited alongside Sallinen in 1934; "The modernist part of her oeuvre is [...] based on a realist vision; the starting point is always observation of the model".⁸⁹ In a description of the work of the Japanese artist Utagawa Hiroshige (1797–1858) that the Aaltos had in their library, Yone Noguchi similarly expressed how:

"Hiroshige may be called a realist or an objective artist, since the artistic mood is slowly but steadily led to trees, rivers and mountains through his expression of the relation between nature and man".⁹⁰

A recurrent compositional theme in Alvar Aalto's later painting is the bringing together of independent shapes in a dynamic formation. Some suggest the 'fan-plan' of a number of the Aalto atelier buildings, such as the Nymnäshamn apartments and the Shiraz Art Museum (1968, fig 7.27a). Others adopt a unified tonal field on which objects, rendered as blocks of modelled colour appear to, jostle, rest against, overlap and reciprocate with one another (figs 7.27b and 7.32a). They evoke a poise of free association that is reminiscent of the coming together of buildings such as at the Malmi Crematorium and the Seinäjoki Centre, while a 1949 oil painting bears an uncanny relationship to the later Seinäjoki Town Hall council chamber (fig 7.27c). Technically, the most striking quality of the paintings is their materiality; paint is treated as a three-dimensional material capable of all kinds of manipulation; layering, sculpting, smoothing and so forth (fig 7.28). This is exaggerated by the thick *in pasto* application of paint with a palette knife and the mixing of sand into the oil paint, probably following the work of the artist Pauli Vuorisalo (b.1944).⁹¹

As implied above, the freeing of ‘form’ in these paintings echo (or inspired) the ‘looseness’ of the Seinäjoki Centre composition. Its composition certainly contrasts with the earlier urban plans of the Avesta Centre and *Forum Redivivum*, and suggests an erosion of their carefully considered scale in favour of an increasing confident assertion of a painterly composition to invoke the valued qualities of geographically remote sources, while simultaneously allowing the *genius loci* of its constituting environment to penetrate its core. A confidence which can either be seen as misplaced, as the affective ambience of the Inner Square at Seinäjoki is not matched by an ‘enclosure’ for supporting public life, or, as justified given Seinäjoki’s climate, with its role being primarily an mnemonic of an outdoor life which is taken up in the surrounding interiors of the public buildings.

The painterliness extended into the colours and finishes of the buildings as well. Alvar Aalto knew from earlier neo-classical buildings that even the paper-thin styling of a building using wooden cladding or a layer of paint, was able to convey mood and could imbue any building with a unifying ambience. While a “crystal-like jumble of buildings” bound together by a single material is a feature of almost all the Aalto atelier’s compositions, their tectonic quality is emphasised through the concomitant, and painterly, deployment of a single surface element as a counterpoint. At the Seinäjoki Centre, both in its locality and within the vicinity of the Inner Square, this element is the cobalt-blue tiled surface of the Town Hall which stands in contrast to the prevailing white of the other buildings.⁹² In individual buildings it could also used to break up a volume, as with the black granite panel set amongst the marble of the Finlandia Hall auditorium. Internally, a ‘counterpoint’ surface or colour was used within buildings to ‘enlarge’ an architectural element or to impart a scale or dimension to an otherwise

'functionally' white space; for instance, by covering a wall or column with a coloured or contrasting surface (fig 9.2b). Throughout the Seinäjoki Centre, externally and internally, the Aalto atelier made use of single blocks of colour in relation to each other, reminiscent of Frosterus' much earlier appeal for a 'scientific' understanding of colour: that as colours only mix on the retina, so they should be placed side by side on the canvas, unmixed.⁹³

In his early paintings and buildings Alvar Aalto had used earth pigment colours to impart a massive quality to his neo-classical buildings. In the 1930s, the Aaltos' play with wooden reliefs led to a favouring of the embodied colours of materials such as timber and terracotta; as the Church and Library at Seinäjoki demonstrate. The paintings of the 1940s and 1950s, however, changed to an exploration of a palette of ultramarine, dark blues, ochre and broken whites juxtaposed with black and greys within a tonal range that ameliorates even the most jarring forms; qualities familiar in compositions such as the foyers and auditorium of the Seinäjoki Theatre, Finlandia Hall and Essen Opera House.

As Alvar Aalto's attitude to painting changed, so did his design sketches. While the secondary drawings with which Alvar Aalto developed the designs of his Nordic Classical and Functionalist work are sophisticated (acquired from both his education and his acquaintance with architects such as Asplund and later on modernists such as Oud and May), his initial design sketches serve merely as notations of ideas. As late as the Villa Mairea (1936-9), the surviving sketches are relatively crude and unrevealing of its built material and spatial qualities (fig 7.29).⁹⁴

Following his return to painting however, the design sketches changed vividly. Instead of the earlier delineation of forms with a relatively hard pencil, initial development sketches were now made with a soft Koh-i-noor 6B pencil. Overlaying line upon line Alvar Aalto elucidated a suggestion of form from his marks, whilst keeping the ambiguity alive. The traces evoke notions of Giacometti's vibrating lines, but they most closely allude to the work of Borromini and the other Mannerist and Baroque architects whose drawings built up through layers of soft lines to suggest a sculpted and voluminous presence (figs 7.30a-c).

Aalto's use of soft pencil also demonstrated sensitivity to the possibilities of line weight. Mass is invoked by the simple act of pressing harder or building up lines and movement by the swiftness of mark-making. The plasticity and *rocaille* ambiguity of the Seinäjoki Library vault are outcomes of this process. Drawings reveal the material condition of architecture, rather than suppressing it to the singular image of a line. Marks often extend to include the contours of people's presumed movement through the space as well, marks that, suggesting the experience of the spectator, sometimes achieve a density greater than that of the forms themselves (fig 7.31).

Alvar Aalto's thick, uneven line unifies phenomena; building and landscape form continuous contours and building materials and plants are implied through hatching and silhouette. In their texture and freedom, the drawings become almost identical to Alvar Aalto's own observational and atmospheric travel sketches, and in some instances it can be impossible to separate observational site sketches from conceptual sketches made in the atelier (figs 7.32a-c). The exterior perspective entered for the Seinäjoki Church competition is a free hand and un-scaled drawing that imparts the critical dimensions of

the morphological conception of the plains, horizon and the tower that forms the proximate perception of the project (fig 4.6f).⁹⁵

Light is rarely represented in the drawings, even though it is illumination that in many ways structures the experience of the buildings. Rather than attempting to simulate how the illumination would effect and affect the spaces, the drawings explore openings and - in iterations of plans and sections - test and refine them so that they emerge as part of the basic morphology of the design (see illustrations to Chapter 4). What is noticeably absent from almost all the drawings is any interest in an overt expression of technology, a lack of interest that the experiential morphologies described in Chapter 5 bear witness to.

The impact of this change in sketching is most clearly manifest in the certainty of the concepts revealed in the sketches. Schemes such as the Viipuri Library and the Villa Mairea underwent fundamental redesigns, with each drawn iteration being more or less a mechanical notation of Alvar Aalto's change of mind. In contrast, the play of the design sketches made after the resumption of Alvar Aalto's painting evolve a conceptual palimpsest with only slight variations; none of which threaten the clearly established *Zweckmässigkeit* (purposive intention) that underlies the design of public spaces from this time, as the buildings and spaces of the Seinäjoki Centre evidence. This is a skill derived from Alvar Aalto's practice; a constant habit that evolved a learnt technique into an intuitive skill.

Chapter 8 ADAPTATION

“We are indeed born with faculties; but we owe our development to a thousand influences of the great world, from which we appropriate what we can and what is sensible. What is important is to have a soul that loves truth and assimilates it wherever found”.

Johann Wolfgang von Goethe ¹

“Millers, who are wind-thieves, make good flour from storms”.

Gaston Bachelard ²

In his 1950 eulogy to Eliel Saarinen, Alvar Aalto spoke of the depth that Gesellius, Lindgren and Saarinen’s work (see Chapter 3) gained from working directly from existing conditions and from nature, a trait that the Aalto atelier emulated in the positive contribution that immediate and wider contexts make to the Seinäjoki Centre.³ A similar critical attention to circumstance defined each of the productive phases of the Aalto atelier’s work described at the beginning of the previous chapter. In the 1920s, the Aalto atelier employed a variation of the idealised neo-classicism common to other democratic Scandinavian states, to describe a scene within which the divisions in Finnish society might be reconciled. In the late 1920s and 1930s, they attempted to further this aim through linking it to the progressive promise of international modernism, which they then adapted and evolved to suit the specificities of the Finnish environment and the nation’s resources. In the post-war reconstruction of Finland they built a sequence of uniquely nuanced public institutions, commercial and housing projects to represent, and nurture, the nascent progressive social-democratic state. As Alvar Aalto said in 1945:

“It is unthinkable that anything of value that has been achieved in the shadow of ignorance or of some kind of semi-civilization could bear witness to a highly civilized nation with development potential”.⁴

The origins of these varying periods of work lay in Alvar Aalto’s belief in the social responsibility and practice of the artist and his linkage of Goethe’s ‘Ideal Beauty’ to a

'natural progress' (see Chapter 3); concepts that were still being reiterated in Finland late into the 20th century.⁵ For instance in the work of Yrjö Hirn and Georg von Wright (1916-2003), whose book *Humanismen som livhållning* (Humanism as an Approach to Life, 1978; Swedish only) matched Goethe's view of harmony as an continually evolving process. In recalling the Jyväskylä of his childhood as unregulated and pioneering, but led by a serious avant-garde, Alvar Aalto chose to see it as close to Jacob Burckhardt's conception of artistic freedom and fellowship in Renaissance Italy, and the Ancient World before it. A model that he would later project onto his own atelier and professional life (see Chapter 9) and which, as Chairman of SAFA, he utilised in his endeavour to strengthen its status as a professional body "above politics", aware of its wider duty of care: a "stewardship of architecture" equivalent to that of the ancient Athenian Alliance based at Delos.⁶

In describing himself as an anarchist, but "first and foremost an architect", Alvar Aalto secured for himself a paradoxically ambiguous position; an independent artist who was at the same time part of a cultural elite that undertook architectural design as a social practice. A view that Alvar Aalto considered was strengthened by the all-pervasive and apparently meritocratic Finnish competition structure: society procured public buildings, and it was in the nature of being an architect to accept the task and to ensure that it was carried out to the "highest level" according to the contingencies of its context, as Goethe had stressed:

"This or that I did against my will, nevertheless I did it because it was the closest approximation to my ideal possible under the circumstances".⁷

Indeed, within limits, Alvar Aalto's "stewardship of architecture" proffered justification for the Aalto atelier to take on almost any task. Despite disagreeing with Vilhelm

Lehtinen's decision to demolish Theodor Höijer's Neo-Renaissance Norrmén building in front of the Uspenskij Cathedral and replace it with the forestry company Enso-Gutzeit's headquarters, Alvar Aalto realistically accepted that this would happen regardless, and that "someone else would do it" if he did not.⁸ He was thus content to accept the commission to replace it; his decision admittedly made easier by his hubristic self-belief; "Alvar of course thought that however good a building is, his new one will be even better."⁹ (figs 8.1a-b). A similar justification underlay his acceptance of the commission for the Soviet funded Communist Party's House of Culture at the behest of Matti Janhunen, the Communist Minister for Social Affairs.

In both cases, however, two conditions ameliorated Alvar Aalto's self-serving justification. Firstly, he trusted the client to honour the potential socio-cultural content of the projects; and secondly, and more importantly, he believed that his own artistry was capable of redeeming the singularity of the buildings' briefs through recasting the projects as contiguous elements in the civic life of the city. In the case of the Enso-Gutzeit building, through reducing the number of storeys stipulated in the Building Permit so that it acts as a plinth to the Uspenskij Cathedral; in the case of the House of Culture, by reflecting the dualistic nature of the commission in contrasting the expression of the public realm of the auditorium with the introverted party offices.

When, however, Alvar Aalto equally realistically believed that there was a fundamental divergence from what he judged as the socio-cultural intent of a project, he could be deliberately intransigent and so bring it to a halt. This occurred with the proposed Jyväskylä University Library project (1968) in which state bureaucrats insisted the atelier's proposal, which was designed to fit around the trees that form a constituting part of the university's milieu, be built with an unrelieved grid plan that necessitated cutting them

down.¹⁰ The Aalto atelier's second prize-winning scheme for the Lyngby Crematorium and Cemetery in Denmark was disadvantaged by Alvar Aalto's refusal to allow for mechanical means, rather than human hands, to move the coffins from the chapel to "their last resting-place" (fig 8.2).¹¹ More hubristically, when in the company of Ernesto Rogers, Alvar Aalto demonstrated such resistance when he smashed the neon signs of a commercial bank appended to the Säynätsalo Town Hall (fig 8.3).¹² Alvar Aalto's action was not primarily about matters of appearance, so much as a demonstration against an inappropriate incursion of the blasé and cynical baseness of monetary values into the civic life that he had sought to secure through an empathetic and representational aesthetic.¹³

Despite the frustrations of such experiences, Alvar Aalto was determined to maintain a "society-building cultural realism", and to design each project on the basis of an acute observation of its circumstance, while maintaining an objective distance from the motifs and skills deployed in relation to it.¹⁴ A closed subjective aesthetic would interfere with the spectator's engagement with the projects's underlying *Zweckmässigkeit* (purposive intention).¹⁵ As Georg Simmel expressed it in 1908 while:

"Truly great works of art might be distinguished by the individual spirituality of the creator, such works were of little value from the point of view of culture".¹⁶

In an essay of 1956, Alvar Aalto attacked the spectacle of modern architecture in similar terms to Simmel's argument, and compared the manner in which some architects treated the design of water towers and churches merely as opportunities to state their authorship:

"Form is sometimes dealt with as a separate phenomenon [...] The architect starts by dreaming up some form, then forces biodynamics, human life, into it. He gives the church a particular configuration, and then fits in its activities as best he can".¹⁷

While individual exaggeration of architectural expression necessarily had to be rejected, Alvar Aalto also argued that it was only the artist, or rather an artistic practice grounded in observation, that was uniquely able to bring about a “society-building” praxis. A conception he expressed through reference to the work of August Strindberg:

“Almost every formal assignment involves [...] conflicting elements that can be forced into functional harmony only by an act of will. This harmony cannot be achieved by any other means than art”.¹⁸

A heightened aestheticism, or grace, was required if the social values, or patterns of behaviour, that the designs wished to encourage were to be experienced by the individual. This in turn is an echo of Schiller’s argument of the political being reconciled through the aesthetic:

“give the world on which you are acting the direction towards the good, and the quiet rhythm of time will bring about its development [...] to act with grace is to act with no more moral force perhaps, but with more moral reach”.¹⁹

A conception that Yrjö Hirn extended, and that was embodied in the ‘clearings’ of the Seinäjoki Centre.²⁰

The art of the Aalto atelier was to be an almost scientific, or more accurately alchemical, process of discovery, achieved through an instinctual consideration and experimentation with the contexts that formed a design, and through the evolution of the design within those same parameters. While initiated by causal response and a determining *Zweckmässigkeit* (purposive intention), this performance – play – was non-teleological, highly adaptive and, with no *a priori* concern as to what a building should look like, inherently reflexive with the full range of its situation. The Aalto atelier’s widely disparate work for the Ahlström concern at Noormarkku before and after the Winter War illustrates this (fig 8.4).

After the Winter and Continuation Wars, when Alvar Aalto's vision (along with other members of the *Nysténin piiri*) of a broadly social-democratic, patrician and progressive Finland emerged as the country's political consensus, it might have been expected that the Aalto atelier would continue in a similar vein to their pre-war modernist work, exemplified by the Villa Mairea. That it did not, (and nor did the work of other Finnish modernists, such as Erik Bryggman and Hilding Ekelund), reflected a widespread concern about the capacity of functionalist architecture to provide a frame for civic life, as well as the effects of technology.

At the Villa Mairea, the Aaltos had sought to extend modernism through a playful spatiality and tectonic and attention to interior design, as well as a more overt harmonisation with the garden and nature. The Villa Mairea was, however, despite its public role, ultimately an elite, private vision. In contrast, the shift of expression that the Säynätsalo Town Hall represents, was an awareness of the need for legible historical forms in the (re)construction of the public realm of the Finnish Second Republic, and its reconciliation beyond. Its linkage to the life of an idealised humanist pre-industrialised Europe makes Göran Schildt's description of the Aalto atelier's work in the Jyväskylä of the 1920s as reflecting Alvar Aalto's "dreams of a radical reform of the country's social and cultural climate" apply equally to environments such as Seinäjoki in the 1950s and 1960s.²¹ Proportionate to this aim, the sequence of urban projects made by the Aalto atelier after the war, beginning with the *Forum Redivivum* (1948) and Kuopio Theatre (1952), cast buildings hierarchically as contributory fragments that extend the existing milieu. The latter, for example, employs the design of a Theatre to recast the Town Hall in its relation to the city, and to create a new *piazza* within the urban block (figs 8.5a-b).

It was this social emphasis that led to the rejection of so many of the Aalto atelier's housing schemes, as like other reformers from Ebeneezer Howard onwards, Alvar Aalto saw his vision for a "synthetic landscape" reduced to "nine birch trees and a few garden chairs".²² While in the late 1930s the Aalto atelier adapted its *Siedlung* model of flat-roofed masonry row-houses to a more *gemütlich* appearance in their work for the Finnish Forestry Industry, in the 1960s they were not prepared to modify housing types evolved in the 1950s to a purely productive ethos. In 1966 their proposal for the HAKA housing association in Gammelbacka was rejected for a spatial and topographic complexity that precluded 'efficient' element construction (see Chapter 2). For the Aalto atelier the earlier circumstance was but one of aesthetic and material contingency; the latter the irreconcilable nature of an historical, that is human, orientation in relation to an absolutist industrialism (fig 8.6). An intention made clear in Alvar Aalto's statement that:

"our housing culture, which cannot produce anything valid unless our residential buildings are grouped in such a way that the joint institutions for a small group of people acquire the same local significance as the higher institutions for the public at large".²³

The play - the habits, skills and judgements - of the Aalto atelier described in the last chapter is grounded within this social purpose and practice. In the first instance, endowing a particular ambience to projects so that the instrumental function of the project lost its *Sachlich* ('thingness') and revealed its honorific *Zweckmässigkeit* (purposive intention). In the second, locating, assimilating and evolving an array of types, standards and stylistic metaphors that, incomplete but suggestive in themselves, could quickly be brought to bear, and adapted to, the contingencies of each project once that *Zweckmässigkeit* (purposive intention) was identified.

The Aaltos therefore possessed a clarity concerning motive and method that endowed their design approach with confidence in accommodating the pragmatic needs of a

project within its greater aspirations. Alvar Aalto was adroit at making judgements during the design evolution about what could be negotiated, and what would be an unacceptable compromise; even if his own rhetoric could obscure this. For instance, in a paean to nature romanticism he described the echelon of narrow rooms of the west face of the Baker House Dormitory as like; “the branch of a pine tree, where the needles and smaller branches group more closely at the ends of the branches as an element of sun-absorption”²⁴ In reality, however, the rooms of the western-most part of the building were bunched tightly together as a response to client demand, late on in the design process, for sixty extra rooms.²⁵ Alvar Aalto’s remark therefore masks the atelier’s real achievement of accommodating this functional need while maintaining the objective of giving every student in the dormitory a view of the Charles River (fig 5.19).

As long as this overall ambience and experience was maintained, functional needs could be accommodated without any concern that attention to them would undermine the *Zweckmässigkeit* (purposive intention). In fact the reverse was the case, by attending to those minutiae of inhabitation so that they were taken for granted, they would not impinge on, but reinforce the cultural milieu.²⁶ The iterations of each of the buildings at Seinäjoki reveal this. The basic *parti* and the relationships between the buildings and the spaces remain relatively unchanged from the first sketches to construction, but the functional details are repeatedly refined (see Chapter 4). This was the necessary grace, previously identified by Goethe and Schiller, that formed the basis on which the Aalto atelier’s reputation for highly considered and functionally resolved ‘good design’ rests; a status that prompted Robin Evans to comment that: “Aalto’s philosophy of emollience [in which] the building took the burden of physiological discomfort upon itself, so removing it from the occupants”.²⁷

The confidence of the Aalto atelier in their artistic and social purpose meant that it was similarly assured in borrowing and collaborating with others, from their own earlier projects and, from the past. It is the synthesis that is original in the works of the Aalto atelier, rather than any single facet of the work. Their ease in regard to assimilation is particularly clear in Alvar Aalto's relation to Le Corbusier and Gunnar Asplund, the architects he most admired and with whom he felt himself to be in competition with.²⁸ Alvar Aalto borrowed extensively from Le Corbusier's work, but in each instance distinguished between the formal means that helped extend his own compositional possibilities, and his and Le Corbusier's intentions. The *Turun Sanomat* newspaper offices may adhere to the formal requirements of Le Corbusier's 'Five Points of Architecture', but it defers to its street setting, unlike the anti-urban forms of Le Corbusier's pavilions. Likewise the dualistic *parti* of the *Pavilion Suisse* at the Cité Universitaire in Paris (1929-32), with its contrast of a rough masonry and free-form communal space to a highly refined *Sachlichkeit* armature of students' rooms is reused at the Baker House Dormitory at MIT (figs 8.7a-b). But, critically, with the relationship of form and material to function inverted. At Baker House it is the student rooms that are placed in the battered masonry free-form, and the communal spaces that are located in the refined orthogonal element; a rearrangement that corresponds to Alvar Aalto's belief in the need to provide a protective shelter for private dwelling, and a graceful space for public congregation (fig 5.19).²⁹

Contrastingly, Alvar Aalto's borrowings from Gunnar Asplund are more direct and citational because of their frequently shared artistic purpose, and because they were acquired through the dialogue of their friendship of the late 1930s when Alvar Aalto was in Asplund's office "about once a month".³⁰ These range from the night-sky metaphor of almost all the Aalto atelier's auditoria, which is ultimately a free derivation of Asplund's

Skandia Cinema (1929, fig 8.8a); and perhaps most of all in Alvar Aalto's unified conception of building and landscape forms, first developed in the Avesta projects, which share an obvious affinity with Asplund's and Sigurd Lewerentz's Stockholm *Skogskyrkogården* (Woodland Cemetery, 1915-40).³¹ Indeed, two of the most convincing realisations of Alvar Aalto's conception of "synthetic landscape" are the Aalto atelier's crematoria projects for Malmi and Lyngby that derive from the crematoria schemes of Asplund and Lewerentz. These are schemes that link Mediterranean ambience to the revival of the Scandinavian ritual of cremation, as well as to the depth of the northern forest (fig 8.8b-c).

A similar discrimination marks the Aalto atelier's relation to its own, earlier work. Its archive of drawings and catalogue of completed buildings were treated as a polysemy of fragments that could be reassembled into new formations through the observational and inventive processes of play. Thus in 1934, when Gustaf Strengell wrote about the forms of the Aaltos' bentwood furniture being idiomatic he was being inadvertently prescient:

"Not only has Aalto discovered a new and original technique but at the same time he has logically derived from it an equally new and original architectural idiom".³²

As I stated earlier in Chapter 5, the curvilinear forms that emerged in the design of the Aaltos' furniture reappeared in other projects, including the Savoy vases, the ceiling of the Viipuri Library lecture room, the plan of the Baker House dormitory, and the auditorium wall of the House of Culture. However they were relocated not just in scale, but also in intention, and it is impossible to say in any of these cases whether the form itself means anything *per se*.³³ What is clear is that in each case the use of the trope is deployed as a poetic response to the *Zweckmässigkeit* (purposive intention) of the project, be it the bunching of flowers within the curves of the vase, the 'visual acoustics' of the lecture room, the desire to give each student an oblique view of the Charles River, or the

suggestion of the ambiguous form of a ruined ancient Greek theatre at the House of Culture.

It is the continual re-contextualisation of its lissom 'line', not the line itself, that exemplifies the Aalto atelier's application of style, and Alvar Aalto's concern with style as a syntax that allowed him to work freely. In tracing his career (see Chapter 3) there is a sense of him as a skilful observer gleaning from the world as found and, assimilating and sceptically, lovingly remaking. As Veli Paatela recalled from 1946:

"Once when we were on a beach on Cape Cod, by the Atlantic, Alvar and I and were going to go for a swim, Alvar suddenly stopped. The waves had washed a few corals onto the sand and Alvar stood there and said: [...] 'I'm filming it into my head. I might need this shape one day'. Form was crucial to him, whether it displayed itself in glass, a lamp or wood or whatever" (fig 8.9).³⁴

In relation to the specific nature of Finland and its past, the Aaltos witnessed, and sustained, a Finnish culture of assimilation and invention born of necessity. Even at the height of his modernist fervour in 1928, Alvar Aalto wrote of the need for:

"a clear-sighted acknowledgement of tradition and a much more favourable attitude to it than has been the case. To art, as a whole, it provides a broader background in harmonising contemporary phenomena".³⁵

Alvar Aalto had already detailed his understanding of tradition in a 1922 article, *Motifs from Times Past*, in which he noted that the thin cultural layering of the relatively vast and remote landscape of Finland invested any international motif with a power that "crystallised" that remoteness, and imbued even the most modest object with a presence and social charge that spoke of a linkage to a wider civilization. He contrasted "a traditional streak" of architecture that developed slowly, responding to climate, technological advances and expectations of both comfort and aesthetics, with that of another more emancipated streak that pursued "architectural luxury, external and foreign

influences, details and general trends”.³⁶ However, instead of the expected collision, the two streaks turned out to be complementary, as the latter approach radiated impulses that gradually took root in the traditional streak so that imported motifs appeared wholly at ease with their surroundings.

Alvar Aalto was convinced that what permitted such a free exchange was an attitude to assimilation in which “people were able to be international and unprejudiced in times past, and yet remain true to themselves”.³⁷ This was an unselfconscious attitude the historicism of the 19th century, and the counteracting, but equally, self-consciously historicising National Romantic movement, with its pursuit of an overtly national style in the early 20th century, had severed (see Chapter 1). In 1967, Alvar Aalto continued the theme of his 1922 text:

“‘National’ and ‘international’ tend to be seen superficially as opposites; in the long term, this is not likely to be the case [...] our beginning is not only national but even more restricted, regional and local. From this local point of departure, our life’s work tends to expand our range [...] Like ripples however, it has no absolute limit, only some kind of relationship between the initial point and the maximum range”.³⁸

The output of the Aalto atelier manifested, as the Seinäjoki Centre shows, an intention to build a local version of a worldly humanist architecture, rather than to pursue any personal or national ‘essence’. That is, to emulate the pre-industrial city as gesture and intent, not as proportion and rule. In this the Aaltos continued the free use of history that had run through their education and its emphasis on a continuity of culture, as opposed to a concern with architectural style for its own sake (see Chapter 3).

Within Finland the exemplars of this adaptive and national/international tradition were the ‘Baroque’ timber churches, predominately located in Ostrobothnia, which Alvar Aalto knew at first-hand, as well as through the mediating enthusiasm of his teachers. In

a 1921 article, *Our Old and New Churches*, Alvar Aalto wrote about the timber Keuruu church (1756-59) built by the master-builder Antti Hakola (1704-78), and since confronted with a late 19th century brick church built in the *rundbogenstil* (neo-Romanesque) as a ‘modern’ replacement (figs 8.10a-b). The latter, in contrast to the wooden church, which unselfconsciously accommodated its international form and motifs to the local mores and materials, is an indiscriminate, unmediated importation of a foreign form. Alvar Aalto commented: “My old teacher Gustaf Nyström once told me ‘The old times smiles gently at the barbarians of our day.’”³⁹ A reflection of Goethe’s observation that:

“We moderns [...] feel well enough the beauty of such a perfectly natural, naïve motif, we have the knowledge how such a thing is to be brought about, but we cannot do it; the understanding is always uppermost, and this enchanting grace is always wanting”.⁴⁰

Master-builders, such as Hakola, evolved a series of local material (timber) solutions to the wants and needs of an international church. Thin log walls supported colossal roofs through unique ‘block pillars’ that acted as buttresses, and painted wooden ‘vaults’ mimicked the vaulting of earlier masonry churches. The churches were built without saws, and joints in the laid log construction were as complex as possible to necessitate a level of craft befitting the churches’ status (figs 8.11a,b and 6.20a-b). Although most of these churches assimilated sources from Sweden, a Building Ordinance of the Swedish State decreed in 1759 that all plans had to be sent to Stockholm for approval. The Ordinance stated that designs were to be cruciform Protestant ‘hall’ churches, modelled on the Katarina Church in Stockholm by Jean de la Vallée (1656), itself derived from the Nooderkerk in Amsterdam by Hendrick de Keyser (1623). From this time, the ‘gap’ that arose between plans given assent in Stockholm and the realised constructions in Finland became a politically charged fusion of artistic and communal assertion.⁴¹

The architectural culture these churches suggested was witty and artistic, responsive to its immediate social and physical ecology, and yet conscious of its meaning, which was derived from its continuity of a wider cultural narrative; a contingent use of history - rooted in history. Assimilation was partial and inventive, attuned to location, and with no schism between an intellectual reference and that of its subsequent comprehension.⁴² Albeit more self-consciously, the Aalto atelier, applied the approach made visible in these churches to its use of type; that is as an empathetic work of art embodying certain political and social attachments.⁴³

The Aalto atelier's neo-classical work is almost indistinguishable from the world Alvar Aalto evokes in *Motifs from Times Past*, a touching northern pathos of a distant, idealised southern Europe conveyed through fragmentary citations that recall Sitte's introduction to *Der Städtebau*:

“Enchanting recollections of travel form part of our most pleasant reveries...the ancient cities, in harmony as they were with the beauties of nature, also acted as a gentle yet irrepressible power upon the temperament of the people [...] In such a situation we do indeed comprehend the words of Aristotle, who summarises all rules of city planning in observing that a city must be so designed as to make its people at once secure and happy”.⁴⁴

The neo-classical Jyväskylä Workers' Club illuminates this. Its main compositional elements are considered borrowings from the work of Gunnar Asplund and others; but it is the uncanny, and philological relationship, of the auditorium's painted exterior to Alberti's marble Rucellai Sacellum in San Pancrazio in Florence (1467), a “citation [...] so explicit that it becomes invisible”, that appeared on the Aaltos' return from their Italian honeymoon, that is most affecting for the spectator (figs 8.12a-c).⁴⁵

As the “ripples” of Alvar Aalto's range expanded, so the more confident he became in the artistic capacity of his allusion. Explicit citations reduce, and their more selective use

is marked by a greater contextualisation to the life of a building's users. Alberti's Rucellai Sacellum, reappearing at the Jyväskylä Workers' Club, imparts a suggestive presence, but can only be regarded as scenic. Contrastingly, the 'bench' of Alberti's Palazzo Rucellai façade (1452-70), which appears at the doorstep of the National Pensions Institute, draws no attention to itself and demands no recognition. It simply reiterates, and invites, the same pattern of use (figs 8.13a-b).⁴⁶

In these later works, a relation to tradition was primarily brought to mind through fragmentation, rather than citation. In common with their estimation of style, and that of the 18th century master-builders, the Aaltos saw little value in the forms of architectural history for its own sake. Rather, as when Goethe questioned why children were not allowed to play in the ruins of the Roman amphitheatre in Verona, they evaluated historical objects as everyday matters in relation to the life they supported.⁴⁷ Alvar Aalto continued the 19th century attitude, ultimately derived from the first head of the École Polytechnique in Paris, J. N. L. Durand (1760-1834) and others, of seeing history as a quarry; but as a quarry of atmospheric types and places, and not genres of order and their associated grammars.⁴⁸ In their work therefore, the Aalto atelier treated the forms of the past as a set of charged compositional anecdotes able, through the accretive processes of play, to participate in the formation of the *Umwelt* (surrounding world). Once again, this was in the manner of Goethe, who, in his experience of ruins saw each fragment as being suffused with the spirit of the work of which it had been a part; an understanding reinforced in the Aaltos' lifetime by the work of modernist painters such as Léger and Braque.⁴⁹

Alvar Aalto, however, additionally shared Quatremère de Quincy's (1755-1849) understanding that type was bound up with "needs and nature", and that classicism

might be a product of societal conventions rather than a pre-determined historical necessity, a view that both Strengell's history and Yrjö Hirn's theory of play reiterated.⁵⁰ Quatremère's apprehension liberated classicism to enable it to address the particular as well as the universal, as well as playing down the importance of origins that Abbé Laugier's conception of the 'Primitive Hut' had implied.⁵¹

The Aalto atelier's work mirrored Quatremère's emphasis on architecture's sociality as the basis for its progression, but it does not share Quatremère's conviction of the need for a unifying style; and it is to later comparative interpretations of history that their work most directly relates. In particular, those histories and theories of architecture written in the late 19th and early 20th century in Austria and Germany by Brinckmann, Frankl, Riegl and others, that ultimately reach back to Semper's *Outline for a System of Comparative Style-Theory* (1853). In this tradition architectural history was no longer analysed and categorised in relation to abstract moral conceptions, such as the Vitruvian *firmitas*, *commoditas*, *venustas*. Instead, art was regarded as parallel to the developmental laws of biology and an index of human culture that linked the effects of architecture to an underlying *Kunstwollen* (immanent style-force) to which art was subservient in each successive era (see Chapter 6).⁵² In turn, analysing the laws governing these different eras would lead to the discovery of those governing the present, on the basis of which the contemporary designer could then structure their own method of invention.⁵³

Consistent with this conception of architectural history, and with his understanding of an evolving environment, Alvar Aalto's attitude to type was Hegelian and coincident to those of Goethe, Hirn and Schiller:

"The positive aspect of all sense of tradition is that every age bequeaths to the one that follows it an outright duty to solve them honestly, in accordance with the values dictated by real life".⁵⁴

Pragmatically, there was no need to reinvent those elements whose *Zweckmässigkeit* (purposive intention) was unchanged; indeed, it was vital they did not. In designing a modern public space, it was the architect's responsibility to accommodate the enduring traditions of congregation to the realities of contemporary contexts through relocating the types that supported it.⁵⁵ As Alvar Aalto wrote:

"Nothing that is old can be reborn. But nor will it disappear entirely. And that which once was, always returns in some new form. Right now I feel that we are looking for unity".⁵⁶ Only those forms or spaces that must respond to new structures of life were required to be invented; such as when, despite their analogous forms, Alvar Aalto stressed the unique qualities required in the design of a cinema, despite its analogous relation to the already existing theatre type.⁵⁷

The buildings and spaces of the Seinäjoki Centre exemplify this. The basilican form of the Church, and the auditorium of the Theatre that refers to the ambience of ruined ancient Greek theatres, are both straightforward, if highly sophisticated, reworkings of enduring types. While it is equally structured by a deferential approach to its contained activity, there were no such direct precedents for a public lending library, so its formation was necessarily more inventive (see Chapter 6). The Inner Square is an asymmetrical 'three-sided' square that includes natural elements and spatially deforms according to the location of its occupier (see Chapter 5).

The square, as the enduring space of formal and informal public assembly was the most critical type for the Aalto atelier in reconciling industrial life to the the public life of the traditional European city, and it is precisely rendered in countless of the Aalto atelier's post-war projects as; courtyard, courtyard garden, civic garden, *piazza*, neighbourhood *campo*, *innenhof*, *atrium*, *patio*.⁵⁸ As Alvar Aalto reflected on his *Viaggio in Italia*:

“A square, having perfect proportions, where the poorest man can live is a better solution than a luxurious building where lives the Bully with a finger in his mouth”.⁵⁹

The square was also the critical type in the Aalto atelier’s casting of the dwelling as a social issue, and its aim to create neighbourhoods not just units of housing production.

The National Pensions’ Institute Housing in Munkkiniemi (1952-4) was structured around a neighbourhood *piazza*, and includes an unbuilt nursery (with its own courtyard), community shops, and opens onto a public park (figs 8.14a-c). The expression of the scheme shows the influence of the neo-realism advocated in the pages of *Casabella-continuata*; the buildings are softly modelled with variably coursed brickwork and terracotta tiled roofs, while clay drain-pipes are used to form window grilles and suggest a ‘home-spun’ quality (figs 8.15a-b).⁶⁰ The classical city-house analogy, which its individual and collective spaces suggest, was even more completely realised in the Hansaviertel Block in Berlin (1955-7, figs 8.16a-c) where the square, rendered as a patio, became the plan of the flat itself.

By viewing type as a divulging trope rather than a finalised form, the Aalto atelier was able to bring it to bear on almost any situation, and so rearrange the familiar. It is in this discrimination that the Aalto atelier’s work distances itself from the guiding hand of Goethe. While retaining Goethe’s conception of morphologies of form caused by variations in habitats, Alvar Aalto rejected his conception of an idealised form for every species. Whereas for Goethe only when an oak tree is in “the most benign conditions” can it be truly beautiful, as it is only then that it can achieve “the period of growth in which the character peculiar to any creature appears perfectly impressed on it”.⁶¹ For Alvar Aalto it was no impediment to beauty that an oak tree is one thing encircled in a forest, another in a marsh, and another on a slope and so forth. As Kalle Leppänen put

it: "Strong architecture tolerates changes along the way, which is why it is strong in the first place".⁶²

The reappearance of these revered, but everyday types, of the *consuetudo italicica* in the Aalto atelier's post-war work is coincident to Alvar Aalto's renewed contact with Italy encouraged by Ernesto Rogers. Rogers' conception of *continuata* (see chapter 6) begins with a search within the architectural act itself for the *zweckmassigkeit* (purposive intention - Roger's used the German word in his Italian text). Rogers defined this as a statement of each project's uniqueness, and its delineative parameters, drawn from the life, customs and intuitions of the era in which the project is situated.⁶³ Following on from this, typology was then availed on to comment on, and to provide an extension of, history, so that the act of design become the identification of a type that would extend the *preesistenze ambientali* (surrounding pre-existences) and resolve the issues implicit in the design context.⁶⁴

The Aalto atelier's works possess those humane traditions of the city that Aldo Rossi identified as lying "between inventory and memory". But while Rossi argued for diagrammatically certain types, un-besmirched by contingency, as the way to establish absolute continuity, Alvar Aalto worked in the opposite way, attending to the situated knowledge of a project so that type arose as a solution and not as an imposition.⁶⁵ In this way he avoided the 'trap' of typology identified by Rafael Moneo where the architect chooses a type "because it is the way he [sic] knows" and was able to enter into what Moneo described as:

"this continuous process of transformation, [in which] the architect can extrapolate from the type, changing its use; he [sic] can distort the type by means of a transformation of scale; he can overlap different types to produce new ones".⁶⁶

For Alvar Aalto, this historical mapping was to be delineated in terms of the lived experience of the building's inhabitants. As Frosterus' and Strengell's polemic against National Romanticism of 1904 put it:

"Normative aesthetics are dead. Aesthetics has had to accept the status of an historical subject [...]. As the highest authority in judging 'beauty' it is no longer absolute, its values are relative. But human thoughts are absolute, experience is the source of all knowledge".⁶⁷

As long as Alvar Aalto felt confident that a design created a milieu that affected and effected the spectator as he intended, the types which it embodies could be almost entirely sublimated. In the manner of Quatremère, who saw the possibility to imitate through both literal form and analogy, Alvar Aalto's formation of an "abstract design matrix" was not so much mimetic as evocative; determining patterns which could govern design, but which were malleable to circumstance.⁶⁸ In this way Alvar Aalto did not need to rely on any immanent value of appearance, but on the social charge of its experiential effect.

This was a reiteration of Hirn's doctrine of universal sympathy in which imitation is a required element of art and its social purpose; a catharsis in response to gestures whose origins and real meanings we may have lost, but whose repetition imparts through the experience of the whole body, not just the mind, an empathetic recognition.⁶⁹ Rather than an intellectual or verbal construct it is the very ambience that Alvar Aalto attempts to impart. This is a delicate conception. If too fragmentary or too painterly, the affective gestures would not be so much sublimated as unrecognisable to any common sense.⁷⁰ If too structured, they would be experienced merely as 'order' or spectacle, and as the privileging of a singular viewpoint.

This approach of conveying type through affinity, rather than literal geometric reference, grew from the time of the construction of the Säynätsalo Town Hall. This building

‘unfolds’ type, so that it is not so much represented as transformed into a sequence of fragmentary episodes that citizens encounter, a ‘whole’ being assembled through their experience. The fractured mass, battered brickwork, granite and turf staircases, the grass court, cloister, winding staircase and culminating gloom of the tall council chamber are all tied together with a tactile treatment of surfaces and details. Analogies to *quattrocento* Tuscany are accurate but unnecessary (and presumably unavailable to most of the citizenship). I first visited Säynätsalo, knowing nothing of its analogous status as a supposedly Italianate composition, in a -20°C blizzard in January 1985, and found it every bit as affecting as later, more informed, visits in high summer. Equally, standing in the centre of Seinäjoki today you would not imagine that Italy is implicated in its design unless you were predisposed to do so.⁷¹ As Rossi stated:

“In order to be significant, architecture must be forgotten, or must present only an image for reverence which subsequently becomes confounded with memories”.⁷²

The Aalto atelier’s painterly approach to type lent it to varying circumstances, an adaptability that was ultimately pragmatic in fulfilling Alvar Aalto’s wish of forming a continuity with the *Umwelt* (surrounding world) of traditional European civic and public life in “one of our most despised railway junctions”. This adaptability was also extended into the atelier’s attention to the modern era’s demands for serial manufacture, and it is this that most distinguished the practice of the Aalto atelier from contemporaries such as Gunnar Asplund and Erik Bryggman. Whereas Asplund’s and Bryggmann’s work remained within the bounds of the traditional Scandinavian atelier (see Chapter 9), uniquely crafting one-off environments, the Aalto atelier addressed how modern scales and modes of production could be most advantageously manipulated to serve the individual. To quote Georg Simmel:

“The deepest problems of modern life derive from the claim of the individual to preserve the autonomy and individuality of his existence in the face of overwhelming social forces, of historical heritage, of external culture, and of the techniques of life”.⁷³

The Aalto atelier’s understanding of type, style and standardisation allowed them, once they had identified the *Zweckmässigkeit* (purposive intention) and contingencies of a project, to assemble a communicative environment in response to even the most modest of briefs. It also enabled them to solve repetitive architectural problems without recourse either to the imprecision of a purely typological or rational approach, or the need to empirically reconsider each element of a project. In the manner of the Renaissance Florentine palazzo, where palazzi, such as Alberti’s Palazzo Rucellai (1452-70), that followed Michelozzo’s Palazzo Medici (1444-60), are not its inferior because they lack a demonstrative formal originality; so the Aalto atelier was content to hone its apposite type solutions. This is clearest in the sequence of eleven libraries (and eight more projects), including Seinäjoki, which followed the Viipuri Library. They all share the same approximate structure, but each is inflected to the nature of its setting (figs 8.17a-c).

It was in the development of “elastic standardisation”, however, that the Aalto atelier most directly addressed the pressures, and possibilities, of mass-production. The most evident example of this was Aino and Alvar Aalto’s prescient interest in developing modern wooden furniture and pre-fabricated timber housing; their work realised the potential of Finland’s greatest resource (while at the same time it ensured the Aalto atelier of the Finnish timber industry as an enduring client). As early as the 1920s, Aino and Alvar Aalto were familiar with standardisation through their knowledge of Finnish vernacular construction and with the technologies of pre-fabrication in the buildings of Martti Välikangas’s Puu-Käpylä and in Alvar Aalto’s own Lindberg Fair Pavilion in Tampere (1922), which were constructed from pre-fabricated panels (figs 8.18a-b). When

in the early 1930s a demand for serial production emerged in Finland, Alvar Aalto's opportunism and stewardship combined domestically in his engagement with the Finnish forestry industry and the SAFA Standardisation Institute, and internationally with organisations such as CIAM and the Bemis Laboratory at MIT.⁷⁴ It was CIAM's stated interest in standardisation, as well as housing and urbanism, that attracted Alvar Aalto in the 1930s, and it was those members of CIAM who developed pragmatic and exploratory approaches to materials and production, in particular André Lurçat, Ernst May and Moholy-Nagy, whom Alvar Aalto cultivated.⁷⁵

As early as 1930, Alvar Aalto had also absorbed the possibilities of organisation and standardisation for extending democracy through Richard Neutra's book *Wie Baut Amerika?* Partly derived from his former employer, Frank Lloyd Wright's 1901 speech, *Art & Craft of the Machine*, Neutra's book was illustrative of a tradition that embraced technology in relation to the experience of the individual. During his time in New England, Alvar Aalto also experienced at first-hand the semi-industrialised type and component based architecture of its timber and brick colonial architecture, which he later used to illustrate the catalogue of the 1945 Helsinki exhibition, *Amerika Rakentaa* (America Builds).⁷⁶ Alvar Aalto's experience of this adaptive American tradition was coincident to his early writings on technology. When writing of his first flight in 1921, Alvar Aalto thrilled in the roar of the engine but described it as "its master's slave" and concentrated on the new view it gave him of Helsinki (fig 8.19).⁷⁷

During and after the Second World War Alvar Aalto shared a pessimism about technology with Le Corbusier. However, his response was, typically, to accommodate and reform it, rather than to treat it as a symbolic issue, as for example Le Corbusier did.⁷⁸ Alvar Aalto placed technology in the field of social ecology in which, as Moholy-

Nagy expressed it: “Technology must be subordinated to humanistic values which in turn are defined by man's harmonious interaction with the totality of nature”.⁷⁹ Accelerated through adaptation to the urgencies and contingencies of the Winter and Continuation Wars, in undertakings such as the SAFA Standardisation Office and the pre-fabricated *A-talo*, Alvar Aalto reflected his experiences in America and at CIAM, along with that of the Finnish vernacular and nature, onto contemporary Finnish circumstances.

“Elastic standardisation” was morphological in nature and it was based on closely allied components, capable of responding to unpredictable growth. Its flexibility was seen as a cultural value; as the Finnish novelist Mika Waltari (1908-1979) wrote in his introduction to the work of SAFA Standardisation Office, it provided a form of “technical expertise and cultural capital”.⁸⁰ Rather than enforcing solutions, components were designed to enable a standardisation guided only by the appropriateness of the fixed spatial idea whose needs they fulfilled. A repudiation of both Taylorist and Fordist ideals of production, and what Alvar Aalto called the “psychological slum of mechanical standardisation”, as well as of the rigid ‘object-types’ advocated by many modernist architects.⁸¹

The *RT-kortisto*, developed with his ex-employees Arne Ervi and Viljo Rewell, as well as with Aulis Blomstedt and Yrjö Lindegren, at the SAFA Standardisation Office was a series of illustrated cards containing measured descriptions of standard details, components and construction systems which still exists to this day in Finland in modified form (fig 8.20). The foundations, wall, floor, and roof sections of all the buildings at Seinäjoki make use of these standards, allowing for an immediate understanding between architect and contractor; a consequence of which is that fewer drawings need to be produced for a Finnish building in comparison to say, a British one.⁸² An immediate

precedent for the Standardisation Office's work was the family of forms and components the Aaltos had evolved together with Otto Korhonen for their furniture, in which standard components, such as the 'bent-knee' leg, could be adapted to serve differing pieces of furniture (fig 8.21).

Notions of cellular growth furnished Alvar Aalto with a metaphor, a 'genetic code', even an ecology, for the growth of forms. This derived from the teleological analogies of Kiesler, Moholy-Nagy and Raoul Francé; a growth process of cells which change and adapt according to their circumstance:

"Standardisation [...] starts in the forest [...] A building cannot fulfil its purpose if it does not possess a wealth of nuances equal to that of the natural environment to which it will belong as a permanent element".⁸³

But in its harmonious, natural conception "elastic standardisation" was equally indebted to the Ruskinian appeal to a natural order that characterised the Aaltos' education, as well as to the harmonies of traditional Japanese architecture and the poetic qualities of the Aaltos' own 'play' with wood:

"Nature is the most remarkable standardisation institute of all [...] Let us take a plant or a tree. We find that every blossom on a spring-flowering fruit tree differs from all the others. If we investigate further we realise this difference is not fortuitous. The blossoms face in different directions, they are shaded by different branches, leaves and adjacent blossoms. Each blossom has a different position, a different relationship with the stem, a different orientation, and so on".⁸⁴

The key justification for Alvar Aalto's belief in "elastic standardisation" was his perception that it worked; particularly in the urgency of the situation in which it arose, that of war-time and post-war reconstruction. As he claimed:

"No activity is possible until people get a roof over their heads. This means that sufficient time for planning cannot be afforded to the first stage housing, but the elastic system reserves space and time for more careful solutions in the future" (figs 8.22a-b).⁸⁵

The Aaltos, and Ahlström, produced over 2,000 pre-fabricated timber dwellings, or rather the components for their construction, building on the existing standardisation of earlier projects. The culmination of which was the *A Talo*, published in 1945 as a 25-page brochure describing the physical and experiential qualities of the buildings along with a leaflet showing their assemblage, as well as a collection of thirty type plans ranging from 31 to 190 square metres.⁸⁶ In its component base and plan of additive ‘cells’ it mirrored the Karelian farmhouse in being able to grow adaptively over time and, in its deliberate but informal aesthetic, the traditional Japanese house (figs 8.23b-c).⁸⁷ Pragmatically this evolving house obviated the need for a large initial mortgage and promised to enable the inhabitants to build the house without recourse to the financial speculators that Alvar Aalto saw as so detrimental to the development of appropriate and affordable housing.⁸⁸

The component basis of “elastic standardisation” also offered the opportunity to refine individual elements over time so that they could then be used in more bespoke buildings. At the Seinäjoki Centre there is an array of standardised solutions that solve particular problems; bricks, window-profiles, roof-lights, doors, door-handles, steps, grilles, lamps, ceramics, furnishings and furniture. While none were individually designed for the place, the relationships to which the Aalto atelier ascribed them were unique; and it was through their role in this morphology that they impart a presence to the Seinäjoki Centre. While within the isolation of a photograph the standard elements can appear as idealised, authored ‘ready-mades’ of product design, once in place they mutely inform the overall sensual and spatial character of the Centre, as the fittings of the Library exemplify (figs 5.34a-c). The differing door handles in bronze or oak, leather wrapped or oak handrails and Japanese screens are all repeated from other buildings, but tellingly and precisely relocated, to fulfil Alvar Aalto’s statement that the purpose of “elastic standardisation”

was to produce variation not types: "Identical cells concealing the capacity to form an astounding variety of combinations."⁸⁹

What is at stake is a capacity to contribute to the ambience of an overall morphology. The pillars of the Seinäjoki Town Hall and Theatre foyers are clad in ceramic sticks to form a fluted column; but it cannot be said whether their source is the tri-partite structure of a Doric column, Tetsuro Yoshida's illustrations, or just serendipity: the happy result of transferring the tiles from their original use as a wall-surface at the National Pensions Institute.⁹⁰ What is maintained is the intention of all of these; to render tactile the relation between column and occupant, and if, in the mind of the spectator, the columns do point to a humanistic tradition in which there is a similar care, then so much the better. It is when a gap arises between the scene and its context that the style of the Aalto atelier's work becomes less certain. The deployment of Italian Carrara marble on prestigious buildings such as the Finlandia Hall, perhaps hubristically motivated by Jacob Burckhardt's statement that only white marble could compete with antiquity, being the most obvious one. Its unsuitability to, and (beguilingly beautiful) failure in, the Finnish climate led to its complete replacement within three decades (fig 8.24).⁹¹

Chapter 9 MANIFESTATION

“Ever tried. Ever failed. Never mind. Try again. Fail better”.

Samuel Beckett¹

The design process of the Aalto atelier throughout the period of the conception and construction of the Seinäjoki buildings was straightforward. Alvar Aalto would produce sketches, usually after conversations with other members of the atelier, and so set the artistic and the social agenda of the project. These drawings would then be taken by appointed job architects, and developed into measurable orthogonal projections. Following this initial stage, an iterative praxis of suggestion and criticism would begin between job architect and Alvar Aalto, lasting until the design was deemed developed enough to show to clients. After agreement with the client that the project would proceed, a team of architects would be formed to develop the project through yet further iterations. As the illustrations to Chapter 4 show, these would ultimately lead to the working and detailed construction drawings for the project, as well as an accompanying written specification. The project would then commence on site.

The directness of this iterative process has disarmed many critics and persuaded them not to attempt writing about it.² Architects and critics have been content to fix on a singular (and possibly post-rationalised) first ‘spark’ of conception and the photogenic qualities of the realised, and usually uninhabited, object (see Chapter 1). Dalibor Vesely is right to state:

“that instrumentality (*techne*) must always be subordinated to symbolic representation (*poiesis*), because *techne* refers only to a small segment of reality, while *poiesis* refers to reality as a whole”.³

Within current conventions, however, the statement is likely to be casually understood as reinforcing the continuing neglect of developmental processes and working habits in

analyses of architects' work. When things go without saying, it suggests a powerful social mythology; in this instance, that there is nothing to say about what happens between the sketch and the photograph.⁴ A myth that is now so prevalent that I would argue that the architectural profession itself finds it more natural to speak as emancipated critics, rather than as reflective artists, about its work.

The secondary processes of representation, and the translation of ideas into material form are what architects mainly expend their time and energy on; it is their pre-eminent skill, if not their genius. A reluctance to consider these processes means that while architects know about what other architects have done, they do not know how they did it. Consequently the habits and skills that formed that achievement go unnoticed, and are unrepeated. There is the situation of a profession not understanding what it admires; hence the superficial imitations of famous architects' works, but not of the artistry of their design process. This situation can have catastrophic consequences for the urban environment, as the transfer of the formal qualities of small scale pre-war avant-garde housing design to the large-scale construction of post-war social housing has demonstrated.

A lack of interest in their design skills has produced a gap in our knowledge of the Aalto atelier. The processes of representation and manifestation are, however, critical to any appreciation of its work. Firstly because as Robin Evans stated: "Drawing produces architectural knowledge and is a production of that knowledge", and secondly because even the most revered works of the Aalto atelier were subject to the contingencies and possibilities of the construction site.⁵ As Alvar Aalto put it; "It always happens that the real inspiration comes and exact forms appear only after construction has started".⁶

The Aalto atelier was modelled on an artistic atelier system typical to Finland, and Scandinavia more generally; a form that the Aaltos would have been familiar with from the time of their own education as it was the most common model of practice amongst their tutors. The most famous of which was that of Eliel Saarinen. He worked in the atelier that he and his former partners, Herman Gesellius and Armas Lindgren, had built as part of their common homestead on a bluff above Lake Hvitträsk, thirty kilometres outside Helsinki (figs 2.11a-b). The intimacy of working at, or next door to, a home, in direct contact with nature, was an ideal of the National Romantic movement; and it was one that Alvar Aalto emulated from the time he moved into his atelier and house at Riihitie in 1936 (figs 9.1a-b).⁷

In the 1930s the Aaltos rented a pilot's house on the island of Suursaari (now Gogland) in the Gulf of Finland, and from the mid-1950s onwards the Aaltos often worked with invited members of the atelier at their summerhouse at Muuratsalo. All of these locations reinforced the ideal a continuum of life and work and of an artistic collective working 'away from it all' (one can only presume the effects on the members' families). When, in 1955, the new Tillimäki atelier building was completed, it was "designed as if for a family", a mere five minutes walk from Riihitie.⁸ To work at the Tillimäki atelier was to occupy the *poché* between a blank elevation to the street and the curved wall that surrounds the stepped garden, a fragment of a ruined theatre "available to all associates for lectures, good fellowship and recreation" (fig 9.2a). Alvar Aalto emphasised, and it did occur, that members of the atelier could ski on the adjacent frozen Espoo Bay at lunch-time in the winter, or walk along Munkkiniemi strand in the summer; a penetration of the natural world into the life of the city that Alvar Aalto similarly brought about in Seinäjoki.⁹

Architectural offices based on an atelier system would be relatively small. Even at its busiest and most productive time in the 1960s, the Aalto atelier had thirty employees.¹⁰ The relatively small number of architects in relation to the quantity of projects in the office, was partly an outcome of the role of architects in Finland where an architect is not usually responsible for the budget of a building once a contract for construction has been signed. Instead, a project manager takes this role, so that the architect can devote a far greater amount of their time to design, and to the supervision of the construction of the building, rather than the contract.¹¹ The desire of Alvar Aalto to retain a small atelier was also motivated by a desire to maintain a direct relation between himself and the members of the atelier, as well as to sustain an artistic identity.¹² Alvar Aalto's analogy of the atelier as an orchestra is apt; he conducted, but all the members needed to know how to play their instruments beautifully if it was to produce excellence.¹³ The small scale also made the idealised use of type, "elastic standardisation" and stylistic tropes vital to the atelier coping with an expansive workload.

The singularity of such an architectural atelier was reinforced by the expectation that an architect employed in an atelier would leave after a few years to either find work in another atelier or to set up their own practice. The competition system encouraged this movement, with architects entering competitions in their spare time and then leaving if they won. The approach of the Aalto atelier was so particular that members of it remarked that if an architect stayed for more than five years they were lost to its culture and would not recover their own expression. As Olli Penttilä remarked:

"Particularly in the light of what happened to the senior architects afterwards, this office was like a symphony orchestra. All the possibilities were used to the full, and great music was created. But working alone seemed to be a problem for many, like [Kaarlo] Leppänen whom I consider really skilful. Working on their own didn't do justice to their skills."¹⁴

A view that was more harshly framed by Tore Tallqvist;

“Afterwards I've often thought that most of the senior architects had problems finding suitable jobs after they stopped working here. Like Slangus and Mänttäri, both fairly frustrated in their later jobs. If you look at the history of the 20th century, the architectural tradition has continued, the next generation has started doing equally good designs. But here that tradition was broken somehow”.¹⁵

However the Aalto atelier did employ a number of architects who later ran eminent ateliers in their own right.¹⁶

While there might be promotion related to experience, for example, an architect might begin assisting with a project before moving on to running jobs, there would neither be opportunity nor expectation of ever becoming a partner. That this did happen in the Aalto atelier was because of the relationship of Alvar Aalto to Aino Marsio-Aalto and Elissa Aalto. Alvar Aalto insisted that the atelier was a full partnership with his two wives irrespectively, and, as he said of Aino Marsio-Aalto; “only when we're together can an unexaggerated attitude be found”.¹⁷ As stated in the introduction it is impossible to delineate exactly what these intimate partnerships were. However it is possible to identify some areas upon which the partners had a direct impact.¹⁸

Foremost of these was Aino-Marsio Aalto's expertise in interior architecture and materials, both before and during her fourteen years as the managing director of Artek. Together with the Aalto atelier's non-dogmatic process of design structured around the individual's experience, Aino Marsio-Aalto's emphasis on interior architecture resulted in the Aalto atelier's buildings having a level of comfort, as well as convenience, which was unusual in 20th century modernism.¹⁹ As with Eileen Gray, Aino Marsio-Aalto and thence the Aalto atelier, generated houses from their domesticity, not just their role as objects to be moulded as 'housing' within greater productive 'architectural' plans.²⁰ This is most obvious at the Villa Mairea, for which Aino Marsio-Aalto and the Artek office designed

the interiors, and in which the patterns of family life, in all its minutiae, structure the space and choice materials. But it is also evident in type solutions such as the Hansaviertel 'patio' flat in Berlin. The atelier carefully designed, as part of the overall scheme, the soft materials and furnishings such as curtains, and other non-technological domestic necessities, that are often avoided by architects, but which form such an integral part of experience.

The interiors of the buildings at Seinäjoki reflect this approach as well. Fixings and furnishings reinforce the spaces; and textiles, wall-finishes, curtains and table coverings have equality with more permanent architectural elements. The free-standing furniture, built mostly in the light tones of birch, sets an overall mood of lightness and grace, but one that is flexible and adjustable by, and to the comfort of, the occupants. The interiors stand in a finely judged contrast with both the *Gesamtkunstwerk* of the National Romantics and the rigid *Existenzminimum* of functionalism, which the Aaltos themselves had earlier displayed in their design for the 1930 Helsinki Minimum Apartment Exhibition.

Elissa Aalto's partnership was conditioned by the circumstance of her original position as an architect thirty years Alvar Aalto's junior working in the atelier; a change of status that was initially difficult for some members of the atelier to accept.²¹ The significance of Elissa Aalto's work was manifold, but particularly in two areas. Firstly, as acting as a conduit to Alvar Aalto, as Frederico Marconi experienced "Elissa was of course a natural mediator of the *Maestro*'s ideas". Secondly, in gradually taking on responsibility for the atelier in Alvar Aalto's later years, as Jaakko Suihkonen witnessed:

“when he got old and tired? I’d say in the mid-60’s. There was a lot of work. Big projects. He worked so well when he was in balance but then he had many big projects going on simultaneously, like the Finlandia Hall. Many young men couldn’t have coped”²²

The realisation of the Seinäjoki Theatre is a reflection of her position as “first amongst equals” after Alvar Aalto died, as Sverker Gardberg commented:

“When Alvar was old and weak I remember him saying to me that when he is gone, Elissa will be the boss. This sentence was important to me. And I think Elissa did a remarkable job, finishing Seinäjoki.”²³

At the time of the construction of the Seinäjoki Theatre in the mid-1980s, the clarity of the development drawings carried out in the 1960s enabled her, together with the *kädenjälki* (literally ‘mark of the hand’, colloquially ‘touch’) of members of the atelier who had worked with Alvar Aalto for many years, to realise the unbuilt design. Mikko Merckling who worked in the atelier during the times when it was led by both Alvar Aalto and Elissa Aalto has commented:

“She was very knowledgeable. I think Elissa was more involved in large-volume buildings than Aino was. Aino I suppose was more intrigued by the interiors..²⁴

While her status and responsibility was respected in the Aalto atelier, there is reason to doubt that she has been accorded the respect or authority given to Alvar Aalto outside it. This can be seen in Seinäjoki’s rejection of her argument for maintaining a rendered elevation to the Theatre (see Chapter 6); while some other architects criticised her leadership of the atelier in the years after Alvar Aalto’s death.²⁵ All of which seem to be a consequence of her simply not being the singular ‘Aalto’, rather than any balanced assessment of her achievements.

From the 1950s onwards Alvar Aalto balanced his artistic life at the atelier with almost daily visits to the city centre where he both carried out his professional duties as SAFA President, and spent time at the *Pörsiklubi* cultivating, and socialising with, clients as well

as with others. Eric Adlercreutz, job architect for the Nordic Bank extension (1960-5), which was constructed on the opposite side of the street from the *Pörssiklubi*, has noted it was the one building about which it was easy to obtain Alvar Aalto's advice:

"He would stand there, look at the building and then we'd go inside the Pörssiklubi. I always had to have white paper in my pocket. The section of the columns, the granite slabs and the bronze profiles, he sketched them all at the *Pörssiklubi*. After a double campari".²⁶

When he was at the atelier, Alvar Aalto either sat in the *taverna* (the office dining room) to *resuneeeraa* (ponder ideas), or would work in the separate studio used for meetings and for testing models and prototypes. He did not have a drawing board of his own. A pattern already established at Riihitie in the 1940s, where, in the words of Tauno Keiramo:

"he walked from one desk to the next, asked the person to get up, he would sit down and the person whose desk it was would be standing and looking over his shoulder [...] He didn't really draw with rulers, he would sketch with his 6B pencil".²⁷

As he was frequently absent, the qualitative and quantitative output the Aalto atelier relied heavily on the experience of these senior members who broke the 'five year rule' and stayed at the atelier. These included Hans Slangus (1945-8, 1954-69), Heikki Tarkka (1950-2, 1955-94), Matti Itkonen (1954-63), Kale Leppänen (1955-75) and Ilona Lehtinen (1961-76). Discussions with these, and other architects, would often take place in the *taverna* over chianti and cigarettes. While as Mauno Kitunen experienced as the job architect of the House of Culture in Helsinki, "an important sketching phase happened between Alvar and a senior architect", the atelier deliberately avoided the formal business model of 'team meetings' and so forth that are familiar in other organisational models.²⁸

Alvar Aalto believed that for the atelier to be collegiate and for all its members to be capable of contributing equally, only fully qualified architects or architectural students should be employed. He considered that specialists, such as drawing technicians, would inevitably turn drawing into a purely instrumental procedure: "I have always been a little

sceptical about specialists, for specialisation means knowing more and more about less and less".²⁹ This collective aspiration was most strikingly expressed in leaving all the drawings produced in the atelier unsigned. Even a young architect could be given responsibility: Eric Adlercreutz was made job architect for the Helsinki Polytechnic lecture theatres and laboratories whilst still a final year student at the Polytechnic's Architecture school. Jaakko Suihkonen was given the State Offices in Seinäjoki almost immediately after graduating:

“He (Alvar Aalto) just thought the guy [Suihkonen] is a qualified architect and gave me the job to do. He didn’t give me much guiding in the beginning”.³⁰

The Aalto atelier employed large numbers of architectural students from Helsinki Polytechnic, which by the late 1950s was sited in walking distance just across Espoo Bay from the Tuilimäki atelier. Students would often begin working in the model room and then ‘graduate’ to being full architects, an almost apprentice like situation in which they evolved into the culture of the atelier. The atelier would frequently make financial advances to support the students through their studies.³¹ Other members were employed after meeting Alvar Aalto by chance, or because of language skills, and others applied after working at other architectural practices.³² Others reflected Alvar Aalto’s friendships, and guile, in employing the relatives of friends, associates and clients. These included the children of his fellow Academicians at the Academy of Finland, Heikki Tarkka was his nephew, while Kristian Gullichsen was Harry and Maire Gullichsen’s son and Ilona Lehtinen, Vilhelm Lehtinen’s daughter.

Alvar Aalto also deliberately employed foreigners to further the creative atmosphere he wished to nurture. On their move from Jyväskylä to Turku in 1927, the Aaltos employed two Norwegian assistants, Harald Wildhagen and Erling Bjertræs, a factor in the atelier’s

emphatically pan-Scandinavian orientation at the time. From the mid 1930s the Aaltos particularly favoured Swiss and Italian architects, to whom Alvar Aalto claimed a particular kinship.³³ This practice gave the atelier an international profile and status that was unusual and noticeable within the marked insularity of Finland; as late as 1990 there were only 26,255 foreigners in the entire country, out of a total of over 5 million people.³⁴

Foreigners also brought different perspectives into the working life of the atelier, as well as different techniques and approaches. Harald Wildhagen had experience of large-scale town-planning and architectural practice in Germany, and the innovative structure of the Paimio Sanatorium would not have been realised without him. In this Wildhagen set the precedent for the Aaltos' careful recruitment of collaborators both within, and without, the atelier. Particularly notable was the engineering office of Magnus Malmberg, beginning with the house at Riihitie in 1935 and continuing through to the Finlandia Hall extension completed in 1975. The engineer Aarne Hollmén, who was employed by Malmberg, and who worked on many projects with Alvar Aalto, expressed their relationship as one of equals, noting that Alvar Aalto "was flexible and he didn't need to question an engineer's request if it was well-founded".³⁵ An attitude applied to the architects employed in the atelier as well.

For those employed at the atelier, Alvar Aalto cultivated the impression that the activities of the atelier were simply part of life and a place beyond any immediate instrumental concerns. Members of the atelier expressed this "society-building cultural realism" as 'care'; as the interviews attest.³⁶ This approach to architecture as a sustained cultural endeavour, along with the quantity of work, reminded many members of the atelier of the academic nature of an architecture school studio. Others, entering the atelier from other practices noticed that in conventional terms the office was not that well organised

and that it was “quite a bohemian place, considering how high a status an office it was”.³⁷

Albeit from his lofty position, Alvar Aalto frequently stated that the best organisation was no organisation and that he never used a predefined formula, rather each case was dealt with independently:

“They have no advantage from working together in what the Americans call ‘teamwork’, which is a kind of creation by meeting; their cooperation must be something deeper, arising spontaneously”.³⁸

While the approach that evolved in the atelier reflected Alvar Aalto’s hope for spontaneous action, ultimately it was shaped more by the repetition of habits from earlier Finnish architectural ateliers in the form of oral traditions that appeared natural to those who were part of this tradition. The longest serving member of the atelier, Kale Leppänen observed:

“Aalto was by no means a democrat, more of Napoleon, divide and rule. It is easier to rule a group, [...] there’s a certain competition going on within the group. Although Aalto said the office is like a big family and he’s the father figure, or it’s like an orchestra where everyone plays his part as well he can. Aalto was certainly not for teamwork. Teamwork diffuses ideas. Anyway, teamwork, in optimising problems and solutions, waters things down, because brilliant ideas are sharp, warts and all, but the faults are easy to get rid of. But once you start optimising things, they become even and boring. I am all for it. [...] Not *divide et impera* but free creative thinking without optimising criticism.”³⁹

The hierarchy of the Aalto atelier was therefore paradoxical; it encouraged exchange and autonomy, but within the limits of the titular atelier system, something the two separate spaces of the Tiilimäki atelier express absolutely (figs 9.2b-c). The Aalto atelier’s members credit the studio-like atmosphere for its mutualism, endeavour and experimentation, but matching this was the knowledge that Alvar Aalto could intervene at will. Hence, some architects recall there was no hierarchy, whilst others felt it keenly. One architect believed that “The great thing about this office was that it allowed

everyone to do their best, to use all they had”, and another recognised that “One of the problem for the ‘slaves’ was that they were expected to absorb the *Maestro*’s way of thinking”.⁴⁰

The series of interviews (Appendix 2) bear out that the independence that characterised Alvar Aalto’s day-to-day relations with members of the atelier relied on a trust that members of the atelier shared its artistic purpose, and that new members would assimilate this, and its practice, from more senior members. This was evident when the operations of the atelier had to be spread over separate locations before the construction of the Tilimäki atelier. The Riihitie atelier, designed for just eight people, became cramped as commissions were won in the 1950s, and in 1953 a ‘satellite’ office was established in the recently completed *Insinööritalo* (Engineer’s House) in the city centre with about ten employees. It was here that most of the working drawings for the National Pensions Institute, widely regarded by members of the atelier, and by many critics, as the most elegantly detailed of all the atelier’s works, were carried out.⁴¹ Alvar Aalto visited this office only once a week as, in the words of Olli Penttilä:

“Both offices had their own jobs. Certain projects were given to [Keijo] Ström and [Olavi] Tuomisto’s branch [the Engineers’ House], and we had our own projects and Aalto travelled between the two offices. Nothing to write home about”.⁴²

This trust in an individual architect’s creative freedom in relation to the atelier’s underlying ethos, was clearly reflected in the scope and support Alvar Aalto offered to the job architects of foreign projects. Ilona Lehtinen was the site architect of the *Nordens Hus* project in Reykjavik (1962-8) and visited the site twenty-five times, when the problems that frequent building contracts such as bankruptcies, illness and so forth mounted up. She recalls Alvar Aalto as allowing, or enforcing, her to make her own judgements, but with an accompanying reassurance when he was aware pressures were

mounting.⁴³ Veli Paatela, similarly recounts making a “beautiful list”, at the behest of Alvar Aalto, of all the urgent matters that needed to be agreed regarding the construction of Baker House at MIT before Alvar Aalto returned to Finland; and how at every meeting during the following fortnight Alvar Aalto put off discussing until ‘next time’. Finally, promising to do so on the last day, but then, at an appointed time merely continuing to read his copy of Anatole France:

“Alvar said: ‘Veli, come, let’s have a drink.’ I sat down with my drink, Alvar reads Anatole France out loud. ‘So you have the list.’ I took the list out of my breast pocket. ‘How many important questions on your list?’ ‘About 20.’ Right, I’m going to be in Finland for 3 months. During that time you’ll have 1000 more questions. If we look at the 20 tonight, you’re still left with 980. I think you should deal with the 20 as well. My plane is about to go.’ Of course he knew that some of my questions were very important but his attitude was [- Paatela shrugs his shoulders and raises his hands -]. The other thing he said was: ‘Remember, when I’m away, you’re Alvar Aalto’”.⁴⁴

The longer architects remained in the office, so their instinctive architectural gestures and drawing styles took on the qualities of Alvar Aalto’s, even advancing it in some cases. In regard to this Leif Englund has remarked: “Some people learned it easily, others less so”, provoking Jaakko Suihkonen’s teasing riposte: “And others were too good at it”.⁴⁵ This was particularly the case with Kale Leppänen, whose design sketches and construction drawings of the church at Vuoksenniska demonstrated a three-dimensional virtuosity, complexity, and control, to produce an extraordinarily sculptural building (fig 1.10g). As Tore Tallqvist has acknowledged:

“I’m sure Kale has had an effect on the Vuoksenniska church [...] I’m pretty sure Alvar was also influenced by the people working in his office, as early as the late twenties and the thirties. Alvar has always used all sorts of influences available to him and developed them”.⁴⁶

As a studio environment the atelier encouraged extemporisation and creative suggestions from its members. Veli Paatela, who worked for Eero Saarinen at Cranbrook on

secondment from the Aalto atelier in Boston in 1948, complained most of all of “a lack of improvisation” that resulted from the much more rigid description of roles in that office.⁴⁷ Within the context of the atelier’s *Zweckmässigkeit* (purposive intention) and Alvar Aalto’s artistic and executive authority, the collective nature of the atelier could assert itself and architects would be expected, to make their own judgements on the atelier’s behalf, as Eric Adlercreutz experienced:

“I sometimes felt he wasn’t quite sure of a particular solution, and we were expected to get on with it. He did give us the keys though but it was down to us. A certain doubt and uncertainty, he didn’t need to cover those up with authority or anything”.⁴⁸

An understanding that extended to Alvar Aalto allowing members of the atelier to evaluate his sketches, as Heimo Paanajärvi recalls:

“It is my experience also that if you didn’t jump at something Alvar suggested, he was quite happy to leave it. He wasn’t pushy in that way. I was designing the Sähkötalo headquarters in Kamppi and he suggested corrugations in the façade’s copper cladding to soften it up, little indentations. There was lots of cladding and it was all very smooth. I was young and not too keen on the idea, and it was dropped”.⁴⁹

This also meant that Alvar Aalto did not expect to be asked to make decisions that he considered the responsibility of the job architect; “there was nobody looking over one’s shoulder as one worked”.⁵⁰ According to Eric Adlercreutz, “He expected us to know when to ask him things. You couldn’t go to him all the time. It was really important to know when to ask”.⁵¹ Vezio Nava’s experience was of Alvar Aalto’s straightforwardness, as “Alvar knew how the projects were progressing and if he had something to say, he would say it. If he had no comments to make, you just carried on working”.⁵²

However much Alvar Aalto might have wished to shelter the studio life of the atelier from the commercial world, the work of an architectural office is inevitably a response to cause.

The perceived instrumentality of this has led architects, particularly since the time of the post-Enlightenment French architects Claude-Nicolas Ledoux and Étienne-Louis Boullée, to create a ‘paper’ architecture autonomous of circumstance and guided only by its author, emancipated from the constraints of client and budget.⁵³ For Alvar Aalto, however, it was absurd to think that drawings alone, supposedly representing a higher, unsullied ‘purity’, could be more important than building as, for every insight such a paper architecture might offer, it also encouraged a closed, subjective and hence counter-productive, aesthetic (see Chapter 8). He called the atelier’s unrealised projects “lines in the sand”, and in consequence was casual with regard to the preservation of his drawings, explaining the relative paucity of design sketches that survive, as is the case with the Seinäjoki buildings.

Alvar Aalto’s attitude that the atelier was an artistic and social endeavour meant he never accepted or turned down commissions solely on a fiscal basis, despite approaching insolvency on a number of occasions.⁵⁴ He was, however, by necessity, shrewd when it came to finding clients and work for the atelier. Some clients owed to coincidence and others to introductions, but all were assiduously cultivated.⁵⁵ Alvar Aalto’s charm had an almost legendary status in the atelier, and in Finland more generally, although this does not imply cynicism. As stated in Chapter 8 he could work for the Communist Party and the largest industrial combines in Finland as long as their projects matched his confidence in a conception of architecture guided by *Zweckmässigkeit* (purposive intention), rather than by an immediate functional description. It is noticeable that many of the public works of the atelier, aside from those won through competition, were for individuals with whom Alvar Aalto could establish such a dialogue; such as the Gullichsens at Ahlström, Vihelmi Lehtinen at Enso-Gutzeit, and Matti Janhunen, the Communist Minister of State.⁵⁶ In commissions where there was no strong individual

client, Alvar Aalto was quite capable of manipulating that client to ensure the realisation of his idealised intention; as with the ruse of presenting ‘alternative’ designs for the Baker House dormitory to the MIT Building Committee. Paradoxically the absence of a client in competitions allowed the atelier to construct an idealised ‘client’ out of the aspirational description of the programme (see Chapter 7).

Once a commission was under way, and the initial sketches were established, the job architect in turn would establish a team of assistant architects, depending on the scale of the building. Because of the relatively small scale of even important civic buildings such as those at Seinäjoki, as well as the “elastic standardisation” of standard and adapted elements used for the production of the buildings, these teams could be kept quite small, with occasional supplementary members joining the team in moments of need. Even the Finlandia Hall, the largest single building of the atelier’s output, was the responsibility of a team of only five architects; while the secondary representation, detailing and construction of the Seinäjoki Library was undertaken by two architects, Jaakko Suihkonen and Leif Englund, who spent the best part of two years working on the project.⁵⁷ This system of small project teams conferred a sense of ownership and duty of care upon its members. As Tide Huesser experienced it, an architect would not think to send out a drawing to the construction site until the design was absolutely resolved, because whilst it may inconvenience the atelier and the contractor, as well as incur financial cost, it would inconvenience the inhabitant of the project forever.⁵⁸ Members of the team helped, and criticised each other’s work as Tore Tallqvist recalled:

“Heimo (Paanajärvi), I remember you criticising Kale (Leppänen) for designing the Finlandia Hall auditorium roof’s standing seams in a fan-shape. You would have preferred parallel” (fig 9.3).⁵⁹

Circumstances abetted this slow pace and made such rhythms common. There were lulls between competition and implementation. The small scale of the economy made the undertaking of even relatively small public buildings, such as those at Seinäjoki, a significant burden for the local economy. The frequent lengthy delays that followed the initial conceptual formation of the project also inadvertently formed a praxis of action and reflection, as almost all the structures at Seinäjoki provide evidence (see Chapter 4). For example, the Library endured several iterations between the competition in 1959 and its realisation in 1964; the critical period for the finding of its final form being the spring of 1962. It was at that moment the project, now seemingly certain of being constructed, moved through rapid iterations from being a gestural form that described an overall intention, to a materially considered construct that realised, more or less, its final configuration.

Alvar Aalto's involvement in a project as a whole would vary according to his judgement as to how important it was. In the context of Seinäjoki the criterion was the public role of each building: the State Offices were of secondary importance, and the Church, Town Hall, Theatre, and the Library, of a critical, civic nature.⁶⁰ Within the atelier “there was talk of first class and tourist class” in which certain buildings with a highly repetitive format and rudimentary cultural value, such as offices, was used to finance the attention and time commitment that a cultural building might require. When Jaakko Suikonen, the job architect for the Seinäjoki Library and State Offices:

“commented to Alvar how many hours we'd spent on the Seinäjoki Library. He got very cross. He said he knew, of course he knew, but that we would recover the loss on some office building later on. That's the way it was [...]. Architects don't really draw single-family houses any more. It's as much work as a block of flats, but a house costs two million, a block of flats twenty”.⁶¹

Another habit of the office was to use a modest building, including the Aaltos' own buildings, as a test-bed for another. For instance, an unpublished block of flats built in Tampere (1947) was used to test out the unrelieved brick walls of Säynätsalo Town Hall, while the Aaltos used their Muuratsalo summerhouse's walls as a material test-bed, and the main pillar of the Tiilimäki atelier as a full-scale mock-up of those proposed for the auditorium of the House of Culture (figs 9.4a-b).⁶²

Alvar Aalto instructed Jaakko Suihkonen, the job architect for the 'tourist class' State Offices at Seinäjoki, that the building would act as the backdrop to the centre and that it would be "mono-coloured". Suihkonen interpreted this as a white and "calm building". The highly repetitive room programme was such that it could easily have become a systematic façade, so Alvar Aalto asked that the windows "be mixed up as much as possible" so that the building did not have a static and dominating elevation. From then on, Suihkonen was allowed to autonomously design the project, at least to a critical point:

"He (Alvar Aalto) didn't seem to look over our shoulders that much. Then once he sat down to look at the drawings and took his pencil out and slashed my plan like that. 'Let's cut it across like that.' I wasn't best pleased. But I had to do it. And I must admit that the mass is better that way. It would have been a bit clumsy otherwise, like a box".⁶³

At the "first class" Seinäjoki Town Hall in contrast, Alvar Aalto was much more involved, as Suihkonen recalls:

"[I] found it difficult to place windows into a façade that had to appear as an unbroken surface. I tried all sorts of window patterns and they all looked just as silly. One day when Alvar came to see the drawings I said to him that the plan needed some vitamins. Okay, let's put the vitamins in, he said. He pointed a few things with his fingers and then he left. After that it occurred to me that in using the blue stick, the 'dick' stick (the cobalt-blue ceramic sticks); I could leave every other one out by the windows so that the windows are sort of behind a grille. [...] When Alvar saw the drawings he was happy (fig 9.5)".⁶⁴

The detailed design of projects stemmed from the play and sketches of Alvar Aalto described in Chapter 7. The forms of secondary representation that evolved these were based on those of the competition system, which since the late 19th century had created a set of norms and conventions that permeated throughout Finnish architectural practice, and which endured throughout the lifetime of the Aalto atelier (see Chapter 3).⁶⁵ The Seinäjoki competitions, as other SAFA competitions, demanded that the main drawings be at 1:200 scale, with a 1:500 Site Plan. Within a wider syntax of architectural scales, 1:200 scale drawings both privilege and suppress different aspects of a building and its environment, both to its designer and to the spectator. The scale of 1:200 permits the description of an overall formation and intention of spaces and forms unavailable at 1:500 scale but without the need to determine the functional minutiae that become exposed at 1:100 scale. This reinforced Hilding Ekelund's amendment of the SAFA competition rules in 1930 that "in the evaluation of results, the significant merits of entries weigh more than the flawless details".⁶⁶ On the 700 by 1000mm sized sheets on which competition drawings had to be presented, 1:200 scale also allowed space for the external spaces of an individual building's milieu to be included and considered, particularly in the long sections that slice through interiors and landscape (figs 4.7a-c).

In the drawings that led to this unifying concept, studies were made of, and reflected on, the site and possible growth patterns and dynamic geometries. As Walter Moser has said, "The term of order with Aalto is a basic mental attitude which is implicitly present, rather than the application of a system".⁶⁷ Even at this early stage sketches would be used to examine a project at differing scales, indicating intimate details as well as the spatial and formal *parti*, if Alvar Aalto considered their presence might be critical to the experience of the realised project. Worked up in soft pencil, a design was conceived through iterations of a sensual appreciation of the building as a topographical image. As well as

fragments and diagrams of plans, three-dimensional studies investigated the spectator's viewpoint and structured the silhouette and dynamic of the form; while carefully formed sections coalesced highly wrought ceilings and changes of level about differing activities and movement (see Chapter 7).

In relation to the built projects, what is striking is that the persuasive ambience that communicates the *Zweckmässigkeit* (purposive intention) of each project, and that will inform the *Umwelt* (surrounding world), is so complete in Alvar Aalto's early drawings. Through the habit of constant practice, the ambiguities of soft pencil line elucidated the initial ideas and built them up to suggest corporeal and affecting forms, tones and mass, whilst preserving them from a too early commitment to a single line, as conventions of architectural drawing can demand. As iteration was layered upon iteration the form of the building and space began to emerge in the manipulation of plan and section and their relationship to each other. Part of this was an ability to sketch to scale borne out of years of habit, as Ilona Lehtinen pointed out when a building of the atelier was completed in the 1960s, it seemed to differ little from the initial sketches because:

“when you received a sketch from Aalto and started drawing it out with a ruler, you found most things that you needed to know in the sketch”.⁶⁸

As already implied, the shift in drawing from the initial *poiesis* of the sketch study to the *techne* of secondary representation can divide the architectural design process.⁶⁹ Equally, it can also serve to bind it together, which the Aalto atelier achieved through their refusal to sever initial sketches from the development drawings through a constant iteration and play between the two phases; thus keeping the ambiguity of the initial sketch alive. The design process began with site visits and consultations and a room programme described in either a competition brief, or drawn up by the client in consultation with the Aalto

atelier. On the basis of this, Alvar Aalto would begin to sketch, and according to Kale Leppänen:

“his strong ideas are transferred to a job architect’s desk whose job it is to place the room programme into the sketch as realistically as possible. After that Aalto checks the design to make sure that it still fits into his architecture. And his architecture is very flexible. It is not a locked box, it is something that grows organically. In fact it improved with time”.⁷⁰

It was for an appointed job architect to dig out from Alvar Aalto’s palimpsest the first suggestion of a definite form, and relate it accurately to the site through establishing measured site sections and plans. An office habit that developed intuitively, disassociated from any theoretical origins, and which new members of the atelier assimilated simply through working on projects with their more senior fellows. In this secondary developmental process Alvar Aalto’s sketches acted more as a mentor than a determining point of view, their multi-faceted fragments being assembled into a whole by the job architect as Heikki Tarkka recalls:

“They [the sketches of the Alvar Aalto Museum] were in small bits and I had to be very careful with the paper. But they were always right to the point and showed us the way. It could still take several days to realise what he was after”.⁷¹

Drawing in pencil, on translucent *Tervakoski skizzipaperi* sketching paper on a large flat surface was endemic to this. Individual drawings, episodic fragments perceiving the object in different ways, could be overlaid and redrawn, be they freehand or ruled, and fragmentary sketches only drawn up as a ‘fair copy’ to show a client, contractor or consultant at the last moment. As with the more overt play of the primary sketch, this process allowed simultaneity in developing the projects as overlays of the tracing paper allowed for rapid iterations of the plans, sections and elevations in relation to one another.

The translation of concept sketches to design drawings to working drawings to tender drawings and finally to production information was a technique of realisation through a straightforward but rigorous process of suggestion and correction. As stated in Chapter 7 there was only one possible conceptual solution, so that this process was the checking and refining of the appropriateness of a single poetic response to the heterogeneity and practicalities of each project.

In developing the sketches members of the atelier necessarily had to use anorganic geometries to realise the intuitive line as measurable, and hence buildable, drawings, but these were not an end in themselves. Any individual designer's play with a T-square, adjustable set-square and a compass (the basic equipment for the Aalto atelier's drawings) unmistakably produced its own, often unnoticed, geometric biases when 'drawing up' a sketch. Those seeking to find 'hidden' geometric keys to the Aalto atelier's work must both stretch credulity and manipulate the evidence of drawings to do so; as well as overlook the purpose of the drawings which was to render the *Umwelt* (surrounding world) evoked in the sketch, not to create a self-referential formation.⁷² While the forms of the House of Culture have been interpreted as examples of 'quadrature',⁷³ Mauno Kitunen, the site architect of the building, observed them as the outcome of struggling to turn a sketch into a measured drawing that still reflected the 'life' of that sketch:

"It was quite a problem to turn Aalto's sketches into the main design drawings. And then into working drawings. It was a painful process. But we succeeded in the end [...] A difficult form [...] the radius which was calculated in the office: the working drawings were quite far advanced and, the American architect whose maths was strong, Lee Hodgden, he calculated it. It consists of several radii, a presentable conceptual plan for the client and the construction engineers" (fig 9.6).⁷⁴

The Aalto atelier was adept at choosing the most appropriate mode of representation to further a basic idea. At Seinäjoki, the eye-level perspective sketches of the Inner Square

made possible the study of the inter-relation of the stepped gardens to the Town Hall council chamber and the square, as well as the relation of this foreground to the background of the Church and Tower. In contrast, the reading room of the Library evolved through a reciprocal iteration of plan and section that studied reading in relation to the spatial and illuminative possibilities of the vault. At the Seinäjoki Library, sections were drawn through the reading room at 1:20 scale to ascertain the exact morphology that furnishings and fittings would form part of. These were then worked out on sketch paper overlays. Once the complete and detailed 'landscape' was achieved, the individual constituting elements were refined in 1:5 and 1:1 scale studies (figs 9.7a-c). It is significant that the abstracted 'rational' viewpoint of the axonometric was rarely used, and it was symptomatic that the twelve pseudo-rationalist 'alternatives' that Alvar Aalto put forward for the Baker House dormitory were rendered as axonometrics to emphasise their supposedly 'scientific' status.

Taken individually, the poetic qualities of both sketches and working drawings are communicated by their suggestiveness, not their completeness, and in their omissions as much as their inclusions. Alvar Aalto utilised drawing more as a form of notation that would be used in the making of a building, but that would not in itself describe that building. Even presentation drawings for competitions or clients were of simply mounted sketch paper; an act of deliberate modesty that stressed their practical status. These drawings do not attempt to form a simulacrum of the built reality. In thinking of drawing as a tool Alvar Aalto resisted, at least in part, the tendency of modern architects to privilege the eye over the other senses, and their artifice recognised the inimicable processes of craft that structure the experience of actual construction.

The drawings of both the Seinäjoki Church and Town Hall competitions are executed in pencil line with hatching and cross-hatching to suggest textures and brick courses and with vegetation described in a single wavering line. Minimal and restrained in expression, each mark, or moment of density built up through line and hatching, is accordingly telling, and variations in line weight layer the two-dimensional drawing to suggest a three-dimensional depth (figs 4.7a-c). Those of the church accentuate the materiality of the walls in contrast with the landscape and in the cross-section of the basilica, the echelon of the great columns. The line of the canopy of trees contains a power in its ascetic contrast to the more described materiality of the building itself.

Alvar Aalto would often become more active in the development of a project when it entered the detailing phase; that is when it began to be considered directly in *materia*. Rather than spending time on drawings that feigned a material appearance it was the choice of materials, the comprehension of the craft of their making, and the effect of weathering upon them, that formed the most urgent part of the atelier's work. A precision evident in the atelier's care in the site-specific selection of bricks and mortar, and attention to brick-laying, as Veli Paatela described:

"But then I found this small brick factory. The guy who ran it was Canadian-American. The workers walked barefoot on the clay from which the bricks were fired. They only extracted one layer of clay every year and then let the sun burn the surface again [...] sun-dried. The colours varied: yellowish, proplys, all black, red, different reds and so on. They were going to throw away some bricks that had fused together but Alvar said no, he wanted to use them on the wall. On the riverside facade, right at the top, Alvar used robust black bricks that had fused together" (fig 9.8).⁷⁵

The sparse yet exacting drawings that describe construction details similarly resisted simulation and were executed in relation to a simultaneous scrutiny and selection of materials. The Tiiimäki atelier's meeting room included a top-lit display bay in which to

test samples under day-light, and samples were also left in the courtyard to weather (fig 9.9a). The comparative drawings of the Seinäjoki Town Hall for studying whether the dressing of the elevation should be made with the cobalt blue ceramic sticks or the less expensive brickwork are anodyne seen on their own; but in the light of material samples available to the architects, as well as constructed precedents using the same materials or finishes, are sufficiently communicative to allow judgements to be made (fig 9.9b).

As well as systematically referencing drawings from the archive, members of the atelier evolved an oral and drawn tradition of tropes that guided future designs. An example of which was the drawing convention that three lines should never meet at a single point. A principle born out of the reality that it is almost impossible to accurately construct a building in which three elements come together at a single junction. This pragmatic practice encouraged the use of overlapping elements which are both easier to construct, less vulnerable and, crucially, in passing one element past another, more dynamic (figs 9.10a-b).⁷⁶

I designed pendant lamps for the council chamber of Rovaniemi Town Hall (1963-88) when I was an employee of the Aalto atelier. I began, on Elissa Aalto and Mikko Merckling's advice, by looking in the Aalto atelier's drawing archive, and I studied, amongst others, the white powder-coated spun steel lamps, incorporating an up-lighter and down-lighter, in the Seinäjoki Town Hall lobby (fig 9.11a, 5.27b). From this precedent I developed a variation for Rovaniemi using metal rods, instead of a bent metal reflector, for the down-lighting element of the lamp to further spread the light and give a sparkle of light and shade (fig 9.11b). While the design fulfilled the illumination required for the council chamber, the major decision was whether to use a more 'honorific' material – brass – for part of the lamp, to reflect the status of the space. While some

members of the atelier, including Majatta Kivijärvi and Tide Huesser, the site architects of the Seinäjoki Theatre, believed the form in itself was so gestural as to make this unnecessary, reflecting an oral tradition of the atelier that it was always 'too much' if one combined two expressive gestures in one object, Elissa Aalto judged that brass should be used for the down-lighting 'rods' because of the representational status of the council chamber (fig 9.11c).

In general, the intention of the atelier was to minimise the spectacle of details so that they read either as a continuity of, or a counterpoint to, the major themes of the building. At Seinäjoki Town Hall the massive veil of the cobalt-blue ceramic surface is reinforced by the afore-mentioned ceramic grilles over the windows and the minimising of the flashings and drips at the head and base of the surface. In the austerity of the Seinäjoki Church nave the meeting of the rough terracotta floor with the whitewashed brickwork of the wall is covered with a quadrant of copper skirting; a material that can be pragmatically moulded to the inherent unevenness of the junction and at the same time avoid the sense of domesticity a timber skirting would impart (fig 5.37c). In contrast, the choir is detailed with fine slivers of marble and the communion step has a long leather cushion. It was these moments that the human body came into contact with buildings, and thereby articulated the composition, that were given the most attention; as all the floors, handrails and doorhandles of the Seinäjoki Centre show.⁷⁷

The final form of a number of standard elements came about from collaboration with artisans, a practice dating back to the Aaltos' work with Paavo Tynell and Otto Korhonen. As with the Savoy Vase, whose final form was derived from the Karhula glassmakers, the Aaltos understood the value of craft in extending their drawn conceptions, and the lamps of the atelier, evolved through prototypes made by *Lamppu*

(Sparks) Hirvonen bear witness to this (fig 9.12).⁷⁸ When the Aalto atelier designed the finely moulded bronze façade of the Nordic Bank there was no attempt to design it in detail, as no one in the atelier knew how to do so. Alvar Aalto's small freehand sketches "a vertical and a horizontal section of the profile, drawn in 6B," were turned into a 1:10 model on the basis of which the fine MS80 bronze façade was developed in direct collaboration with the manufacturers (fig 2.3). Eric Adlercreutz recalled:

"I remember the Outokumpu [the copper manufacturers] engineers assuring us that the seams would be sealed with the soot in the air. We just had to trust them".⁷⁹

The failure, or perhaps the difficulty, to find an equivalent expertise in the design and manufacture of marble elevations at such northerly latitudes is seemingly the root cause of the repeated failings of the Finlandia Hall's skin.

The Nordic Bank model is a typical example of the role of model making in the Aalto atelier. Lying between the suggestiveness of the drawings and the absolute materiality of the site the Aalto atelier's models were a precise three-dimensional check on the conceptual and intuitive design process. According to Heikki Hyytiäinen, one of the expert model-makers at Tiilimäki:

"There were 5 types of models in this office: *working models*, often sectional, like Life's [Englund] Vuoksenniska church, *prototypes*, furniture or door handles, or lamps by *Lamppu* (Sparks) Hirvonen. Then there were *test pieces*, *timber experiments*, [...] in the thirties and then again in the sixties. The fourth group is *competition models*. Later on the office started making models for clients, like a model of Finlandia for the Helsinki city council. The final group is *exhibition models*, the biggest group in terms of numbers. For instance for the Florence exhibition there were ten model makers working on it" (my italics).⁸⁰

The Aalto atelier was unusual in making so many models, as in Finland models tended to be made after the event, not as part of the design process; a practice that stemmed from the education and competition system.⁸¹ It is no coincidence that the increasing spatial complexity of the atelier's projects, from the 1955 iteration of the House of Culture

onwards, coincided with the move from Riihitie where there had been no space for the establishment of a model room within the atelier. Tauno Keiramo noted:

“At Riihitie there was no special room for that purpose. Most of the work was done at professional modelmakers, [...] The model would be brought into Aalto’s office a few days before the deadline and small changes were usually made, sometimes big ones. The model maker would be there and do all the changes”.⁸²

At the Tuilimäki atelier the garage was seconded as a model workshop with seven to eight people working in its confines; mostly architecture students (and potential future colleagues) from Helsinki Polytechnic.⁸³ Alvar Aalto was now able to incorporate model making into the atelier’s process of suggestion and correction, and his working with the atelier’s model makers in *materia* encouraged the development of deformed three-dimensional surfaces that had previously only occurred in the wooden reliefs made in Otto Korhonen’s workshops. The Model Room, perhaps because of its unique situation in the geography of the atelier (accessed only through the secretary’s room on the ground floor with garage doors opening to the forecourt – whilst the main drafting room was situated upstairs), appears to have occupied a particular place in the hierarchy of the office; cutting across the established order by which projects were run “Aalto was always very relaxed in the Model Room, maybe it was an easier place for him to be, less pressure”.⁸⁴

As part of the process of suggestion and correction, models offered a concrete opportunity to observe a realised form, and then reconsider it in the light of the perceptions gained. Smaller scale models that described the overall form and landscape at the earlier stages of the projects would give way to larger scale models at the end in which the plastic qualities of interiors were studied (figs 9.13a-b). Working models in

card, timber or plaster were treated as tools and ruthlessly reworked, Mariikka Riimaja recalling:

“He [Alvar Aalto] was once thinking about a particular roof/ceiling form and he asked for the model to be sawn in half. The model was nearly finished, but he wanted to see the roof section. So we sawed the thing in half which we’d been working on for weeks”.⁸⁵

Alvar Aalto was also aware of how much a model could impress a wavering client or a competition jury, as Jaakko Suihkonen observed:

“They were objects. [...] They were important in the way competitions were judged. Wooden or cardboard models would have been out of the question. But this office was brilliant at judging suitable materials. Not that that was the primary criteria, but a suitable one”.⁸⁶

A consequence was the construction of grandiose large-scale models of urban compositions that rendered the design as a spectacle to be manipulated from above. At Seinäjoki the sequence of models was largely developmental, of a relatively small scale and of a ‘working’ quality (fig 9.14). The prestigious Helsinki City Centre Plan, however, was focused on the production of a vast and highly crafted model to impress the City Council and the media. The photograph of Alvar Aalto ‘conducting the master-plan’ to this audience, reflects the priorities of a design that is convincing when viewed in this way, but that is flawed in its relationship to both pedestrian scale and programme (fig 9.15).

The move to Tiihimäki, and the skills that became available in the model room, enabled Alvar Aalto to once again make experimental prototypes, reliefs and sculptures in house, although 1:1 scale mock-ups made to study elevations of buildings continued to be built off-site. The work included bespoke sculptures such as the fountain adjacent to the chapel at Seinäjoki as well as examples of “elastic standardisation” such as the ‘Rautatalo’ bronze door-handle used throughout the Seinäjoki Centre. This design could be

pragmatically, and artfully, stacked to hierarchically reflect the numbers of people using a door. The handle was developed from drawing to plaster cast by Lina-Christina Aaltonen in a continuum between the drafting room and the model room (figs 9.16a-b).⁸⁷ The model room also became integral to the development of the colour palette used for buildings, with Alvar Aalto able to refine the precise, tone, saturation and hue of the colours he wished to use; most notably the blues and greys that dominate the later public buildings.⁸⁸

Once on site, the Aalto atelier's surveillance continued, with observations of construction leading to perceptions of how the building might still evolve; an acknowledgement that it is only through making something that the artist can clearly see the object. That critics acknowledge many of the Aalto atelier's buildings as being beautifully built is testament to the skills of the builders and the atelier's understanding of that craftsmanship. It is also a reflection of the determination of the atelier that the making of a building should be an extension of the suggestive and corrective process that began in the initial sketches. Critical to this ambition was the high status designers had in Finland and the attitudes the atelier's clients often had, or could be persuaded to adopt. As Tore Tallqvist said concerning the Enso-Gutzeit headquarters:

“There is a small detail here which reveals how much say architects had in those days: Aalto had, I think, taken the idea from Italy that the façade should have stripy marble, on the party wall. [...] Alvar had told Lehtinen that he had made a mistake, the stripy marble should be all white. Vilhelm Lehtinen was happy for the scaffolding to go up again and the marble changed. The façade now has narrow marble slats. The stripes were a mistake, Aalto made mistakes”.⁸⁹

As buildings also took a relatively long time to be constructed, with small labour forces and comparatively intermediate levels of technology, details could to some extent be resolved in parallel to their construction. In designing the Seinäjoki Library Jaakko

Suihkonen and Leif Englund both remarked how they were able to draw details as the building rose up, therefore furnishing the space as it was formed. This situation often necessitated drawings, and hence decisions, to be made reflexively “in a rush”, but always in precise relation to the ongoing works: “It was built over 2 years [...] Time reveals”.⁹⁰

The flexibility of Alvar Aalto in relation to construction was most pronounced on site and recalls his teachings by Usko Nyström of Ruskin’s theory of imperfection:

“If perfection were the goal of our work, then a machine would often perform better and faster [but] thanks to the simple turn of the potter’s wheel the trace of the hand shows as indefinite, horizontal waves. A hand thrown vase is a living, individual being where the idea and will of the maker becomes visible”.⁹¹

This was an attitude that Alvar Aalto applied to unalterable ‘mistakes’, such as the adaptation of the ‘incorrectly’ placed brackets and beams that protrude into the auditoria of the Finlandia Hall and the House of Culture, and which became instances of witty, and loved, improvisation (fig 9.17).⁹² The sixty metre canopy that runs along the street frontage of the House of Culture and that visually binds the auditorium and office block together, and which is often seen as the crucial anchor of the composition, was only conceived when the building had already been on site for over a year. An extemporisation caused by Alvar Aalto realising the weakness of the two buildings’ distinct forms in relation to the cityscape and topography (figs 7.13a-b).⁹³

In the atelier, the regard for contractors and their contribution was high, a recognition of the tradition of master-builders that was still prevalent in Finland in the 1960s. This enabled a dialogue in which designer and builder evolved the project according to the skills of both. The trust was such that the atelier did not put measurements on their 1:1 scale detail drawings, allowing the craftsmen to work directly with the representation in the knowledge that this would result in some inaccuracies, or put another way, situated

accuracies as Jaakko Kontio the site architect of the Seinäjoki Church recalled (see Chapter 2). Tapani Mustonen, restoration architect for the Viipuri Library has said:

“You can see in Aalto’s earlier works, Viipuri as well, that things have been negotiated on site with the professionals. ‘What’s the best way of doing this?’ ‘How would you do this?’ A clear dialogue”.⁹⁴

By the 1980s this ability to improvise had already begun to fade. It is noticeable that the production drawings for the Seinäjoki Theatre are more prescriptive than for the other projects and that the building, the only one of the Seinäjoki Centre’s buildings to be built by a large national contractor as opposed to a local one, is the least inventive in its detailing.⁹⁵

Alvar Aalto’s play at Seinäjoki ended with a correction and with a perception. Firstly, as Kale Leppänen said:

“in the Seinäjoki church, where the concrete backdrop to the pulpit had been cast with a visibly wrong outline, and Aalto widened it with a new line. Both lines are there, it’s a beautiful synthesis of mistake and remedy. There were lots of these, Vuoksenniska too. But let’s not talk about mistakes, although they are interesting. I think us humans, too, are much more interesting, warts and all, than, say, Milo’s Venus made to perfected measurements. Boring” (figs 9.18a-b).⁹⁶

Secondly, in the Library reading room whose concrete vault was specified to be smooth plastered, but where the carpenters responsible for the timber formwork for the concrete, who came from a local tradition of boat building, had not only built the formwork to the standard of fine joinery, but instinctively used narrower boards for the tighter central radii, and wider boards for the peripheral outer radii (fig 9.19). “The formwork was so precise that Alvar decided not to cover the boardmarks up, he wanted it painted instead.”⁹⁷

Chapter 10: CONCLUSION

The organising hypothesis of this thesis is that the achievements of the Aalto atelier rest on three specific practices. Firstly, that an assimilative formation of an approach to design becomes, through experimentation and iteration, an intuitive set of working habits. Secondly, that an understanding of design as a social practice, is expressed as a persuasive, and effecting, cultural milieu. Thirdly, that this unifying morphology and taxonomy of types, structured by individual and collective experience, was brought about through a design technique rooted in the freedoms and values of play and the atelier tradition. It is thus that the board-marked vault of the Seinäjoki Library can act as a metaphor for the work of the Aalto atelier. A material solution that forms part of a continuously evolving *Umwelt* (surrounding world) structuring, and structured by, the lived experience of a public lending library. Its achievement rests on the simultaneous practice of various design operations, and its originality lies in their synthesis.

As the Seinäjoki Centre exemplifies, the Aalto atelier was able to build in the blighted urban and suburban conditions that have often defined the legacy of 20th century architecture, yet has so frustrated modern architects. The Seinäjoki Centre is an example of the Aalto atelier's ability to endow such places, conventionally marginalised within the cultural field of architecture, with the grace of, what Alvar Aalto described as, the "mystery" of form that "is a necessary humanising procedure" that "makes people feel good in a way that is completely different from what efforts at social salvation can do".¹

This is in contrast to many of the methodologies of 20th century architecture; cautionary tales that imply an authentic architecture can only be achieved by absolute adherence to,

or dissention from, modern conditions; which Arnold Berleant has termed a “negative sublime”.² Rather, the Aalto atelier’s approach is more in the manner of a fable, suggestive of, and to, experience; but in a manner that is resolutely engaged with its circumstances. This was a commitment that Alvar Aalto attempted to extend beyond his own artistic practice, with his continued attempts to guide the role of the architectural profession in Finland, above all as the Chairman of SAFA.

It is an unwillingness by scholars to explore the Aalto atelier’s work in relation to the facts of its situation, and in its place to accept a slight construct of Finland; that has led to the Aalto atelier’s buildings, and Alvar Aalto’s writings, being judged against abstracted notions or criteria and masked their accomplishments. There are undoubtedly weaknesses in its work, but the Aalto atelier displays a capacity for ‘both/and’, instead of absolutes of ‘either / or’, in dealing with the world as found; and it is the nuances of that world that are critical to the formation of their practice.

To all intents and purposes the Aalto atelier restored ambiguity as a central architectural theme. The intention of the Aalto atelier’s public spaces was that the ambience of the *Umwelt* (surrounding world) would slowly affect, and then effect, change; a pragmatic and opportunistic stance that was equally naïve and wise in its faith in the capacity of empathy:

“*Entweder fühle Ich oder fühle Ich nicht* (Either I feel or I do not feel) a man who had been through the harsh school of human tragedy, told me, trying to express his own personal relationship to art”.³

The experience of the Aalto atelier’s public spaces is a mixture of mnemonic and suggestion. In the first place, this is an invocation of the experience, within modern times, of an earlier stage of historical development and idealised public life; the *presistenze ambientali* (surrounding pre-existences) of the city. In the second, it counsels the

spectator's experience of the *Zweckmässigkeit* (purposive intention) of encouraging reconciliation and socially beneficial patterns of behaviour.

This is achieved through a non-dogmatic deployment of buildings and landscapes in which the individual establishes particular relationships with the environment, and with others (fig 10.1). Project briefs are therefore fragmented so that instead of facing a building as an object, one is surrounded by its sensual and communicative materiality. More than aiming for autonomous visual harmony, there is a relational morphology, a "synthetic landscape" structured, in the manner of Granö's concepts of proximity and locality, through the experience of the individual in which all that contributes to the place is present in the moment of its apprehension.⁴ Indeed, it is the primacy of the individual's perception that is the measure of the space and through which the assimilated structures, as well as the qualities of the site and the functionality of the buildings, are revealed.

In a society that has lost its connection with a public notion of empathy however, such ambiguous constructs as the Seinäjoki Centre can be easily overlooked. Its Inner Square is perhaps the most sensually persuasive space of any of the Aalto atelier's city centre schemes, but a conceptual or analogous critique may find that its 'looseness' fails to perform typologically as a 'European' square. Equally, however, a reflective criticism may establish that its fragmentary forms and spaces are matched to its inhabitants and locality; and that it reflects the modest agenda that Maurice Merleau-Ponty set out for phenomenology - in parallel to the more vaunted quest for 'essence':

"a philosophy which puts back into existence, and does not expect to arrive at an understanding of man and the world from any starting point other than their own facticity".⁵

The Aalto atelier's understanding of the design and performance of public space was undoubtedly scenic and based around observation and experience with only slight sociological and empirical analysis. As designers, their limits were those of design, and design skills; and throughout their education and careers the Aaltos absorbed the notion of an artistic and common volition shaping human activity at a particular moment in history. This stemmed from the influence of Goethe, through the turn of the 19th and 20th century group of Berlin and Viennese urban historians and theorists such as Sitte, Riegl and Brinckmann, domestically to Hirn, Frosterus and Stengell, and then more latterly to the biotechnique of Moholy-Nagy and historicism of Ernesto Rogers. These emphasised the affective and qualities of immanent, over moral, readings of history, as well as the values of experience over abstracted or mimetic 'essence'.⁶

As stated in the opening hypothesis it is the emphasis on public space and 'place' in the work of the Aalto atelier that makes its study so timely, and in many ways the work does seem to prefigure the contemporary discipline of urban design and movements such as 'New Urbanism'.⁷ It is how the approach of the Aalto atelier as a social practice dissents from these practices however, that is at least as telling. It is implicit in the public works of the Aalto atelier that an aesthetic position cannot be a final one; that the *Umwelt* (surrounding world) is continually evolving, and that the Aalto atelier's empathetic, aestheticised 'clearings' are not an end in themselves but are supportive of this process.

Whereas most contemporary urban designers and architects first encounter Nolli's Map of Rome (1748) through Rowe and Koetter's *Collage City* (1978) as a revelatory compositional antidote to modernism's failings, for the Aaltos its appearance in Brinckmann's *Stadtbaukunst* (1920) would have been as part of an unfolding tradition of the European city (fig 10.2). It was the continuity of this tradition that guided the Aalto

atelier's approach to form; and that motivated Alvar Aalto, citing August Strindberg, to state the need to guard architecture from becoming a series of individualist projects.⁸ It was also from this milieu that the Aalto atelier evolved a taxonomy of types that corresponded to existing typicalities of use and social patterns; to which in turn they added new patterns mirroring emergent habits and mores.

In his determination to make the visible world legible Alvar Aalto sometimes slipped into nature romanticism and made an unmediated use of “motifs from times past”, for instance the bathos of the residual outdoor amphitheatres that pepper schemes from the 1950s onwards; but more often Alvar Aalto resisted the attractions of analogy and refused to subjugate the brief to a preconceived form so that, unrecognised in advance, an assertive appearance value does not interfere with the firsthand experience of the buildings.⁹ The Aalto atelier's types are, in Hegel's terms, believable, in that their experience matches the *Zweckmässigkeit* (purposive intention) of the social practice of the project:

“The positive aspect of tradition is that every age bequeaths to the one that follows it an outright duty to solve its unsolved problems and above all to solve them honestly, in accordance with the values dictated by real life”.¹⁰

This pragmatism is repeated in the relationship of the Aalto atelier's social practice to its circumstance. The Seinäjoki Centre does not challenge the instrumentality of the town's productive and consumptive life; rather it forms a frame, or 'clearing', for the social structure of life within it. The maintenance of the Aaltos' relationship with Finland necessitated a nuanced architecture; ranging from emergency war-time housing to the structuring of a public life in the Second Republic, of which the Seinäjoki Centre forms the most complete manifestation. It also necessitated a capacity for contingency if the

Aalto atelier was to build appropriately and well in response to the physical and cultural needs of the country, so that the Aalto atelier's artistry is in the manner of Goethe:

“what could rescue him from a meaningless existence was not freedom but a curtailment of freedom, that is to say, the curb upon his subjective emotions which would come from being responsible for people and things other than himself.”¹¹

Claims that Alvar Aalto was above all an anti-idealist pragmatist are, however, too simplistic. A “methodological accommodation to circumstance” can be a deliberate, positive act, but by definition it must be an accommodation of something.¹² In this case the Aaltos’ determination to bring about a social and physical reconciliation and harmonisation of Finland. Alvar Aalto wrote of how:

“As a child I played under my father's work-desk, a large white table around which eight surveyors, maybe more, carried out their demanding duties. Very far-reaching and difficult work was done there by means of cadastral measurements and geodesy. The solutions were based not only on practical considerations but also on broader goals. In order to perform the work in a satisfactory way, something that I would call a society-building cultural realism was needed. Because of this background, I think the incidental aesthetic elements that may exist in my work shouldn't be exaggerated. Realism usually provides the strongest stimulus to my imagination”.¹³

The “society-building cultural realism” Alvar Aalto wished to accommodate in the everyday was all pervasive and was not to be; “detached from real life because culture is the warp which runs through all phenomena. Even the smallest daily chore can be humanised and invested with harmony”.¹⁴ Even Seinäjoki, “one of the most despised railway junctions in our country”, could be opened up to the civic and democratic life and “life-enhancing charm” of an idealised, humanist European life. However, while the Aalto atelier’s work attempted to extend this life into modern housing provision, an area otherwise given over to instrumentally productive concerns, it largely ignored modern workspaces. A resignation that the, admittedly highly acculturated, work of the Dutch

architect Herman Hertzberger at, for example the Centraal Beheer offices (1967-72) renders as a lost opportunity.

The thrust of the Aalto atelier's work was therefore the recovery of the social scale of the city, a 'middleground' public space that modernist planning squeezed out with its focus 'background' scale of the urban master plan and the 'foreground' scale of the dwelling. The Aalto atelier strove to form communicative milieux at all costs; which becomes a caricature amongst the motorways of Wolfsburg, but is compelling, and touching, in the connective tissue of Siena (figs 10.3a-b). The Seinäjoki Centre lies somewhere in between.

The consistent theme of reconciliation and the necessity for harmony in Alvar Aalto's writings, are often taken as platitudes used to justify a discrete form of composition. But glossing over the political contexts and stances of the Aaltos reduces their achievement and the seriousness of their endeavour. Spaces for representation and congregation placed at the heart of projects, potentially reconciling them with the life of the city, town or commune, be it the piazza within the Rautatalo office block or the park within the National Pensions Institute. Buildings and places take on the role of "stewardship", fables in which form becomes a kind of anamnesis, an epistemological reminder of the values and pleasure of the public life of the city as Abbé Coignard experienced it.

Seen in the light of the brittle and divided state that existed in Finland between the Civil and Winter War, and the vulnerable, industrializing Second Republic created after the Continuation War, a political intent to Alvar Aalto's approach seems clear. The institutions of Seinäjoki, and elsewhere, are treated as social phenomena and shaped as fragments of the landscape and city. A fragility of civil society made apparent in the

experience of the fragmented composition of the surrounding institutions. A strategy designed to foster an humanist life, not impose an order:

“I once heard a lecture by my French teacher, which sowed the first seed of positive doubt in my mind. He talked about stupidity, discussing the views of Erasmus and Voltaire on the subject. A school that teaches its students such antithetical methods is no longer a mere educational institution. It is a creator of culture”.¹⁵

The Aalto atelier set out a project that was more modest, or perhaps just less vain, than those of architects who believed that the totalities of their visions could somehow overcome or re-order the predominant modes of production, and that was arguably more successful in adopting an historical - human orientation. As Henri Lefebvre argues:

“Abstract space, which is the tool of domination, asphyxiates whatever is conceived within it [...] This space is a lethal one which destroys the historical conditions which give rise to it, its own internal differences, and any such differences that show signs of developing, in order to impose an abstract homogeneity”.¹⁶

Of all the Aalto atelier’s schemes it is at the intimate scale of Säynätsalo Town Hall that this is at its most convincing. Indeed it is the almost monastic, reclusive nature of Säynätsalo and its suggestion of a calm *vita contemplativa* that is its most beguiling quality.¹⁷ But where the scale of the Aalto atelier’s public space demands a public life to fill it, with what Hannah Arendt called the *vita activa*, it falls away. What is absent from many of the Aalto atelier’s public spaces, including the Inner Square in Seinäjoki, is occupation. For all their suggestiveness and adaptiveness, the public spaces have yet to be filled with the life that the Aaltos so aspired to. Like the impression of the amphora on the gravestone Alvar Aalto designed for Ahto Virtanen it is an absence, rather than a presence, of human life that they imply, and so the ambience becomes a wistful Finnish version of the melancholic *hüzün* that Orhan Pamuk describes suffusing his experience of post-Ottoman Istanbul (fig 10.4).¹⁸

In part, this is an outcome of Alvar Aalto's insistence on separating the commercial from the representational. Ironically, the only truly occupied public space of the Aalto atelier's work in Helsinki is that of the Academic Bookshop, which as a commercial space belongs to what Alvar Aalto saw as the 'lesser' square of the *agora*. The Seinäjoki Centre endows a grace on the town, and shows up the brutality of the surrounding environment, but it remains at a remove from its commercial life. However the lack of occupation is also an outcome of how the spaces are perceived; rendered as the 'Aalto Centre' the Seinäjoki Centre's honorific status is such that even during the annual Seinäjoki *Tango markkinat* festival, a vast national celebration of the music and dance, which takes place during July in the open spaces of the town, no dancing takes place in the Inner Square (fig 10.5).¹⁹ In other locations it is the management of spaces that is the problem. In Helsinki the penetrating public route and park central to the conception of the National Pensions Institute has been locked off, as has the Rautatalo's atrium by its new owners. Elsewhere, the House of Culture's communist associations and location in a working class quarter of the city has seen it sidelined from Helsinki's wider bourgeois public life. While even the small, and commercial, neighbourhood square at the heart of the National Pensions Institute housing has been colonised as a car park, its shops closed.

Such fates bear out the limits of the Aaltos' (Goethean) belief in the affecting powers of architecture in the face of the instrumentality of modern life, even if it reinforces the notion of their anamnesis. Alvar Aalto melancholically concluded as early as 1922 that "the public seems to receive good works as unwanted gifts". However, occupation may still take place as citizens (re)learn how to 'use' the city as a place of congregation and challenge the encroaching privitisation of the public spaces that the Aalto atelier and their original civic minded clients created.²⁰ This is already manifest in the everyday street-life of Helsinki (that the Aaltos ignored) in which a 'café culture' established itself in the

space of a few years during the mid-1990s, a typicality of European metropolitan life which the citizens of Helsinki assimilated, and evolved, into their own unique milieu. At Seinäjoki the library succeeded in fostering an *Umwelt* (surrounding world) through identifying and dignifying the habits of a public lending library and giving a space to contemplation and reflection at the centre of public life. The continuity of the taxonomies of European liturgical and theatrical life that the more traditional forms of the churches and theatres represent can also lay claim to some success. It is the more ambiguous Inner Square that we wait on.

It is Alvar Aalto's playful and *malerisch* (painterly and picturesque) approach and practice, that leads to the formation of this suggestive world. A technique through which he could harmonise his intuitive response to places, materials and history with the intellectual structures of culture and civil society that he knew his designs had to contribute to. For Alvar Aalto, reaching back to Goethe, art was, in the words of Josef Albers:

“revelation instead of information, expression instead of description, creation instead of imitation or repetition. Art is concerned with the HOW not the WHAT; not with literal content but with the performance of the factual content. The performance – how it is done – that is the content of art.”²¹ (Alber's capitalisation)

Art alone was capable of marrying the *Zweckmässigkeit* (purposive intention) to the care that underlay the Aalto atelier's conceptionn of an *Umwelt* (surrounding world).²² The rhythms of experiment and production that characterised the Aalto atelier reflect the primacy of an artistic approach dovetailed with the possibilities and needs of circumstance. The clearest contrast being the exploratory work carried out in the emancipated circumstances of neutral Sweden and the United States during the 1940s, and the strictures of war-torn Finland in the same period in which the SAFA Standards Office and *A talo* emergency housing evolved.

Painting was of particular importance in suggesting how a particular ambience could be brought about, from the early coarse structuralism and tonal range of the realist *marraskuu* group of painters, to the topographic and morphological formations of Alvar Aalto's later paintings. The resurgence of Alvar Aalto's interest in painting at the same time as the Aaltos' renewed faith in the atmospheric qualities of the traditional European city is hardly coincident. While as much as it was a source of compositional possibilities and ambience it was probably also the source of some of the weaknesses identified in the Seinäjoki Centre, as at times Alvar Aalto allowed the intuition with which he developed projects to overwhelm the more measured structuring of the scheme.

At its simplest, play was a way of getting things done, to intuitively create a design from the varying practicalities of a project. A process that allowed Alvar Aalto to, in Goethe's words "*ausser sich geben*" (to go outside himself), to take account of all the factors involved, play with them, and come up with an appropriate solution.²³ Consequently, Alvar Aalto derided any interruption to this process, and sought to nurture it in his ateliers, laboratories and collaborations:

"When a real artist does his [sic] best, this is in itself a kind of guarantee of good work. But history shows that to be allowed and able to do his best, an artist needs understanding and sympathy for his efforts; in other words a climate favourable to art. The more social the art – and architecture is one of the most social of the arts – the more collective the spirit, the participation of the environment and the whole epoch, in the work it involves".²⁴

The Aaltos' maintenance of friendships and collaborations with artists, architects, craftsmen and clients were similarly of great importance. It can be argued that it was the deaths of Alvar Aalto's intellectual peers, Aino Marsio-Aalto, Erik Bryggman, Sigurd Frosterus, Yrjö Hirn, László Moholy-Nagy and Tyko Sallinen, within a few years of each other in the late 1940s and early 1950s that, along with the increase in the atelier's

workload, accounted for the reduced conceptualisation and experimentation in the atelier's work. For instance Erik Bryggmann's death in 1955 robbed Aalto of the one contemporary Finnish architect he looked up to.²⁵ There is little in the work and the ideas of the Aalto atelier that cannot be attributed to some source or another. Far from being the 'lone' artist-architect of repute, Alvar Aalto was an opportunist endeavouring to locate ideas, techniques and projects, confident in his cultural and social intentions and the capacity of his play to turn assimilated material into something new.

The most critical peer was Alvar Aalto's partner Aino Marsio-Aalto. Her omission from most accounts of the Aalto atelier has had two consequences. Firstly a misunderstanding of the nature of architectural practice, and why partnerships are so common a form of practice as a form of enabling a creative dialogue and the reflective consideration of one partner's work by another. Secondly, and more particular to the Aalto atelier, to overlook the primary source of the Aalto atelier's social practice, as well as the uniquely comfortable and carefully considered interiors designed by the Aalto atelier. In the case of Elissa Aalto, the oversight has been of her extraordinary artistic responsibility for the atelier, which she assumed from the late 1960s onwards.

The Aalto atelier itself was in many ways an *Umwelt* (surrounding world); in which the members of the atelier contributed to and benefited from, its humane and highly productive practice. The Aalto atelier evolved an approach to design structured by the responsiveness of play that could be extended into *materia* through systematic representation and testing, as well as simple suggestion. Without this support there seems little reason to think the qualities of the Aaltos' designs would have been achieved. Any reflection on the Aalto atelier's work must also acknowledge its ability to elegantly resolve the functional aspects of a brief, and the skill with which members of the atelier

practiced secondary forms of representation. The nature of the atelier obviated the gap between any limitations of Alvar Aalto's intention and the actual making of the building; so that, for example, his relative lack of interest in structure - which is nevertheless a matter of great interest to the buildings themselves - could be condoned and accommodated. The atelier was a form of practice that allowed Alvar Aalto to avoid the hiatus common to so much of modern architectural practice and criticism; that of explicit product and implicit process.

As Alvar Aalto made clear, any mental image is utterly dependent on its material implementation; *materia* is both the medium through which an image is made visible and which, through the laws of its own materiality, extends that image. For those wishing to find any explanation, functional, typological, phenomenological or otherwise, the endeavour is doomed to be found wanting if there is no engagement with how the work of the Aalto atelier was realised. It is this intimacy with craft and materials that leads to the sensual and communicative nature of the buildings such as the Seinäjoki Centre; as well as the pragmatic development of "elastic standardisation".

'Aaltoesque' may, in the end, be the most fitting adjective for the Aalto atelier's work because of its uniquely synthetic response to such an array of environments. The Aalto atelier built out of what was there, not what they wished was there, confronting and enjoying the particularities of both social and physical ecologies, site, programme, memory, materials and construction, and allowing each part to inform the other. In aiming to build well within the everyday of modernity, it exhibited a care for, and accommodation of, the uncertainties of the 20th century human condition. From the 1940s onwards the practice acknowledged the cultural situation that Paul Ricoeur articulated in 1961 in which:

"we are in a kind of lull or interregnum in which we can no longer practice the dogmatism of a single truth and in which we are not yet capable of conquering the scepticism into which we have stepped".²⁶

This was a situation that the Aalto atelier was, to a limited extent, able to cope with by turning that scepticism into a basis for invention and care, as fore-shadowed by Alvar Aalto's own argument that:

"The frequently despised philosophy of doubt is an absolute prerequisite for anyone wishing to contribute to culture, assuming that this doubt is transformed into a positive force. For criticism conveys the message 'I do not follow the tide', and on the highest plane doubt can be transformed into its apparent opposite, love in a critical sense, love that endures".²⁷

NOTES TO CHAPTER 1: INTRODUCTION

¹ Quoted in Bruce Chatwin (1987), p.174.

² The Aalto atelier carried out approximately 500 projects in Finland and a further 90 abroad. Over 2,000 *A Type* houses were built. Private conversation with Arne Heporauta, April 2003.

³ Alvar Aalto (1954), p.5.

⁴ Alvar Aalto (1962), p.276.

⁵ Kristina Navari (1992), p.256.

⁶ Kristina Navari (1992), p.262.

⁷ Wölfflin himself had been a student of Jacob Burckhardt (1818-97), another Swiss historian, whose books formed a key influence on Alvar Aalto's education (see Chapter 2).

⁸ Siegfried Giedion (1967), pp.619, 620 and 633.

⁹ Marc Treib (1998), p.59. Siegfried Giedion (1950), p.77.

¹⁰ See Walter Nerdinger (1999), p.116. Siegfried Giedion (1967), p.622. Göran Schildt (1984a).

¹¹ Manfredo Tafuri and Francesco Dal Co (1976), p. 338. Henry-Russell Hitchcock (1958). Vladimir Šlapeta (1980), p.135.

¹² Siegfried Giedion (1967), p.620.

¹³ Malcolm Quantrill (1983), p.1.

¹⁴ The only known remark I know Alvar Aalto made about Sibelius was that he was "too much like Tchaikovsky". Vezio Nava, private conversation with author, August 2004.

¹⁵ The *Architectural Review* under the editorship of Peter Davey (1980 – 2005) is perhaps the most complete example of this tendency, with Finland posited as an architectural shangri-la in relation to the United Kingdom.

¹⁶ Wilfred Nerdinger (1999), pp.11-26.

¹⁷ Rainer Knapas, Private conversation with author, April 2007. See for instance Matti Klinge (1990), pp.7-20.

¹⁸ 'Nordic Classicism' is the given name for a period of austere neo-classicism widespread in all the Nordic countries between the 1910s and 1930s. The name originated in the 1980's post-modern 'rediscovery' of classicism in a 1982 touring exhibition of the same name. See Paavilainen (1982).

¹⁹ Jorma Mänty in Jormakka, Gargus and Graf (1999), p.7. Kristian Gullichsen (2000), p.12.

²⁰ Beatriz Colomina (2000), p.118 quoted in Petra Ceferin (2002), pp.3-16. Ulla Kinnunen (2004), p.188.

²¹ Petra Ceferin (2002), p.16.

²² Karl Fleig (1963), (1971), (1978).

²³ Göran Schildt (1989a), pp.172-74. Interview 16, Veli Paatela.

²⁴ Alvar Aalto (1958). Robert Venturi (1976), p.67. Giedion (1967), pp.665-7.

²⁵ Paul David Pearson (1978), pp.120-22, 148.

²⁶ Paul David Pearson (1978), p.220.

²⁷ Porphyrios cited Michel Foucault's *Les mots et les choses* (1966) in which *discreminatio* refers to the activity of the mind which no longer consists in drawing things together"but, on the contrary, in imposing the primary and fundamental investigation of difference" and *convenientia* "refers to the adjacency of dissimilar things, so that they assume similarities by default through their spatial juxtaposition". Demetri Porphyrios (1982), p.2.

²⁸ Demetri Porphyrios (1982), pp. 25-6, 55, 110, 41-4.

²⁹ Demetri Porphyrios (1982), pp. 101, 113, 94-8, 84-6, 60-2.

³⁰ Juhani Pallasmaa (1967). See also Kirmo Mikkola (1980a), pp.88-89.

³¹ Jaakko Kontio (1998), p.52; translation Harry Charrington. Kirmo Mikkola (1980a), pp.88-89. Göran Schildt has stated that he edited *Sketches* in 1973 at Aalto's behest as a response to these attacks. Göran Schildt (1989a), p.313.

³² Pekka Helin (1979), pp.158-74.

³³ Kirmo Mikkola (1979a), pp.135-57.

³⁴ See Helin's, Schildt's, Wickberg's and Colin St. John Wilson's papers in the published papers of the first Alvar Aalto Symposium, Kirmo Mikkola (1979b), pp.100-33.

³⁵ See Jaakko Kontio (1998), p.52.

³⁶ Göran Schildt (1985a), p.106.

³⁷ Tuomas Wichmann (1998), p.13.

³⁸ Juhani Pallasmaa (1985a), p.44. Juhani Pallasmaa (1987).

³⁹ *Taidehistorallisia tutkimuksia* (Art History Research).

⁴⁰ Göran Schildt (1989a), pp. 301, 305-311.

⁴¹ Roger Connah (2000), p.13.

⁴² Kristian Gullichsen (1998), p.10. For varying interpretations of the Villa Mairea see Juhani Pallasmaa (1998), Richard Weston (1992), Sarah Menin and Flora Samuel (2003).

⁴³ Göran Schildt (1984a), p.20. Schildt first met Aalto at the Projektio Film Club in the mid-1930s but they became friends in 1953 through the Italian painter Roger Sambonet, to whom Schildt introduced Aalto. Göran Schildt (1989a), pp.172-74.

⁴⁴ Göran Schildt (1989b), p.32. As Schildt's own family had its origins in the Jyväskylä of the same era it is possible that this is a romanticization of his own origins. Göran Schildt (1984a), p.10, (1988), p.32.

⁴⁵ Göran Schildt (1984a), pp.102-108, 61.

⁴⁶ Göran Schildt (1984a), pp.29-30, 113.

⁴⁷ Göran Schildt (1989a), pp.48, 139-151, 241, 301.

⁴⁸ Göran Schildt (1985a), pp.129 & 131 and (1984a), p.223.

⁴⁹ Schildt was awarded his doctorate in 1947.

<http://www.soderstrom.fi/forfattare/SchildtG.htm> accessed 20.04.08.

⁵⁰ Interview 7, Jaakko Kontio.

⁵¹ Roger Connah (2000), p.19.

⁵² Heikki Alanen (Alvar Aalto's son-in-law) quoted in Ulla Kinnunen (2004), p.9.

⁵³ Renja Suominen-Kokkonen (2004b), p.98.

⁵⁴ Even in Göran Schildt's biography there are only a few pages coverage to the "the practical foundation [...] the boys [sic] at the office". Göran Schildt (1989a), pp. 248, 258-268.

⁵⁵ Siegfried Giedion (1967), pp.665-7.

⁵⁶ Kimmo Sarje, Private conversation with author, April 2007.

⁵⁷ Siegfried Giedion (1967), p. 874.

⁵⁸ See Rayner Banham (1962), p.lxvii, Malcolm Quantrill (1983), p.ix. Bruno Zevi (1999) as well as Göran Schildt (1989a).

⁵⁹ Johan Peter Eckermann (1836-48), p.379.

⁶⁰ Göran Schildt (1989a), p. 217.

⁶¹ Göran Schildt (1997). For consistency translations will be taken from the more comprehensive and later volume, although Stuart Wrede's translations in *Sketches*, Göran Schildt (1978), are arguably more poetic than those of *Alvar Aalto In His Own Words* by Timothy Binham.

⁶² Göran Schildt (1991), p.21; translation Jaana Kuorinka & Harry Charrington. A flexibility Alvar Aalto seems to have applied to Schildt himself. As Schildt notes, they naturally spoke Swedish together and conversed of largely Swedish-speaking Finnish intellectuals and artists and the Mediterranean. Göran Schildt (1984a), p.16

⁶³ Göran Schildt (1984a), p.32.

⁶⁴ Interview 9, Mikko Merckling.

⁶⁵ Göran Schildt (1994). Arne Heporauta (1999).

⁶⁶ Jorma Mänty (1999), p.8.

⁶⁷ “*Aalto* [...] a sign of activity – the movement inherent in any natural order.” Sarah Menin (1997), p.99. Similarly speculations about the etymology of the word ‘nature’ in relation to the Aaltos’ work seem intractably difficult; the word is *natur* in Swedish, but *luonto* in Finnish. See Sarah Menin and Flora Samuel (2003), pp.2-3.

⁶⁸ Alvar Aalto (1939b), p.111. See also Alvar Aalto (1958), p.16. Alvar Aalto refused to acknowledge which language he spoke in his application for a professorship at Helsinki Polytechnic in 1935. Application paper in Archives of the Helsinki University of Technology.

⁶⁹ Kirmo Mikkola (1980a), p.32.

NOTES TO CHAPTER 2: LOCATION

¹ Alvar Aalto (1972a), p.274-5.

² Kirmo Mikkola (1980a), p. 89. See also Göran Schildt (1984a), p.179.

³ *Statistical Yearbook of Finland* 1978.

⁴ Alvar Aalto (1954b), p.138.

⁵ <http://sunposition.net/sunposition/spc/locations.php#1> accessed 05.01.2008.

⁶ Lauri Putkonen (1993), p.4.

⁷ ‘Alku’ Työväen Osakeyhtiö at 20 Ruolahdenkatu. Arne Heporauta (2004), pp.15-22.

⁸ Senior Forester G. O. Timgren. G. O. Timgren & Päivö Oksala (1958). Göran Schildt (1984a), p.34.

⁹ Kari Pitkänen (1993). Snellman was Finance Minister at the time.

¹⁰ For more on this see Rayner Banham (1960) and Göran Schildt (1989b).

¹¹ Göran Schildt (1984a), p.44. Alvar Aalto (1921), pp.12-3. Kirsi Saarikangas (1995), pp.160-171. The address is now Yliopistonkatu 22.

¹² Kirsi Saarikangas (1992), p.160. The traditional status of women in rural Finland can perhaps be best shown by the words *isäntä* and *emäntä*. These only translate into English as the hierarchical ‘farmer’ and ‘farmer’s wife’, but in Finnish each title, and role, was distinct and roughly equal.

¹³ Göran Schildt (1984a), p.25. There has been speculation of how the trauma of the early death of mother caused a psychosis in Alvar Aalto, for example Sarah Menin & Flora Samuel (2003). However this was based on a misinterpretation of remarks made by Aalto’s son-in-law, the

psychiatrist Yrjö O. Alanen in Göran Schildt (1984a), p.71; which Alanen repudiated in *ptah*, Alanen (2004b), p.54.

¹⁴ Eero Jutikkala & Kauko Pirinen (1984), pp.81-3. William Wilson (1976), p.127.

¹⁵ Göran Schildt (1984a), pp.44-53. Alvar Aalto (1958a), p.16.

¹⁶ Matti Klinge (1980), p.35.

¹⁷ Rainer Knapas, private conversation with author, April 2007.

¹⁸ Göran Schildt (1984b), p.152.

¹⁹ See also Alvar Aalto (1939b), p.168, (1949a), p.111.

²⁰ Alvar Aalto (1950a), p.245. Untitled / undated article in Alvar Aalto Foundation archive in Göran Schildt (1984a), p.160. Lars Sonck (1870-1956) was the other most eminent National Romantic practitioner.

²¹ Breines, Simon (1938), p.6. Patrik Nyberg (1992), p.308.

²² Eero Jutikkala & Kauko Pirinen (1984), pp.207-8.

²³ Göran Schildt (1984a), p.87.

²⁴ J. H. Wuorinen (1965), pp.209-10. Göran Schildt (1984a), p.87. Eero Jutikkala & Kauko Pirinen (1984), pp.212-20, 223.

²⁵ Sini Sylvelin (2004).

²⁶ Quoted in Päivi Aalto (2005). The wider historiography of Finland has also involved omitting issues that threaten these constructs. For instance The Finnish Literature Society's *Finland: A Cultural Encyclopedia*, Alho, Olli, Hawkins, Hildi, and Vallisaari, Päivi; ed. (1997), has no entries for The Civil War, Communism or Politics.

²⁷ Aino Marsio's childhood friend, Väinö Tanner, led the single Social Democratic government. J. H. Wuorinen (1965), p.239.

²⁸ William Stover (1977), pp.741-757. Ståhlberg was beaten but he and his wife were released.

²⁹ Matti Klinge (1980), pp.37-8.

³⁰ Dr. Rainer Knapas, conversation with author, April 2007. Renja Suominen-Kokkonen: (2006), p.127.

³¹ Riitta Nikula (1994), p.221. See also Alvar Aalto (1929a), pp.241-3.

³² For more on the status of women architects in Finland see Ulla Markelin (1983).

³³ Pekka Korvenmaa (1998), pp.73.

³⁴ Jarkko Sinisalo (1992), pp.14-29.

³⁵ Architect Martti Välikangas (1893-1973) quoted in Ulla Salmela (2004), p.36.

³⁶ Jere Maula (1992), p.69 and Ritva Wäre (1992), p.179.

³⁷ Jere Maula (1992), p.179.

³⁸ Alvar Aalto (1927) and Alvar Aalto (1932a), p.89.

³⁹ *Suomen Teknillinen Korkeakoulu Ohjelma Lukuvuotena 1916* (Technical High School Programme 1916) in Archives of Helsinki University of Technology.

⁴⁰ Merja Häörö (1992), p.34; Eeva Maija Viljo (1992), pp. 213-5: See also Dalibor Vesely (2004).

⁴¹ For more on this see David van Zanten (1977).

⁴² Alvar Aalto (1963a), p.159.

⁴³ Eeva Maija Viljo (1992), pp.49-50; Ritva Wäre (1992), p.62: Pertti Solla (1992), p.269.

⁴⁴ Pertti Solla (1992), p. 276-8. Göran Schildt (1984a), p.142, Göran Schildt (1984b), p.25.

⁴⁵ Kirmo Mikkola (1979), p.135.

⁴⁶ Alvar Aalto (1939c), p.115. See also Henrik Lilius (1985).

⁴⁷ Which dropped to 13% by 1980. Kirsi Saarikangas (1992), J. H. Wuorinen (1965), p.258.

⁴⁸ Ulla Salmela (2004), pp.48-50. Ferdinand Tönnies (2001).

⁴⁹ Kirsi Saarikangas (1992), p.55.

⁵⁰ Ulla Salmela (2004), pp.39. William Wilson (1936), p.130.

⁵¹ Of which Alvar Aalto was a member until the Aaltos left for Turku in 1927. Renja Suominen-Kokkonen (2004b), p.86.

⁵² J. H. Wuorinen (1965), p.278.

⁵³ See Maija Mäkkilä & Ulrika Grägg (2004) and Renja Suominen-Kokkonen (2004a), pp.85-103.

⁵⁴ Henri Terho (2004), p.161.

⁵⁵ Gotthard Johansson (1932). Johansson was a friend of Aalto.

⁵⁶ Göran Schildt (1985b), p.62. See also Nils Erik Wickberg (1981), pp.44-65, Ulla Salmela (2004), pp.33-6. Jung and Alvar Aalto later served together on a number of SAFA commissions.

⁵⁷ Silja Laine (2004), p.127. Renja Suominen-Kokkonen (2004a). A 1934 exhibition of Soviet Art at the Helsinki Art Hall had resulted in violent opposition.

⁵⁸ Ásdís Ólafssóttir (2002), p.14. Kevin Davies (1998), pp.145-166. GS2 p.89. Karl-Erik Michelsen (1992), p.92.

⁵⁹ Alvar Aalto (1963a), p.159. Göran Schildt (1998), p.28. Ritva Wäre (1992), p.69.

⁶⁰ Hamilkar Aalto quoted in Renja Suominen-Kokkonen (2006), p.138.

⁶¹ "Elastic standardization" was the term Alvar Aalto used in his Gold Medal address to the RIBA in 1957. See Alvar Aalto (1935), pp.89-93.

Aalto undertook visits on behalf of SAFA, including one to Germany in 1943 where he met with Ernst Neufert (1900-86), Neufert had also visited Finland in 1942. Wilfred Nerdinger (1999), p.155. Pekka Korvenmaa (1992b), pp.120-4.

⁶² Göran Schildt (1984b), pp.122-124.

⁶³ Pekka Korvenmaa (1998), p.80. The Villa cost FIM 4,300,000 (£4.3 million) at 1997 prices. Juhani Pallasmaa (1998), p.70.

⁶⁴ Alvar Aalto (s.a 4), pp.259-60. See also Alvar Aalto (1940a), pp.122-131.

⁶⁵ *Arkkitehti 1-2/1943*. Pekka Korvenmaa (1998), p.85-87.

⁶⁶ Alvar Aalto (1939). See also Alvar Aalto's essays, 'The Dichotomy of Culture and Technology' (1947b), 'Between Humanism and Materialism' (1955b) and 'National-International' (1967a).

⁶⁷ Sakari Heikkinen (2000), p.176. Oiva Kuisma (2004), p.47.

⁶⁸ Göran Schildt (1989a), p.24.

⁶⁹ *Amerikan Rakentaa* Exhibition Catalogue in Alvar Aalto Foundation archives.

⁷⁰ <http://www.helsinginporssiklubi.fi/> accessed 06.01.08. Interview 7, Jaakko Kontio.

⁷¹ Göran Schildt (1984b), p.104. Similarly many of Alvar Aalto's foreign connections led to commissions including Louis Carré, Siegfried Giedion, Edgar Kaufmann, Gregor Paulsson and Alfred Roth who commissioned the Maison Carré, Bazoches-sur-Gayonne (1955), Wohnbedarf furniture production, Zurich (1930 onwards), a meeting room at the United Nations, New York (1961-5), the Västmanslands-Dala Student Building in Uppsala (1961-5) and Schönbuhl Apartments in Lucerne (1965-8) respectively. Philip Johnson, whom Alvar Aalto met in Stockholm in 1930 and in Berlin 1931, was persuaded to include the Paimio Sanatorium in 'The International Style' Exhibition at MOMA in 1932. Göran Schildt (1984b), p.167.

⁷² Eero Jutikkala & Kauko Pirinen (1984).

⁷³ Interview 23, Valter Karisalo.

⁷⁴ Riitta Nikula (1994b), p.221.

⁷⁵ Interview 8, Jaakko Kontio.

⁷⁶ Alvar Aalto (1941a), pp. 115-119. Harri Kalha (1994), pp.239-41.

⁷⁷ Kirsi Saarikangas (1992), p.83.

⁷⁸ See Mark Wigley (1994) for a more general discussion of decoration in modernism.

⁷⁹ For instance the exhibition 1950s *Sankaruus ja Arki / Heroism and the Everyday*, Museum of Finnish Architecture 22.6-25.9.1994.

⁸⁰ Heikki von Hertzen (1946) in Lauri Putkonen (1993), p.12.

⁸¹ Bengt von Bonsdorff (2000), p. 265.

⁸² Peter von Bagh (1994), pp.252-4.

⁸³ Kirmo Mikkola (1980a), p.88-89.

⁸⁴ Riitta Nikula (1994b), p.211. See also Jarmo Maunula (1970).

NOTES TO CHAPTER 3: MILIEU

¹ Johan Peter Eckermann (1836-48), p.354.

² Vilhelm Helander, Private conversation with author, February 2007.

³ Alvar Aalto's school record is held in the Finnish National Archive. *Kouluhallitus oppikolunuosasto luettelot III Bb2 luettelo koulutoimen ylihallituksessa hyväsytyistä oppikirjoistai 1900-1932*.

⁴ Göran Schildt (1981), p.27.

⁵ Anatole France (1893), pp.34, 114, 120, 216.

⁶ J. H. von Goethe (1788). Alvar Aalto (1958a), p. 16.

Alvar Aalto made specific references to Goethe in a number of his speeches, however beyond his already noted reading and rereading of *Italian Journey*, there is no certain evidence as to which works of Goethe he had read. The records of Alvar Aalto's schooling in Jyväskylä only state the 'national curriculum's' list of recommended books, which do not include Goethe. (*Kouluhallitus oppikolunuosasto luettelot III Bb2 luettelo koulutoimen ylihallituksessa hyväsytyistä oppikirjoistai 1900-1932*: Alvar Aalto - School Record in the Finnish National Archive). However it seems reasonable to assume from Alvar Aalto's remarks, as well as those reported by Göran Schildt (1984a) and by others, that Goethe's work was a central part of the prevailing cultural and educational milieu.

⁷ Göran Schildt (1984a), p.194.

⁸ Alvar Aalto (1955a), p.174.

⁹ J. H. von Goethe (1788), p.385.

¹⁰ Göran Schildt (1982), p.3. Alvar Aalto's other artist friends included the sculptor Wäinö Aaltonen (1894-1966), Eemu Myntti (1890-1943) and Eero Nelimarkkä (1891-1977). Aaltonen would later design the sculpture for the courtyard of the House of Culture (1952-8) in Helsinki. Elissa Aalto recalls Alvar Aalto relating stories of Nelimarkka and Myntti. (The former was also from Alajärvi, and the latter from nearby Vaasa). Mia Hipeli and Päivi-Marjut Raippalinna (1991), p.6.

¹¹ Alvar Aalto (1967b), p.171.

¹² Alvar Aalto quoted in Nils Erik Wickberg (1981), p.60. Kimmo Sarje, conversation with author, April 2007.

¹³ Timo Huusko, Riitta Ojanperä, Soili Sinisalo, (2006), p.58.

¹⁴ Timo Huusko (2006), p.206.

¹⁵ 'T.K. Sallinen' in *Iltalehти* 30th May 1922 quoted in Göran Schildt (1984a), p.34.

¹⁶ Alvar Aalto, article in *Hufsvudstadbladet* quoted in Göran Schildt (1984a), p.117.

¹⁷ Alvar Aalto (1921), p.36. Riitta Nikula (1988), p.148. Usko Nyström 'Mietelmiä kauniista' in *Kotitalo VII 1911* cited in Harri Kalha (1998), p.203.

¹⁸ Vilhelm Helander, private conversation with author, February 2007. Armas Lindgren: 'Kaksi keskiaikaista kirkkoa Suomessa' (Two Mediaeval Finnish Churches) in *Ateneum 9-11/1901* quoted in Riitta Nikula (1988), p.149.

¹⁹ These books were in the libraries of both Nyströms. Timo Tuomi (1997), p.77.

²⁰ This only occurred after the appointment of the neo-classicist J. S. Sirén in 1934.

²¹ Alvar Aalto (1941). Alvar Aalto (1930c), pp.76-7. Alvar Aalto (1949a), p.171.

²² The term 'the Finnish encyclopaedist' is from Vilhelm Helander, private conversation with author, February 2007. A large part of Gustaf Nyström's library is now stored in the Rarities Archive of the School of Architecture in Helsinki. For tensions in the relationship of the 'International / Rational' and the 'National/Romantic' see *Ateneum 9-11/1901* in Riitta Nikula (1988).

²³ See also Nils Erik Wickberg (1981), p.53. Alvar Aalto (1955b), p.176.

²⁴ Simo Paavilainen (1979), p.99.

²⁵ "For Goethe there was no painting or sculpture between Classical antiquity and Mantegna". W H Auden and Elizabeth Mayer (1970), p.11.

²⁶ Henri Schildt (1991), p.103. Hilding Ekelund (1923), pp.17-27.

²⁷ Arne Heporauta (2004), p.20.

²⁸ Alvar Aalto (1924a), p.49.

²⁹ J. H. von Goethe (1788), pp.199, 482.

³⁰ Simo Paavilainen (1979), p.107. Demetri Porphyrios (1977), p.35-9.

³¹ Arne Heporauta (2004), p.19.

³² Simo Paavilainen (1979), p.109. *Arkkitehti* 3/1928, pp.38-41.

³³ 'Edusuntatalon Piirustuskilpailu' (Parliament Competition) *Arkkitehti* 7/1924. For more on the University's architectural policies see Rainer Knapas (1991).

³⁵ Simo Paavilainen (1979), p.119.

³⁶ Sigurd Frosterus & Gustaf Strengell (1904), pp.49-82. Kimmo Sarje (2006). See also *Art Nouveau ja Rationaalisuus Sigurd Frosterus 1876-1956*: Exhibition at the Finnish Museum of Architecture 2006.

³⁷ Kimmo Sarje, private conversation with author, April 2007.

³⁸ Riitta Nikula (1991). Gustaf Nyström was also Sonck's teacher.

³⁹ 'Töölön Asemakaavakilpailu Helsingissä' (Töölö Bay Master Planning Competition) *Arkkitehti* 2/1925, pp.25. See also Donald Olsen (1986) and Marc Girouard (1987).

⁴⁰ A. E. Brinkmann (1912) and (1920). Raymond Unwin (1910).

⁴¹ Gustaf Strengell (1923), pp.201-2. Many of the photographs come from these earlier works. Sigurd Frosterus *Siena, pikakuvia* (Siena, glimpses) in Kimmo Sarje (2006).

⁴² Gustaf Strengell (1922), pp. 155 & 230; translation Jaana Kuorinka and Harry Charrington. Interview 1, Kale Leppänen.

⁴³ Alvar Aalto (1928b), pp. 70 & 130.

⁴⁴ *Arkkitehti* 6/1928, p.74.

⁴⁵ Renja Suominen-Kokkonen (2004), p.99. Alvar Aalto (1926a), pp.49-57 and (1928c), pp.58-63.

⁴⁶ Nicholas Ray (2005), p.180. Paulsson was the director of the Swedish Design Council from 1920-3.

⁴⁷ Göran Schildt (1984b), pp.137-8, 48, 141.

⁴⁸ See Eric Mumford (2000).

⁴⁹ Hilding Ekelund quoted in Kirmo Mikkola (1980c), p.72.

⁵⁰ See Interview 26, Hellevi Ojanen. Göran Schildt (1984b), p.55.

⁵¹ Paul David Pearson (1978), p.106. He also met Erno Goldfinger. Following his visit to Finland Moholy-Nagy named his daughter 'Hattula', after the Finnish mediaeval church of the same name.

⁵² The dated copy of *Von Material Zu Architektur* in the Aaltos' library is inscribed by Moholy-Nagy: "für aalto's wit herrlichen geüsssen".

⁵³ Arne Heporauta (2004), pp.15-22.

⁵⁴ Interview 26, Marja-Liisa Parko, Pirkko Stenros and Hellevi Ojanen. Marjo-Riitta Simpanen (1998), p.38. After graduating Alvar Aalto had visited the A. M. Luterma furniture factory in Tallinn on behalf of *Arkkitehti*, which had been manufacturing laminated wood furniture since 1892, and the Aaltos work is indebted to some of its products. Júri Kermik (1999). Another Finnish company, Ekwall, had begun to bend plywood in the early 1930s. Erik Bryggman also designed a timber and plywood Pavilion for the Brussels' World's Fair of 1930.

⁵⁵ See Marjaana Launonen (2004), pp.136-192.

⁵⁶ Sigurd Frosterus: *Jorden Krymper, jorden växer* (Earth Shrinks, Earth Grows) quoted in Nils Erik Wickberg (1979), p.57. A Nobel prize winning doctor, Alexis Carrel supported an elite 'Council of Doctors' to govern the world; a version of the Syndicalist Council of Experts ('Carrel's Man' in *Time*, Sept 16, 1935). He later became an enthusiastic supporter of the Nazis' eugenics programme.

⁵⁷ For example see Alvar Aalto (1957a) and (1930a), p.262. Elina Standertskjöld (1992b), p.78. For more on Moholy-Nagy and the Vienna Circle see Peter Galison (1990), pp.709-752.

⁵⁸ Rolf Nummelin (2000a), pp.214-5 and (2000b), p.300.

⁵⁹ Göran Schildt (1991a), p.17.

⁶⁰ Göran Schildt (1984b), p.135.

⁶¹ Elina Standertskjöld (1992b), p.117.

⁶² Kirsi Saarikangas (1994), pp.234.

⁶³ Kevin Davies (1998), pp.145-156.

⁶⁴ Tuula Karjalainen (1994), p.247-8.

⁶⁵ Renja Suominen-Kokkonen, private conversation with author, April 2007.

⁶⁶ Pirkko Tuukkanen (2002), pp.45-8, 115, 142.

⁶⁷ Pirkko Tuukkanen (2002), p.142.

⁶⁸ Marjo-Riitta Simpanen (1998), pp.17-30. Alvar Aalto (1926), pp.49-57.

⁶⁹ Göran Schildt (1984b), p.61. Josef Frank's wife was from Turku.

⁷⁰ Aino Marsio-Aalto: *Sosialidemokraatti* 14 May 1935. Quoted in Renja Suominen-Kokkonen (2004), p.133; translation Harry Charrington.

⁷¹ Matti Klinge: 'Kalevala, Artek, Eureka' in *Helsingin Sanomat* 6th October 1985. Cited in Renja Suominen-Kokkonen (2004), p.138; translation Harry Charrington & Jaana Kuorinka.

⁷² Renja Suominen-Kokkonen (2004c), p.222.

⁷³ Kaarina Mikonranta: (2004), pp.121 & 218. Jeremy Melvin (2003), pp.148-151.

⁷⁴ See Alvar Aalto (1935), p.93 and (1941), pp.115-119.

⁷⁵ Kaarina Mikonranta (2004), p.134. See Alvar Aalto (1921b), p.30. Helmiriitta Sariola, Soili Sinisalo (2006), p.88. The books were in the Aaltos' library, see Appendix 2.

⁷⁶ Göran Schildt (1984b), pp.108-113.

⁷⁷ Ulla Salmela (2004), pp. 184-94.

⁷⁸ Gregor Paulsson was on the jury.

⁷⁹ Elina Standertskjöld (1998), p.85.

⁸⁰ Elina Standertskjöld (1998), p.78. Richard Neutra quoted in Thomas S. Hines (1994), p.94. Both Erik Bryggman and Hilding Ekelund had the 1911 Wasmuth edition of Frank Lloyd Wright's drawings in their libraries, Riitta Nikula (1991), p.71. The USA held a special status in Finland that owed to the numbers of Finns who had gone to the USA and sent back parcels and money to Finland.

⁸¹ There is a photograph of the Alvar Aalto and “his colleague” Frederick Kiesler at Grand Central Station in Göran Schildt (1984b), p.169, but no mention of Kiesler in the text. Schildt was seemingly unaware of Kiesler’s work – and hence of his importance to Alvar Aalto.

⁸² The Aaltos’ library contains copies of Frederick Kiesler’s 1939 book.

⁸³ Tim Putnam (2004), note 7 p.428-9. See Frederick Kiesler (1949). Albert Bemis (1936).

⁸⁴ Karl-Erik Michelsen (1992), p.109.

⁸⁵ Quoted in Pekka Korvenmaa (1998), p.81. Paul David Pearson (1978), p.191.

⁸⁶ A revised version of *An American Town in Finland* was printed in the RIBA Journal in 1941 Alvar Aalto (1941b), p.122-131.

⁸⁷ Eric Mumford (2000), note 30, p.308, pp.153, 160.

⁸⁸ Alvar Aalto (1942), p.165. Only anecdotal evidence survives of the visit to Nazi Germany, see Göran Schildt (1989a).

⁸⁹ ‘Ugehaefte’ in *Arkitekten* 24/1948 cited in Kirmo Mikkola (1979), p.151. Göran Schildt (1989a), p.31. Donald Miller (1989), p.198.

⁹⁰ Interview 8, Veli Paatela. See also Göran Schildt (1984a), pp.43-54 and 242-259.

⁹¹ Jere Maula (1994), p.228. Alvar Aalto (1949), p.167.
The Kokemäenjoki River Plan was published in *Arkkitehti* 1-2/1943.

⁹² Pekka Korvenmaa (1992), p.179. Ulla Salmela (2004), pp.11, 184-94.

⁹³ Riitta Nikula (1994b), pp.217-9.

⁹⁴ Sundh would later commission the ‘Aalto Centre’, a combined commercial and residential building, in Avesta (1960).

⁹⁵ Alvar Aalto (1954a), p.4. In the same edition is the first of Göran Schildt’s writings. Göran Schildt (1954), p.iii. There may be flattery here. At the Milan Triennale in 1947 Alvar Aalto told Rogers that “You in Italy are among the best groups of modern architects in the world.” *Domus* August 1947, p.50. While *Domus*’s editorial praised Finnish designs as “infinite in their purity of form”.

⁹⁶ Eric Mumford (2000), pp.126-7.

⁹⁷ Göran Schildt (1989a), pp.147-50.

⁹⁸ J. M. Richards (1947) Vilhelm Helander & Simo Rista (1994), p.23. The Aaltos acquired Kay Fisker’s *Boligbyggeri* (1947) and *Präfunktionalismen* (1947) for their library.

⁹⁹ Kay Fisker (1893-1960) “Tanskalaista rakennustaidetta” (Danish Architecture) in *Arkkitehti* 10/1927, p.137, quoted in Simo Paavilainen (1979), p.107.

¹⁰⁰ Göran Schildt, private conversation with author, June 1998.

¹⁰¹ Kyosti Ålander (1954), p.211. Hilding Ekelund (1951), p.182.

¹⁰² Nils Erik-Wickberg: 'Thoughts on Architecture' in *Finsk Tidskrift*, 1943, reproduced in Asko Salokorpi, and Maija Kärkkäinen (1983), pp.157-8. See also Nils Erik Wickberg in *Arkkitehti* 10-11/1959.

¹⁰³ *Arkkitehti* 9-10/1952 quoted in Juhani Pallasmaa (1992), p.11.

¹⁰⁴ *Arkkitehti* 1/1954, p.6. See also 'Arkkitehtuurin kieli' (Architectural Language) *Arkkitehti* 6/1955. Whilst this was a clear reproach to Alvar Aalto, they had much in common, in particular a belief in the linking of the eye and ear in the perception of space.

¹⁰⁵ Aulis Blomstedt (1958) quoted in Marja-Riitta Norri (1994), p.201, note 18.

¹⁰⁶ *Le Carré Bleu* was founded together with the French architect André Schimmerling in 1958.

¹⁰⁷ Anna-Liisa Stigell, (1956).

¹⁰⁸ Aarno Ruusuvuori quoted in Timo Tuomi (2000), p.10. Erkki Helamaa (1992), p.145-48. See also 'Arkkitehtuurin tutkimus Suomessa' (Architectural Research in Finland) in *Arkkitehti* 6/1967.

¹⁰⁹ Interview 20, Tore Tallqvist.

¹¹⁰ For instance see Göran Schildt (1989a) and Alvar Aalto (1958b), p.264.

NOTES TO CHAPTER 4: INTRODUCTION TO CASE STUDY

¹ Alvar Aalto (s.a. 1), pp.235-6.

² See Göran Schildt (1994).

³ Alvar Aalto (1962), p.279.

⁴ See for example Nicholas Ray 2006.

⁵ There is nothing in the archives of the Museum of Finnish Architecture or the Alvar Aalto Foundation.

⁶ Jaakko Penttilä (2004).

⁷ http://www.seinajoki.fi/kaupunkitieto/.alvar_aallon_seinajoki.html/4406.pdf accessed 23.05.2007.

⁸ Tide Huesser, private conversation with author, 1987.

⁹ Richard Weston (1995), pp.176-184.

¹⁰ Zacharius Topelius (1875) reproduced in Lauri Putkonen (1993), p.48.

¹¹ Markus Aaltonen (2004), pp.13-18.

¹² Seinäjoki Parish Building Committee records quoted in Jaakko Penttilä (2004), p.4; translation Jaana Kuorinka and Harry Charrington.

¹³ SAFA (1951a). Seinäjoki Parish Building Committee records quoted in Jaakko Penttilä (2004), p.5.

¹⁴ *Arkkitehti* 11-12/1952. Alvar Aalto's assistants are named as Elsa Mäkiniemi (Elissa Aalto), Erkki Karvinen, Edward Neuenschwander, Ulrich Stucky, Olavi Tuomisto, Lorenz Moser, Jaakko Kaikkonen, Alice Asher.

¹⁵ SAFA (1951b).

¹⁶ The population of the Parish was only 11,700 in 1951. Kyttä & Takalo (1977), p.23. In reality the two spaces have never been cojoined.

¹⁷ Paul David Pearson (1978), p.161. The submission date for Lahti was March 1950 and it was published in *Arkkitehti* 3/1950 pp.22-40.

¹⁸ Alvar Aalto: Competition written submission in Jaakko Penttilä (2004).

¹⁹ Alvar Aalto in Jaakko Penttilä (2004), p.62.

²⁰ The 'battle' was heated with Lapua's history as a centre for extreme nationalist politics (the 'ballast' of the 1930s) being brought to bear on the subject. It is also possible to read the decision of as more evidence of President Paasikivi's antipathy towards Alvar Aalto. See Markus Aaltonen (2004), pp.21-42. Jaakko Penttilä (2004), p.10.

²¹ At the same time the site across Kirkkokatu, to the north of the Church, was designated as a Bus Station, but this has never been realized and has remained undeveloped, a park by default.

²² SAFA (1958).

²³ Timo Penttilä and Kari Virta's entry was entitled 'Agora', an indication of the classical allusions prevalent in Finland at this time. Pekka Pitkänen's entry was titled "Wall River", a literal translation of Seinäjoki. Alvar and Elissa Aalto's entry was entitled 'Kaupungintalo' (Town Hall) in expectation of Seinäjoki receiving this status. Alvar and Elissa Aalto's assistants are listed in the Jury Report as Kaarlo (Kalle) Leppänen, Matti Itkonen, Erkki Luoma, Maina Vatara, Karl Fleig, Lea Punstar, Hans (Hasse) Slangus.

²⁴ Interview 19, Per-Mauritz Ålander. The assistants for this second entry were Jaakko Kontio, Kalle Leppänen, Matti Itkonen, Erkki Luoma, Maina Vatara, Karl Fleig, Walter Moser.

²⁵ Alvar & Elissa Aalto: competition written submission quoted in Jaakko Penttilä (2004), pp.28-9; translation Jaana Kuorinka & Harry Charrington.

²⁶ Interview 8, Jaakko Suihkonen. The plan was published upside in Fleig's three volume series.

²⁷ Interview 8, Jaakko Kontio.

²⁸ Alvar Aalto *Seinäjoen kaupunginhallituksen kokouspöytäkirja 2.2.1961* quoted in Jaakko Penttilä (2004), p.33.

²⁹ Matti Itkonen and Per-Mauritz Ålander were the site architects, Lauri Mehto structural engineer and Pentti Ylinen main contractor.

³⁰ The term 'table and flowers' comes from Tide Huesser. Private conversation with author, 1986.

³¹ Jaakko Penttilä (2004), p.48-9.

³² Interview 5, Jaakko Suihkonen.

³³ Alvar Aalto: letter to Seinäjoki Town Engineer Matti Nuolivirta, 7.10.1963, cited in Jaakko Penttilä (2004), p.51. The space to the south of the Library became a park.

³⁴ The Männikö brothers were main contractors, Lauri Mehto structural engineer and Jaakko Suihkonen, assisted by Matti Itkonen and Leif Englund, site architects.

³⁵ Jaakko Penttilä (2004), p.51.

³⁶ The Männikö brothers were once again main contractors, Lauri Mehto Structural Engineer and Sverker Gardberg and Leif Englund site architects, assisted by the Aalto atelier's first interior designer Pirkko Söderman.

³⁷ Interview 4, Jaakko Suihkonen.

³⁸ Alvar Aalto: *Seinäjoen kaupunginhallituksen kokouspöytäkirja 4.12.1961* quoted in Jaakko Penttilä (2004), p.61.

³⁹ Elissa Aalto: Letter to Town Council 11.5.1981, cited in Jaakko Penttilä (2004), p.57; translation Harry Charrington. Eventually the newspapers and journals room was moved to an adjacent house. In 1998 an international student competition was held for a new library on a site north of the Church. None of the 321 entries were realized.

⁴⁰ Alvar Aalto & Co.: Letter to Town Council, 18.1.1982, cited in Jaakko Penttilä (2004), p.57.

⁴¹ Timo Koho (1995), p.72. Jaakko Penttilä (2004), pp.67-9.

⁴² Vesi-Pekka Oy was the main contractor, Magnus Malmberg structural engineer and Elissa Aalto site architect, assisted by Marjatta Kivijärvi and Tide Huesser.

NOTES TO CHAPTER 5: MORPHOLOGIES

¹ Alvar Aalto (s.a. 2), p.248.

² Alvar Aalto (1925a), p.264.

³ Touko Saari, private conversation with author, 1996.

⁴ Y-F Tuan (1974).

⁵ Alvar Aalto (s.a.3), p.139.

⁶ Alvar Aalto (1924a), p.49.

⁷ See Tetsuro Yoshida (1935).

⁸ Alvar Aalto (1925), p.21. A view that echoes his earlier praise of Tyko Sallinen's landscape paintings as "not idealized but intertwined with man".

⁹ The term *malerisch* derives from Heinrich Wölfflin's: *Principles of Art History. The Problem of the Development of Style in Later Art* (1915).

¹⁰ Alvar Aalto (1962a), p.277.

¹¹ Alvar Aalto (1955a), p.175.

¹² In their role, and disposition, the gardens recall the Pincio gardens that overlook the Piazza del Popolo in Rome.

¹³ I am indebted to Jaakko Penttilä for pointing this out to me. Private conversation with author, April 2007.

¹⁴ This integration is also a feature of the Aaltos' contemporaries before the wars; in particular the Viipuri Art Museum (1930) by Uno Ullberg.

¹⁵ Alvar Aalto (1926b), p.56. Johan Peter Eckermann (1848), p.117. Jacob Burckhardt (1963), p. 155.

¹⁶ J. H. von Goethe (1788), p.211.

¹⁷ Arnold Berleant (1993), p.231.

¹⁸ Venice in particular. Leonardo Mosso (1973). Interview 2, Frederico Marconi.

¹⁹ Alvar Aalto (1947a), pp.106-9.

²⁰ The Nordic Classical architect Birger Brunila quoted in Bengt von Bonsdorff (2000), p. 273.

²¹ "If one sees two or more figures overlapping one another, and each of them claims for itself the common overlapped part, then one is confronted with a contradiction of spatial dimensions. To resolve this contradiction one must assume the presence of a new optical quality. The figures are endowed with transparency; that is they are able to interpenetrate without an optical destruction of each other. Transparency however implies more than an optical characteristic, it implies broader spatial order. Transparency however implies a simultaneous perception of different spatial locations. Space not only recedes but fluctuates in a continuous activity. The position of the transparent figures has equivocal meaning as one sees each figure now as the closer, now as the further one". Gyorgy Kepes: *Language of Vision*, Chicago, 1944 p.77 quoted in Colin Rowe & Robert Slutzky (1963), pp.159-183.

²² Demetri Porphyrios (1982), p.2.

²³ See Heinrich Wölfflin (1883) and Harry Mallgrave and Eleftherios Ikonomou (1994).

²⁴ See Harry Mallgrave (1996), p.366. Kenneth Frampton (1995), p.91.

²⁵ Paul Frankl (1914), p.142.

²⁶ Nils-Gustav Wickberg (1952). This view of the Baroque also relates to Heinrich Wölfflin (1883).

²⁷ Gustaf Strengell (1922), pp.79-93 and illustrations 135-7, 153-60, 194-6. Camillo Sitte (1889), pp.195-255.

²⁸ A. E. Brinkmann (1912), p.53 and illustrations 28, 31, 46, 59-61. Gustaf Strengell (1922), pp. 26, 30-50.

²⁹ Gustaf Strengell (1922), pp. 115, 129, 143, 196. See also Norberg-Schulz (1974).

³⁰ Prior to his appointment as Professor of Geography in Turku, Johannes Granö had been the Professor at the University of Tartu, where the Estonian geographer August Tammekann had been his assistant. See also <http://granokeskus.utu.fi/enkehikko.html> accessed 31.05.07. In the early 1930s Tammekann made contact with the Aaltos through Granö and the Aaltos designed the Villa Tammekann (1932, now the Granö Centre) in Tartu for Tammekann and his family. Tapani Mustonen, private conversation with author, July 2007.

³¹ Pauli Tapani Karjalainen (2002), p.131. See also Hannes Palang and Piiret Paal (2002), pp.94-110.

³² O. Granö & A. Paasi (1997), pp. 18-19 & 27, quoted in Pauli Tapani Karjalainen (2002), p.132. The boundary between locality and vicinity would vary according to context; Granö's most famous observations were in the Altai Mountains.

³³ As Andres Duany writes "Only by designing the silhouette, which is the perceptual hybrid generated by the human vantage point, does the architect have precise formal control of what is to be seen". Andres Duany (1985), p.110. The church's situation has changed now with the growth of the silver birch between it and the river.

³⁴ The terms belong to the biologist Jakob von Uexhull. Kalevi Kull (2001), pp.5-6.

³⁵ Adrian Forty (2000), p.95.

³⁶ Kaila was also from Alajärvi and was Professor in Turku from 1921 until 1930. Alvar Aalto used the translation of the phrase "man the unknown" in his obituary of Gunnar Asplund see *Arkkitehti 10/1940*. The causal relationship that Schildt suggests between Alvar Aalto and Carrel's book can be questioned given that Aulis Blomstedt also read it and his direction in architecture - towards abstract Pythagorean harmonies - was almost the opposite of Alvar Aalto's. See Juhani Pallasmaa (1992), pp. 7-21.

³⁷ Rudolph Carnap was a former experimental physicist turned philosopher who, together with Ernest Neurath, became a leading member of the logical positivist group 'The Vienna Circle'. Carnap also reviewed Kaila's *Der Logistische Neupositivismus*. <http://www.kirjasto.sci.fi/ekaila.htm> accessed 20.04.08.

³⁸ Westermarck was a moral philosopher as well a pioneering evolutionary psychologist. Riitta Nikula (1991), p.71.

³⁹ Peter Galison (1990), pp.720-5. Joseph Frank had addressed the Bauhaus and designed a museum for Ernest Neurath. See Jormakka, Gargus & Graf (1999), p.155 note 78.

⁴⁰ Eric Mumford (2000), p.112. Elina Standertskjöld (1992a), pp.78.

⁴¹ László Moholy Nagy (1930), pp.13 & 19. The edition of *Von Material Zu Architektur* used in this thesis is the translated and updated version published as *The New Vision*. The major change is the reduced number of photographs, particularly of work from the *Vorkurs* students.

⁴² László Moholy Nagy (1930), pp.63-4. Adrian Forty (2000), pp.262-268.

⁴³ László Moholy Nagy (1930), p.46. He also cited Raoul Francé's 7 bio-technical elements (crystal, sphere, cone, plate, strip, rod and spiral) as taking the place of Euclid's 3 geometries.

⁴⁴ László Moholy Nagy (1930), p.56.

⁴⁵ Neurath had visited the Bauhaus in 1926 and chided it for relying too much on style and not its practical implications "when will the modern engineers run the Bauhaus?" Quoted in Peter Galison: (1990), pp.710, 716 & 736.

⁴⁶ John Dewey (1934). Pekka Korvenmaa has related the work of Herbert Read to Alvar Aalto. Pekka Korvenmaa (1998), p.80. Alain Findeli (1990), p.7.

⁴⁷ Alvar Aalto: (1957b), pp.216-7.

⁴⁸ Jakob von Uexküll (1909) cited in Torsten Rüting (2004), p.70. *Umwelt* is rendered as *milieu* in the work of Gilles Deleuze and Félix Guattari, who are probably the best-known 'architectural' exponents of von Uexküll's concept. Andrew Ballantyne, private correspondence with author, March 2007. Martin Heidegger and Ortega y Gasset have also cited his work. Kalevi Kull (2001), p.12.

⁴⁹ Kalevi Kull (2001), p.4.

⁵⁰ Torsten Rüting (2001), pp.50 & 52-5. Kalevi Kull (2001), pp.1 & 4.

⁵¹ Alvar Aalto (1942), p.165. Jakob von Uexküll quoted in Kalevi Kull (2001), p.7.

⁵² Alvar Aalto (1957), pp.216-7.

⁵³ Henri Bergson (1907) quoted in Alexis Carrel (1935), p.159.

⁵⁴ Demetri Porphyrios (1982), p.113 and Adrian Forty (2000), pp.70-1. Biological analogies pervade Paul Frankl's work (1914) as well.

⁵⁵ Alvar Aalto (1966), p.212.

⁵⁶ See Alvar Aalto (1941a), pp.115-19. Building technology from Sweden allowed for the jointing of logs in continuous runs to create multi-cellular buildings based on the right-angle, in contrast to the agglomerative, 'cellular', plans of the Karelian house which would be made up of individual units. A classical sensibility exists in the relations of the openings and the wall. See Alfred Kolehmainen (1979) Ranulph Glanville (1978b).

The combination of these settlements' austere 'Doricist sensibility', coupled with a sophisticated and recognizably internationally influenced culture, at least in relation to the deliberately archaizing and 'primitive' ideals of 'Karelianism', had made Ostrobothnia attractive to certain artists of the post-Independence period. The composer Leevi Madetoja (1887-1947) composed the opera *Pohjalaisia* (Ostrobothnians 1923) utilising folk melodies. The painters Ragnar Ekelund and Eero Nelimarkka, amongst others, painted town and landscapes and the architect Hilding Ekelund spent three summers measuring manor houses in Swedish speaking areas. Alvar Aalto also carried out surveys there before beginning his studies in 1916.

⁵⁷ Georg Simmel (1903), p.333. Alvar Aalto (1962a), p.278.

⁵⁸ The most famous of these was the *kirkonkylä* (church-village) of Vörå, some 45 kilometres north-west of Seinäjoki.

⁵⁹ H. Trevelyan (1941), p.256. See also J. H. von Goethe (1788), Kenneth Frampton (1995), p.62.

⁶⁰ Kari Jormakka, Jacqueline Gargus, Douglas Graf (1999), p.13. Friedrich Schiller (1794). Heraclitus: fragment 51, quoted in Sarah Menin (1997a), p. 247 & 336.

⁶¹ Heinrich Wölfflin (1915). Daniel Adler (2004).

⁶² “Not only does every good curve vary in general tendency, but it is modulated, as it proceeds, by myriads of subordinate curves. Thus the outlines of a tree trunk [...] So also in waves, clouds, and all other noble formed masses. Thus another essential difference between good and bad drawing, or good and bad sculpture, depends on the quantity and refinement of minor curvatures carried, by good work, into the great lines. Strictly speaking, however, this is not variation in large curves, but composition of large curves out of small ones; it is an increase in the quantity of the beautiful element, but not a change in its nature”. John Ruskin (1857), p.180.

⁶³ Juha Leiviskä, private conversation with author, June 2003.

⁶⁴ Tide Huesser, private conversation with author, 1987.

⁶⁵ The opposite of the intricate Vuoksenniska church and its setting in the forests of Southern Karelia.

⁶⁶ Moholy-Nagy pointed to the ‘cinematic’ qualities of surfaces. László Moholy Nagy (1930), pp.39-40. According to Professor Heiner Hoffmann of Aachen University, Alvar Aalto spoke of Tibetan monasteries of white regular geometries setting off the Himalayas in a German television programme during the 1960s. Private conversation with author, July 2006.

⁶⁷ See Alvar Aalto (1922), p.33. Alvar Aalto (1921a), p.36. Gustaf Strengell (1922), p.49 and Camillo Sitte (1889), p.188.

⁶⁸ Quoted in Colin St. John Wilson (1995), p.123. Alvar Aalto (1921), p.33. Alvar Aalto (1922), p.36.

⁶⁹ Alvar Aalto letter to Veli Paatela, 14th June 1948 in Alvar Aalto Foundation Archive; translation Jaana Kuorinka and Harry Charrington. In the proposal for housing at Nynäshamn in Sweden (1945) Alvar Aalto wrote how trellises would cool the interior by providing shading. Alvar Aalto (1946), p.209.

⁷⁰ Elias Canetti (1960), p.244. See also Richard Sennett (1990), pp.57-62.

⁷¹ George Baird (1930), p.13. See Mark Wigley (1994).

⁷² Jacob Burckhardt (1869)n p.46.

⁷³ Interview 4, Jaakko Suihkonen. See also Harry Mallgrave (1996), p.288. Even on overcast days the white ceramic sticks of the Theatre render its elevations as ripples of shadow and relief, but without the rich effects of the Town Hall.

⁷⁴ Interview 6, Tauno Keiramo.

⁷⁵ The poetics of such a thing happening are seen as a failing when seen in maintenance terms.

⁷⁶ Paul Frankl (1914), p.112.

⁷⁷ J. H. von Goethe (1772), p.8.

⁷⁸ Alvar Aalto (1938), pp.98-101.

⁷⁹ Interview 15, Eric Adlercreutz.

⁸⁰ Harry Mallgrave (1996), p.298.

⁸¹ Tide Huesser, Private conversation with author, 1986.

⁸² Alvar Aalto (1947a), p.109.

⁸³ An earlier design for the column used cobalt blue ceramic sticks and would have unified their form more with the surfaces above.

⁸⁴ László Moholy Nagy (1930), pp.26, 35. Ulla Kinnunen (2004), pp.179 & 196.

⁸⁵ Interview 22, Veli Paatela. See also Pekka Korvenmaa (2002), p.122.

⁸⁶ Edward Ford has suggested the emblematic roof-lights are versions of Moholy-Nagy's perforated screens. Edward Ford (1996), p.123. Tetsuro Yoshida (1935), pp.2 &38.

⁸⁷ Alvar Aalto (1928a), p.255.

⁸⁸ J. H. von Goethe (1980), pp.196-7.

⁸⁹ Pirkka Tuukkanen (2002), p.72. Alvar Aalto (1950b), p.186.

⁹⁰ Alvar Aalto (1972a), p.271.

⁹¹ The handles were designed by Lina-Christina Aaltonen, Interview 5, Life Englund. So many have been stolen over the years that it is difficult to judge this on the older buildings.

NOTES TO CHAPTER 6: TAXONOMIES

¹ Anatole France (1893), pp.216-7.

² Interview 3, Veli Paatela. See also Göran Schildt (1984a), p.184.

³ Alvar Aalto quoted in Teija Isohauta (2003), p.117. See also Alvar Aalto (1961a), p.236 and (1950a), p. 246.

⁴ Anatole France (1893), p.220. See also Gustaf Strengell (1922), pp.201, 205 & 235. Gustaf Strengell cited Laugier for the city as a social institution.

⁵ Jean-Jacques Rousseau (1770). Richard Sennett (1978), pp.108, 115-122.

⁶ It is tempting to post-rationalise Alvar Aalto's approach as one of *bricolage* in the light of Fred Koetter's and Colin Rowe's *Collage City* (1973). Whilst the Aalto atelier's work shares the book's interest in the fragmentary composition of historic cities created over time, its stress on

ambience does not aim at the level of self-consciousness that Koetter's and Rowe's "City of Composite Presence" implies.

⁷ Alvar Aalto (1965-8), p.236.

⁸ Alvar Aalto and Albin Stark: Undated written submission for the Avesta Town Centre (1944) quoted in Jaakko Penttilä (2004), p.79; translation Jaana Kuorinka & Harry Charrington.

⁹ Alvar Aalto (1953a), p.210.

¹⁰ Alvar Aalto (1926b), p.57. Coignard's wit and dislike of any form of cant, are identifiable with what we know of Alvar Aalto's character.

¹¹ In the early 2000s a new market square and internal shopping mall was built two blocks closer to the Aalto Centre, although no improvements in the pedestrian connections were made between the two.

¹² Alvar Aalto (1963), p.140. See also Hannah Arendt (1958).

¹³ Jacob Burckhardt (1869), p.9. Aino Marsio-Aalto, working in Helsinki City Centre, shared this to a lesser extent.

¹⁴ The analogy of Pisa came up in a private conversation with Vilhelm Helander, February 2007.

¹⁵ The Acropolis informed Aino and Alvar Aalto's un-submitted entry for the League of Nations Competition (1926). Gustaf Strengell (1922), pp.24-6, 39. Earlier examples of such an analogy include Otto-I Meurmann's 1921 Viipuri plan. Ulla Salmela (2004), pp.185.

¹⁶ Alvar Aalto (1924), p.20.

¹⁷ Alvar Aalto (1924b), p.20.

¹⁸ William Curtis (1998), p.12.

¹⁹ Alvar Aalto (1958b), p.264. See also Robin Evans (1995), pp.70-4.

²⁰ August Strindberg quoted in Alvar Aalto (1955a), p.174.

²¹ Hannah Arendt (1958), pp. 79-174.

²² Hannah Arendt (1958), pp. 12-17 & 51.

²³ Alvar Aalto (1953a), p.210.

²⁴ It also contrasts with their attentive designs for individual artisan and artist workspaces.

²⁵ Robert Venturi (1976), p.66.

²⁶ See Bruno Taut (1919).

²⁷ Alvar Aalto (1957), p.202 and (1972a), p.273.

²⁸ Alvar Aalto (1955b), p.179.

²⁹ Alvar Aalto (1955a), p.171.

³⁰ Friedrich Schiller (1794), p.27.

³¹ László Moholy Nagy (1930), pp.51 & 57.

³² Alvar Aalto: (1953b), p.234 and (1972), p.273.

³³ David Frisby (2001), p.7. Yrjö Hirn (1904), pp.74, 78, 87 & 104. Camillo Sitte (1889), p.271.

³⁴ Henri Lefebvre (1974), quoted in Adrian Forty (2000), pp.271-2. I am indebted to Professor Andrew Ballantyne for his thoughts in relation to this. As Nicholas Ray has noted, *morphology* is a term that was initially coined by Goethe. Nicholas Ray (2005), p.154.

³⁵ The phrase “between inventory and memory” is taken from Aldo Rossi (1981), p.74.

³⁶ Alvar Aalto (1927), pp.64-5.

³⁷ J. H. von Goethe (1788), pp.214 The Winterkeisen is a folly near Kassel.

³⁸ Johan Peter Eckermann (1848), pp.192-4. W H Auden and Elizabeth Mayer (1970), p.10.

“The utility-teachers say that oxen have horns to defend themselves; but I ask, why is the sheep without any - and when it has them, why are they twisted about the ears so as to answer no purpose at all? If, on the other hand, I say the ox defends himself with his horns because he has them, it quite a different matter. The question as to the purpose - the question *Wherfore?* - is completely unscientific. But we get further with the question *How?* For if I ask how has the ox horns, I am led to study his organization, and learn at the same time why the lion has no horns, and cannot have any”. Johan Peter Eckermann (1848), p.388. See also John Ruskin (1857), pp. 175-180.

³⁹ Adrian Forty (2000), p.180. Forty is referring to Paul Frankl (1914), who used the word *zweckgesinnung* -which also translates as “purposive intention”.

⁴⁰ Alois Riegel (1901) quoted in Frederick J. Schwarz (1996), p. 21.

⁴¹ James Ackermann (1968), p.x. See also Rudolf Wittkower (1962).

⁴² Paul Frankl (1914), pp.28, 142 &184.

⁴³ See Rudolf Wittkower (1962).

⁴⁴ Camillo Sitte (1889), pp.166-7. Frosterus had worked at the Deutsche Werkbund where *Kunstwollen* (artistic volition) was a major concept. Frederick J. Schwarz (1996), p. 21.

⁴⁵ Jaakko Kontio (1998), pp. 44.

⁴⁶ See, for instance, Andres Duany (1985), pp.105-119.

⁴⁷ Demetri Porphyrios (1982), p.26.

⁴⁸ A severance that is even more striking at the nearby Alajärvi Town Hall (1969) where the council chamber is closed off from views to the adjacent lake, much to the initial frustration of the local council. Interview 15, Heikki Tarkka.

⁴⁹ J. H. von Goethe (1788), p.53.

⁵⁰ Finnish theatres are largely closed in summer when outdoor festivals predominate.

⁵¹ Interview 1, Kalle Leppänen.

⁵² Interview 9, Manu Kitunen.

⁵³ J. H. von Goethe (1788), p.492.

⁵⁴ Pallasmaa (1992) p.12.

⁵⁵ Cited in Jaakko Penttilä (2004), p.29.

⁵⁶ Alvar Aalto (1963b), p.140.

⁵⁷ The council chamber at Säynätsalo in turn had an interior inspired by that of Siena Town Hall and an external form first glimpsed on a trip to Morocco, which reappeared later at the Imatra and Marl Town Halls. Interview 16, Veli Paatela.

⁵⁸ Interview 15, Eric Adlercreutz: “He always wanted to structure his buildings so that the inhabitation and workings of the building would be symbolized”.

⁵⁹ Alvar Aalto (1928), p.62.

⁶⁰ Alvar Aalto (1966), p.212.

⁶¹ See Eric Hobsbawm (1999), pp.1-12. This view of a strong ‘partial history’ versus a weak ‘total history’ is indebted to Peter Carl; private conversation with author, June 2002.

⁶² Alvar Aalto (1926a), pp. 50-52.

⁶³ See also Timo Koho (1995), p.87 and Göran Schildt (1984a), p.10.

⁶⁴ Ernesto Rogers (1953), p.1. “History is permanent evolution. History is the life of man in his conscious perception, that is, in his use of life, therefore in his customs. Architecture represents this.” Ernesto Rogers (1964/5), p.59.

⁶⁵ Alvar Aalto: ‘Archittettura e arte concreta’ in *Domus* October-December 1947. The Finnish title is *Taimen ja tunturipuro*, literally ‘The Trout and the Fell Brook’. The fell streams or brooks of Lapland have associations of absolute purity; translation Jaana Kuorinka & Harry Charrington. The article was published alongside Giovanni Michelucci (1947) and J. M. Richards (1947). Earlier editions of *Domus* in the same year included photo essays on Kafka’s Prague and Rilke at Muzot.

⁶⁶ Ernesto Rogers (1954).

⁶⁷ “It happened once upon a time that the workers voluntarily spent their Sundays at the workshop because that was their natural home. There are places in Italy where this still happens, and everyone is happy”. Alvar Aalto (1962c), p.265.

⁶⁸ Alvar Aalto (1954a), p.4.

⁶⁹ J. M. Richards (1940), p.184. Such views also concurred with those of Lewis Mumford, see Donald A. Miller (1989), p.332.

⁷⁰ 'Discussion on Italian Piazzas' in Jacqueline Tyrwhitt, José Luis Sert, and Ernesto N. Rogers, (1952), pp.74-80, 73. See also Eric Mumford (2000), pp.162 & 187-202.

⁷¹ Jacqueline Tyrwhitt, José Luis Sert, and Ernesto N. Rogers (1952), p.11.

⁷² Alvar Aalto speech in Seinäjoki, 1961, quoted in Jaakko Penttilä (2004), p.29; translation Harry Charrington.

⁷³ Inscribed on the temple at Delphi. Frederick Gutheim has analyzed Säynätsalo Town Hall's programme as Hellenic. See Frederick Gutheim (1960), p.23.

⁷⁴ Matsuo Basho quoted in Tetsuro Yoshida (1935), p.194. See also László Moholy-Nagy (1930), p.32 and Gustaf Stengell (1922), p.50. The falseness of historicism was also condemned in Yrjö Hirn (1904), pp.146 & 181.

⁷⁵ László Moholy Nagy (1930), pp.34-7.

⁷⁶ See Lars Pettersson (1989). In areas divided, or unified, by large tracts of water, the church-village would be serviced by 'church-boats' that smaller villages would maintain and row to services in the church. An inadvertent reminder of Christ the fisherman.

⁷⁷ Alvar Aalto (1921a), p.36. Alvar Aalto also refused to allow his children to attend church. Ulla Kinnunen (2004) p.24.

⁷⁸ Johan Peter Eckermann (1848), p.60

⁷⁹ Alvar Aalto (1940), pp.104-5. Father Barnabas Reasoner Director of Mt. Angel Library (1966).

⁸⁰ This description is a paraphrase of Alvar Aalto (1947), pp.107-9.

⁸¹ It is acceptable in Finnish public lending libraries to talk quietly, hence quiet rooms for study are provided as well.

NOTES TO CHAPTER 7: PLAY

¹ Alvar Aalto, Jyväskylä *Kesäpäivät* (Summer Days) 1965, quoted in Göran Schildt (1989a), p.273.

² Dalibor Veseley (2004), p.310. For more on this see *ibid* pp.241-4.

³ Interview 2, Frederico Marconi.

⁴ Göran Schildt (1984b), p.121.

⁵ Renja Suominen-Kokkonen, private conversation with author, April 2007.

⁶ Pekka Korvenmaa (1998), p.85-87. The Villa Mairea had a construction cost of approximately £4.5 million at 1997 prices. Juhani Pallasmaa (1998), p.70.

⁷ Göran Schildt (1984b), p.186.

⁸ Alvar Aalto (1953), p.234. As Aino Marsio-Aalto's design for the Villa Flora (1925) and Aino and Alvar Aalto's design for the house at Riihitie (1936) had been earlier.

⁹ Before its reorganization following Elissa Aalto's death Paul David Pearson stated there were books by Hirn in the Aaltos' library. Paul David Pearson (1978), p.14. A pre-eminent Professor at the University of Helsinki, Hirn also lectured extensively on William Morris.

¹⁰ Friedrich Schiller (1794).

¹¹ Friedrich Schiller (1794), pp. 71 & 91-3.

¹² *Barnlek* is not translated into English, but is translated into Finnish as *Leikkia ja taidetta* which I will use for references. Alvar Aalto's connection to Yrjö Hirn seems most likely to have come about through Carolus Lindberg who had collaborated with Hirn whilst Alvar Aalto was his student. For example Carolus Lindberg (1919) and Yrjö Hirn (1919).

¹³ Yrjö Hirn (1904), pp.13 & 25.

¹⁴ Yrjö Hirn (1916), p.52.

¹⁵ Yrjö Hirn (1904), pp.5 & 308.

¹⁶ Yrjö Hirn (1904), pp.76, 142 & 302.

¹⁷ Alvar Aalto (1953b), p.234 and (1972a), p.273.

¹⁸ Donald Miller: *Lewis Mumford, A Life* p.76. GS2 pp.221-2.

¹⁹ Dalibor Vesely (2004), p.328.

²⁰ Alvar Aalto (1947a), pp.103-115.

²¹ Siegfried Giedion (1967), p.619.

²² Renja Suominen-Kokkonen, private conversation with author, April 2007.

²³ Mikko Merckling, private conversation with author, April 2002.

²⁴ "We want to examine things and allow them to discover their own images. It goes against the grain with us to bestow a form on them from the outside." Hugo Häring quoted in Colin St. John Wilson (1961), p.97. "The Mediterranean peoples, including the Latin people, who persist in decadent geometric thinking, are foreign to the tasks of the new building". Hugo Häring: 'kunst –und strukturprobleme des baueans' (Artistic and structural problems in building, 1931) quoted in Jormakka, Gargus & Graf (1999), p.15.

²⁵ Dalibor Vesely (1985), p.32 quoted in Adrian Forty (2000), p.293.

²⁶ Interview 28, Sverker Gardberg. Lee Hodgden (who later worked in the Aalto atelier) quoted in Göran Schildt (1989a), pp.120-1. See also Colin St. John Wilson cited in Nicholas Ray (2005), p.108 and Alvar Aalto (1930a).

²⁷ Alvar Aalto (1955a), p.175.

²⁸ Yrjö Hirn (1904), pp.12, 29, 140. Alvar Aalto (1940), p.102.

²⁹ Alvar Aalto (1926a), pp.49-55. Gustaf Strengell (1922), p.109. Yrjö Hirn (1904), p.250. Camillo Sitte (1889), p.162.

³⁰ *Tabulae Votivae von Schiller und Goethe* Quoted in Jormakka, Gargus & Graf: *The Use and Abuse of Paper* p.31. See also Friedrich Schiller (1794), p.45.

³¹ Yrjö Hirn (1916), p.270.

³² Friedrich Schiller (1794), p.120. See also pp.70-1 Note 1.

³³ Johan Peter Eckermann (1848), p.366.

³⁴ Johan Peter Eckermann (1848), p.156, J. H. von Goethe (17889, p.87.

³⁵ W H Auden & Elizabeth Mayer (1970), pp.12 & 10. For more on this see John Ruskin (1857), pp. 175-180.

³⁶ Alvar Aalto (1957c), p.203.

³⁷ Interview 28, Sverker Gardberg.

³⁸ Alvar Aalto (1947b), pp.136-7. Friedrich Schiller (1788), pp.28-9.

³⁹ Timo Tuomi, private conversation with author, September 2007. See also the Oulu Rapids River Centre as a metaphor of Venice, *Arkkitehti* 1-2/1943.

⁴⁰ Correspondence dated 15th September 1948 between Alvar Aalto and Veli Paatela. Alvar Aalto Foundation Archive; translation Jaana Kuorinka & Harry Charrington. Other letters dated 20th June 1947 and 16th August 1948 in the Alvar Aalto Foundation reinforce how “absolutely compulsory” the trellis was.

⁴¹ Alvar Aalto quoted in Karl Fleig (1970), p.25.

⁴² Moholy-Nagy ‘updated’ Goethe’s views in quoting Siegmund Freud on art as the only “field of omnipotence” within the ‘play’ of civilization. He also possessed a heavily annotated copy of Goethe’s *Farbenlehre* (Theory of Colours, 1810) in his library. Alain Findeli (1990), p.14 note 22.

⁴³ Alain Findeli (1990), pp.4, 7 &12-3. The courses were taught by Charles Morris from the University of Chicago Department of Philosophy, the main US connection to the Logical Positivism of the *Wienerkreis* Vienna Logical Positivism of Rudolf Carnap and Otto Neurath. John Dewey had also taught at the University of Chicago.

⁴⁴ Alain Findeli (1990), p.14, note 22

⁴⁵ Göran Schildt (1984a), p.31.

⁴⁶ Pekka Korvenmaa (1998), p.80.

⁴⁷ Robin Kinross (1998), pp.37 & 38-9. Moholy-Nagy’s fellow *Bauhäusler* Herbert Bayer was the designer of the book.

⁴⁸ Alvar Aalto (1954c), p.258.

⁴⁹ Herbert Read: ‘The Redemption of the Robot’ quoted in Michael Parsons (1969), p.31.

⁵⁰ Herbert Read (1943), p.63. See also Alvar Aalto (1940), pp.102-7; translation Jaana Kuorinka.

⁵¹ Alvar Aalto (1947a), p.109.

⁵² *Arkkitehti* 2/1968. Yrjö Hirn: *Det estetiska livet* (The Aesthetic Life, 1924) quoted in Kirmo Mikkola (1979a), p.149. Yrjö Hirn (1904), pp.128-9.

⁵³ I am aware of Read's disdain for the word culture, but I use it in the terms that Alvar Aalto expressed it.

⁵⁴ Plato: *The Republic* (401.f) quoted in Herbert Read: *Art Through Education* (1943), p.63. For typological analyses see Demetri Porphyrios (1982) and Andres Duany (1985).

⁵⁵ László Moholy-Nagy (1930), pp.19, 21, 34, 51-56.

⁵⁶ Alvar Aalto (1947a), p.108.

⁵⁷ See Alvar Aalto: (1955a) and (1955b), pp.171-179.

⁵⁸ "Crystallization" is the word that Vezio Nava used to describe the drawing process in the Aalto atelier. Private conversation with author, September 2007.

⁵⁹ Interview 4, Jaakko Suihkonen.

⁶⁰ Raoul Francé (1920) in Alain Findeli (1990), p.11.

⁶¹ Raoul Francé (1920) in Alain Findeli (1990), p.7.

⁶² Interview 7, Veli Paatela.

⁶³ See Malcolm Quantrill (1983a), p.109 and Colin St. John Wilson (1995).

⁶⁴ Marc Treib (1998), p.64. Barry Gasson, private conversation with author, 1993.

⁶⁵ Dalibor Vesely (2004), pp.76, 238 & 387. Yrjö Hirn (1904), p.145. Tide Huesser, private conversation with the author, 1987.

⁶⁶ Max Ernst quoted in Lucy R. Lippard (1973), p.12. Alvar Aalto expressed particular admiration for Braque. See Interview with Elissa Aalto (1991), p.8. Some critics have interpreted the Villa Mairea as a collage. See Juhani Pallasmaa (1998), p.93.

⁶⁷ See Harry Charrington (1998).

⁶⁸ Interview 21, Heino Paanajärvi and Tore Tallqvist. Lisbeth Sachs (the site architect for the Villa Mairea) interviewed in Göran Schildt (1984b), p.158.

⁶⁹ Alvar Aalto (1970), p.267.

⁷⁰ Interview 29, Aarne Hollmén.

⁷¹ Alvar Aalto (1941a), pp.115-9.

⁷² The brickwork of Helsinki Polytechnic has a 12.5 mm mortar bed instead of the Finnish norm of 15mm. Interview 15, Eric Adlercreutz.

⁷³ Josef Albers quoted in *Back to Zero: Black Mountain College 1933-57*. Exhibition at Arnolfini, Bristol 5 November 2005- 2 April 2006.

Alvar Aalto knew Josef Albers, and Albers was in communication with Alvar Aalto during 1933 inquiring as to the possibilities of installing some of his work in the Paimio Sanatorium. Letter in Alvar Aalto Foundation.

⁷⁴ Interview 26, Pirkko Stenros.

⁷⁵ Alvar Aalto (1935), p.90.

⁷⁶ Peter Galison (1990), pp.717 & 735.

⁷⁷ A. Lawrence Kocher (1938).

⁷⁸ Interview 7, Jaakko Kontio.

⁷⁹ Interview 1, Kalle Leppänen. “I see it as a very positive trend that the artist should ... deny himself by going beyond his traditional field of operation and democratizing his product... The artist thus steps out among the people in order to harmonize life with his intuitive ideas, rather than stubbornly maintaining the opposition of art and non-art, which only leads to a sustained tragedy and hopeless life”. Alvar Aalto (1930b), p.72.

⁸⁰ Alvar Aalto: (1955b), p.178.

⁸¹ Alvar Aalto (1955b), p.178.

⁸² Alvar Aalto (1970), p.266.

⁸³ Alvar Aalto writing in *Arkkitehti 1-2/1948* quoted in Ulla Enckell (1998) - no page numbers.

⁸⁴ Writing of the Villa Mairea in *Arkkitehti 9/1939*, reproduced in Alvar Aalto (1939a), p.230.

⁸⁵ Leonardo Mosso (1967).

⁸⁶ Alvar Aalto, Monument of the Battle of Suomussalmi, 1964 quoted in Ulla Enckell (1998) - no page numbers.

⁸⁷ Paul Bernouilli, who worked for the Aaltos in the 1930's, noted “Braque was held in high esteem”. Juhani Pallasmaa (1998), p.90.

⁸⁸ Ingeborg Becker and Sigrid Melchior (2002), p.235.

⁸⁹ Bo Lindberg (2000), pp.214-5 and Timo Huusko (2006), p.221. Gotthard Johansson would write a book about her: *Helene Schjerfbeck's kunst* in 1940.

⁹⁰ Noguchi, Yone (1934), p.26.

⁹¹ “Pauli Vuorisalo, the artist, dropped by once to show his paintings. He displayed his paintings in the ateljee. Alvar looked at them, Vuorisalo had used oil paints mixed with sand. Alvar didn't buy any, Vuorisalo left. But fairly soon after that Alvar started using sand in his own paintings”. Interview 25, Heikki Hyttiänen.

⁹² Alvar Aalto (1941a), p.116.

⁹³ Leena Ahtola-Moorhouse, conversation with author, April 2006.

⁹⁴ See Juhani Pallasmaa (1998).

⁹⁵ On site plan drawings the actual physical contour lines of the map-maker are often left and the buildings often emerge as an extension of this, as with the Essen Opera House. Mark A Hewitt (1989), p.171.

NOTES TO CHAPTER 8: ADAPTATION

¹ Johan Peter Eckermann (1848), p.282.

² Gaston Bachelard (1969), p.64.

³ Alvar Aalto (1950a).

⁴ Alvar Aalto (1955a), p.173.

⁵ Wright was a Finnish philosopher and was, alongside Alvar Aalto, a member of the Academy of Finland. In Britain he is best known as the successor of Ludwig Wittgenstein in the Chair of Philosophy at Cambridge University. See also Alvar Aalto's obituary for Gunnar Asplund in *Arkkitehti* 11-12/1940 and Alvar Aalto (1921d), pp.13-15 and (1924b), p.17-9.

⁶ Alvar Aalto (1963a), pp.157-163. See also Göran Schildt (1984a), p.251.

⁷ J. H. von Goethe (1788), p.89.

⁸ “An example of how a famous architect is sometimes needed when a hole needs to be dug in the ground”. Interviews 19 & 20, Per-Mauritz Ålander and Tore Tallqvist. See also Jaakko Kontio (1998), p.44.

⁹ Interview 19, Per-Mauritz Ålander: “I remember coming to Riihitie once and Wickberg was sitting in the sofa. He was very much opposed to the scheme because he would have wanted to keep the old Kinopalatsi building. He had obviously had a heated discussion with Alvar about this. [...] Alvar said after he'd left what a strange genius Wickberg was. Alvar of course thought that however good a building is, his new one will be even better.”

¹⁰ “Cheeffi sent me to a meeting at National Board of Building. He authorised me to change nothing. As I left he said: “You have no right to change a single line.” Interview 17, Heikki Tarkka. A grid-plan project was later carried out by Arto Sipinen.

¹¹ Karl Fleig (1971), p.164.

¹² Ernesto Rogers: *Casabella-continuata* 202, p.viii.

¹³ A resistance that was equivalent to that expressed by Georg Simmel in *The Philosophy of Money*, as well as in Camillo Sitte's concept of *Raumkunst*. David Frisby (2001), p.10. George R Collins (1986), p.14. See also Alvar Aalto (1953a), pp.210-11 and (1962c), p.265.

¹⁴ Alvar Aalto (1972a), p.274. Alvar Aalto (1970's), p.11.

¹⁵ Johan Peter Eckermann (1848), p.366.

¹⁶ Georg Simmel: 'Subjective Culture' (1908), in Adrian Forty: *Word and Buildings* p.166. See also George Simmel (1903), pp.324-339.

¹⁷ Alvar Aalto (1956), p.183. See also Alvar Aalto (1930a), p.77 and Interview 12, Olli Penttilä. For Simmel's argument in *The Philosophy of Money* (1900) see Georg Simmel (1900) and David Frisby (1985), p.45 and (2001).

¹⁸ Alvar Aalto (1955a), p.174.

¹⁹ Friedrich Schiller (1794), pp.27 & 53.

²⁰ Yrjö Hirn (1904), p.116.

²¹ Göran Schildt (1984b), p.11.

²² Alvar Aalto (1964).

²³ Alvar Aalto: (1953a), p.211.

²⁴ Alvar Aalto: 'Senior Dormitory, MIT, Cambridge, Massachusetts' in *Arkkitehti 6 / 1950* p.64.

²⁵ Interview 16, Veli Paatela.

²⁶ Alvar Aalto (1958a), p.15.

²⁷ Robin Evans (1995), p.71.

²⁸ Interview 14, Matti Pöyry: The day he (Le Corbusier) died, I think it was a Saturday. There was a group working here that day, and we were invited to the Taverna where Chianti had been laid out. I remember Alvar saying that he is now the world's best architect, since Corbu had died. I suppose it was Mies, Corbu and Alvar. [...] It was an inevitable joke. We all had a nice time".

²⁹ The board-marked concrete slab of Le Corbusier's later Unite d'Habitation in Marseilles, completed in 1952, is on the other hand, almost synonymous in this aspect.

³⁰ Stuart Wrede quoted in Juhani Pallasmaa (1998), p.77.

The closeness of the Aaltos and the Asplunds can be gauged by the fact that the Aaltos' daughter, Johanna, spent part of the war years living with Ingrid Asplund at the Asplunds' summer house at Stennäs. Renja Suominen-Kokkonen (2004c), p.214. Alvar Aalto (1924a), p.49.

³¹ Göran Schildt has pointed out that on engaging the Norwegians Harald Wildhagen and Erling Bjertnaes in autumn 1927, Alvar Aalto insisted they closely study the Skandia and the City Library on their way through Stockholm. Göran Schildt (1985a), p.60.

³² Gustaf Strengell in *Helsingfors Journalen* quoted in Göran Schildt (1984b), p.84.

³³ For instance William C Miller (1979).

³⁴ Interviews 16 & 22, Veli Paatela.

³⁵ Alvar Aalto (1928c), p.63.

³⁶ Alvar Aalto (1922), pp.34-5.

³⁷ Alvar Aalto (1922), pp.34-5.

³⁸ Alvar Aalto (1967a), p.218.

³⁹ Alvar Aalto (1921a), p.36.

⁴⁰ Johan Peter Eckermann (1848), p.41.

⁴¹ Bengt von Bonsdorff (2000), p.113. Lars Pettersson (1979), pp.32-5. For example the church at Kiukainen was built before the 'corrected' version of the project was sent from Stockholm.

⁴² See Bernard Tschumi: 'The Architectural Paradox' in Bernard Tschumi (1996). There is reason to suppose that Alvar Aalto's own churches in the 1950s directly responded to these structures; both in the rhythmic vaults at Seinäjoki, which suggest the restrained geometries of churches such as Vörå, and the more sculpted complexity of Vuoksenniska which has affinities with the complex 'double-cruciform' vaulting of the church at Lemi by the Salonen brothers (1786).

⁴³ Gustaf Strengell (1922), pp.11-2.

⁴⁴ Camillo Sitte (1889), p.141.

⁴⁵ Francesco Dal Co (1998), p.72.

⁴⁶ Simo Paavilainen has also interpreted the entire main façade of the National Pensions Institute as a reworking of the Palazzo, but whereas the Palazzo Rucellai is seen obliquely down a narrow street, the National Pensions' Institute is approached flat on. A more convincing reference might be Le Corbusier's Villa at Garches, also approached frontally.

⁴⁷ J. H. von Goethe (1788), p.57.

⁴⁸ See for instance Adrian Forty (2000), pp.79-80 and 240-2.

⁴⁹ Goethe cited in Adrian Forty (2000), p.68.

⁵⁰ Strengell quotes Laugier on architecture being a societal building enterprise. Gustaf Strengell (1922), p.235.

⁵¹ Yrjö Hirn (1904), p.74. Sylvia Lavin (1992), p.176. See also Anthony Vidler (1989).

⁵² James Ackermann (1968), p.vii.

⁵³ Mari Hvattum (2004), p.131.

⁵⁴ "Live with your century, but do not be its creature". Friedrich Schiller (1788), p.54. See also Alvar Aalto (1928a), p.255 and (1928c), p.62, as well as Yrjö Hirn (1904), p.117.

⁵⁵ "The world ... remains always the same; situations are repeated; one people lives, loves, and feels like another; why should not one poet write like another? The situations of life are alike; why then should not those of poems be alike?" Goethe quoted in Johan Peter Eckermann (1848), p.82.

⁵⁶ Alvar Aalto (1921), p.32.

⁵⁷ Alvar Aalto (1928d), p.67.

⁵⁸ The Jyväskylä University Refectory; Säynätsalo Town Hall; National Pensions Institute, Helsinki; Rautatalo, Helsinki; National Pensions Institute Housing, Munkkiniemi; Marl Town Hall; Muuratsalo Summer House and Hansaviertel Flats, Berlin respectively.

⁵⁹ Alvar Aalto (1954a), p.4.

⁶⁰ Schemes such as this by Quaroni and Ridolfi and those at Cesate by Gardella were in turn influenced from Sweden. Letters in the Alvar Aalto Foundation archives. See also Göran Schildt (1989a), p.165 & 215.

⁶¹ Johan Peter Eckermann (1836-48), pp.192-3

⁶² Interview 1, Kalle Leppänen.

⁶³ Luciano Semeriani (1999), pp.76 -78.

⁶⁴ Ernesto Rogers 'Esperienza di un Corso Universitario' in *La Utopia della Realtà*, Bari, 1965 cited in Rafael Moneo (1978), p.36.

⁶⁵ Aldo Rossi (1981).

⁶⁶ Rafael Moneo (1978), pp.27 & 23.

⁶⁷ Sigurd Frosterus and Gustaf Strengell (1904), p.51.

⁶⁸ Adrian Forty (2000), pp.224-5. Kirsi Saarikangas (1992), p.230-1.

⁶⁹ Yrjö Hirn (1904), pp.74 & 283.

⁷⁰ See Alvar Aalto (1930b), pp.71-6. "*Kritisk Revy* once published a picture of the Tivoli Gardens in Copenhagen: paper lanterns in the trelliswork above a café table. The caption was 'eternal values'."

⁷¹ For example, there is a theory that the balcony on the east front of the Seinäjoki Town Hall is a reference to the Papal Palace in Orvieto Markus Aaltonen (2004), pp.166-70. Other analogies include the Piazza del Duomo in Pienza, Simo Paavilainen (1979), p.166. My own analogy came when visiting Seinäjoki for the first time in 1985 when I was put in mind, partly because the 'hammer & sickle' flag was flying over the Town Hall in honour of a visiting Soviet delegation, of the balcony of Lenin's mausoleum in Moscow.

⁷² Aldo Rossi (1981), p.45.

⁷³ Georg Simmel: 'The Metropolis and Mental Life' (1903) quoted in David Frisby and Mike Featherstone (1997), p.174.

⁷⁴ See Igor Herder (1984). Timo Keinänen (1981).

⁷⁵ See Frank Whitford (1991).

⁷⁶ *Arkkitehti* 1/1945.

⁷⁷ Quoted in Göran Schildt (1989a), p.13 and article in *Kerberos* (1921), reproduced in Göran Schildt (1984a), p.135.

⁷⁸ See Charles Jencks (2000).

⁷⁹ László Moholy Nagy (1930), p.16.

⁸⁰ Pekka Korvenmaa (1992b), p.120.

⁸¹ Alvar Aalto (1940), pp.102-3. Elina Standertskjöld (1992a), pp.75-82.

⁸² This comment is based on my first-hand experience.

⁸³ Alvar Aalto: (1950), p.189. The Aalto also had a copy of Frederick Kiesler (1939) in the their library.

⁸⁴ Alvar Aalto (1941c), pp. 153-4. See also John Ruskin The Lamp of Power XVI pp.89-90 and Tetsuro Yoshida (1935).

⁸⁵ Alvar Aalto's quoted in Jussi Rautsi (1986), p.56.

⁸⁶ *A Talo* (1945), catalogue is in the Alvar Aalto Foundation. 2000 is an estimate, there may be more. Pekka Korvenmaa, private conversation with author, July 2005.

⁸⁷ *La Bois est en Marche*, the winning entry for the Finnish Pavilion at the Paris Exposition in 1936 was laid out according to the pattern of tatami mats.

⁸⁸ See Alvar Aalto (1941c) and (1957c).

⁸⁹ Alvar Aalto (1941c), p. 154.

⁹⁰ Tetsuro Yoshida (1935), p.169.

⁹¹ Jacob Burckhardt (1869), p.193.

NOTES TO CHAPTER 9: MANIFESTATION

¹ Samuel Beckett: *Worstward Ho* (1983).

² In Göran Schildt's almost 800 page long trilogy only about 5 pages are given over to the actors and actions of the atelier.

³ Dalibor Vesely (2004), p.242.

⁴ Roland Barthes: 'Mythologies' quoted in Edward Robbins (1994), p.9..

⁵ Robin Evans (1995), p.110.

⁶ Alvar Aalto, letter to Aino Marsio-Aalto. Alvar Aalto Foundation archives.

⁷ From 1928 Alvar Aalto and Aino Marsio-Aalto had already begun to work from an office that connected to their apartment in Turku.

⁸ Interview 8, Jaakko Kontio. See also Göran Schildt (1989a), p.260.

After the construction of the purpose built Tiiämäki atelier, the Riihitie atelier continued to be used for some competitions "far from the hustle and bustle of the office [...] the atmosphere at Riihitie was idyllic and very calm. Coming up with ideas was easy there". Interview 2, Frederico Marconi.

⁹ Karl Fleig (1963), p.248.

¹⁰ Interview 15, Heikki Hyytiäinen.

¹¹ Heikki Lonka and Roy Cameron, private conversations with author, 1988. Having worked in both the UK and Finland I can avow to the significant difference this makes in the time it allows for refining a design.

¹² This was a view common in many other Scandinavian ateliers, for instance that of Ralph Erskine in Sweden. Ralph Erskine, private conversation with author, February 1998.

In the 1950s and 1960s the Aalto atelier did informally appoint an office manager (*toimistopäälikkö*), an architect responsible, together with the atelier's secretaries, for managing the office resources and finances; a subject for which Alvar Aalto had no aptitude or interest. Interview 8, Jaakko Kontio.

¹³ Alvar Aalto (1956), p.182.

¹⁴ Interview 12, Olli Penttilä; Vezio Nava and Tide Huesser, private conversations with author, 1986 and 2003.

¹⁵ Interview 20, Tore Tallqvist.

¹⁶ The most famous of whom were Ragnar Ypyä (1924-5), Aarne Ervi (1935-6), Viljo Rewell (1936-7, 1943-4), Kristian Gullichsen (1954-6) and Eric Adlercreutz (1959-65).

¹⁷ Alvar Aalto letter to Aino Marsio-Aalto quoted in Göran Schildt (1989a), p.99. Alvar Aalto publicly acknowledged Aino Marsio-Aalto and Elissa Aalto as partners, even if they were less often acknowledged by others. See Alvar Aalto (1947a) and (1957c).

¹⁸ For more on this see Renja Suominen-Kokkonen (2007).

¹⁹ Until the late 1960s the Aalto atelier did not employ any interior architects at all. Interview 27, Pirkko Söderman.

²⁰ Caroline Constant: (1994), pp. 265-279. See also Christopher Reed (1996) Thames & Hudson, London 1996.

²¹ Undisclosed sources in Interview series.

²² Interview 2, Frederico Marconi. Interview 9, Jaakko Suihkonen.

²³ Interview 28, Sverker Gardberg.

²⁴ Interview 24, Mikko Merckling.

²⁵ Tide Huesser, private conversation with author, 1987.

²⁶ Interview 15, Eric Adlercreutz.

²⁷ Interview 6, Tauno Keiramo. Interview 26, Mariika Ruumaja.

²⁸ Interview 13, Mauno Kitunen. Alvar Aalto's drinking is a subject of countless anecdotes and speculation as to whether, and if so how much, it influenced his architecture. Nothing can be concluded.

²⁹ Alvar Aalto (1972a), p.273. The atelier helped a number of students through college by making loans of advance wages. Interview 14 Heikki Hyytiäinen and Matti Pöyry.

³⁰ Interview, Frederico Marconi; Interview 4, Jaakko Suihkonen.

³¹ Interview 14 Heikki Hyytiäinen and Leif Englund.

³² Interview 7, Veli Paatela.

³³ In part through the recommendations of Siegfried Giedion, Ernesto Rogers and Carlo Scarpa. Interview 2, Frederico Marconi. Letters in the Alvar Aalto Foundation.

³⁴ http://www.stat.fi/tup/suoluk/suoluk_vaesto_en.html#Foreigners accessed 26 August 2007. Particularly before the 1970s a foreigner was unusual in the country and could be feted. Mikko Merckling, private conversation with author, 1987. See also Lisbet Sachs comments in Göran Schildt (1984b), p.163.

³⁵ Interview 29, Aarne Hollmén.

³⁶ See Mark Cousins (1994).

³⁷ Interview 20, Tore Tallqvist.

³⁸ Alvar Aalto (1958c), p.182. Vezio Nava, private conversation with author, September 2003.

³⁹ Interview 1, Kale Leppänen.

⁴⁰ Interview 20, Heikki Paanajärvi and Interview 13, Mauno Kitunen.

⁴¹ See Interview 12, Olli Penttilä. Colin St.John Wilson, private conversation with author, May 1998. Nicholas Ray (2005), pp.120-31.

⁴² Interview 12, Olli Penttilä, Interview 6, Tauno Keiramo. Temporary satellite offices had also been established at Hedemora in Sweden when Artek established production there at the end of the Second World War, and in Cambridge, Massachusetts for the building of Baker House Dormitory.

⁴³ Interview 10, Ilona Lehtinen.

⁴⁴ Interview 8, Veli Paatela.

⁴⁵ Interview 5, Jaakko Suihkonen and Leif Englund.

⁴⁶ Interview 20, Tore Tallqvist.

⁴⁷ Interview 16, Veli Paatela. Lee Hodgden quoted in GS3 p.121.

"Aalto's holiday times suited us well. He would always go in September when work was in full swing here and in other offices. Rajja would call the airport and check that the professor had

caught his flight, and then she would ring around the other offices and we would have a big party here.” Interview 27, Raija Sarmanto.

⁴⁸Interview 15, Eric Adlercreutz

⁴⁹ Interview 20, Heimo Paanajärvi.

⁵⁰ Interview 13, Mauno Kitunen.

⁵¹ Interview 15, Eric Adlercreutz. Interview 13, Mauno Kitunen.

⁵² Interview 20, Vezio Nava.

⁵³ For more on this see ‘The Nefarious Influence on Modern Architecture of Boullée and Ledoux’ in Jospeh Rykwert (1982) and Edward Robbins (1994), p.46.

⁵⁴ Lee Hodgden quoted in Göran Schildt (1989a), p.121.

⁵⁵ Interview 20, Tore Tallqvist.

⁵⁶ Interview 9, Kristian Gullichsen.

⁵⁷ Interview 9, Leif Englund, Jaakko Suihkonen, Mauno Kitunen.

⁵⁸ Tide Huesser, private conversation with the author, 1987.

⁵⁹ Interview 20, Tore Tallqvist.

⁶⁰ Interview 2, Frederico Marconi; Interview 5, Jaakko Suihkonen.

⁶¹ Interview 4, Jaakko Suihkonen.

⁶² Interview 17, Heikki Tarkka. “The building work nearly stopped at one point but then *Cheeffi* wired the bond details from America”.

⁶³ Interview 4, Jaakko Suihkonen.

⁶⁴ Interview 4, Jaakko Suihkonen.

⁶⁵ See Pertti Solla (1992).

⁶⁶ Quoted in Pertti Solla (1982), p. 272.

⁶⁷ Werner Moser (1970), p.184. Interview 15, Eric Adlercreutz.

⁶⁸ Interview 10, Ilona Lehtinen.

⁶⁹ Edward Robbins (1994), p.31.

⁷⁰ Interview 1, Kale Leppänen.

⁷¹ Interview 17, Heikki Tarkka.

⁷² In Juhani Pallasmaa (1998), the geometric diagrams forced upon the plan of the Villa Mairea (they do not actually align with the building as built) are such a misapprehension.

⁷³ Kari Jormakka, Jacqueline Gargus, Douglas Graf (1999), pp.95-100.

⁷⁴ Interview 13, Mauno Kitunen.

⁷⁵ Interview 7, Veli Paatela.

⁷⁶ Tide Huesser, private conversation with author, 1987.

⁷⁷ My own experience. Interview 5, Leif Englund and Jaakko Suihkonen.

⁷⁸ Pirkko Tuukkanen (2002), pp.138-154.

⁷⁹ Interview 15, Eric Adlercreutz.

⁸⁰ Interview 25, Heikki Hyytiäinen.

⁸¹ Erkki Vanhankoski (1992), p.297. Interview 25, Heikki Hyytiäinen. There is also a classical precedent for this which states that models only need to be made for the client, not for the architect's sake. Jacob Burckhardt (1869), p.77.

⁸² Interview 6, Tauno Keiramo.

⁸³ Although at the beginning a professional model maker, Mihail (Mikko) Galkin, was employed.

⁸⁴ Interviews 14 & 25, Heikki Hyytiäinen.

⁸⁵ Interview 25, Mariikka Riimaja.

⁸⁶ Interview 4, Jaakko Suihkonen.

⁸⁷ Interview 9, Leif Englund, Jaakko Suihkonen, Mauno Kitunen.

⁸⁸ Interview 25, Mariikka Riimaja; Interview 27, Pirkko Söderman; Interview 20, Heimo Paanajärvi.

⁸⁹ Interview 20, Tore Tallqvist.

⁹⁰ Interview 5, Jaakko Suihkonen and Leif Englund.

⁹¹ Usko Nyström 'Mietelmiä kauniista' in *Kotitalo* VII 1911 cited in Peter Reed (1998), p.203.

⁹² Interview 25, Aarne Hollmén.

⁹³ Sarah Menin (1997a), p.338. For more on the design process of the House of Culture see Harry Charrington (1998).

⁹⁴ Interview 13, Tapani Mustonen.

⁹⁵ When working away from Finland, the atelier was aware to adapt its design to the local capacities, be it in Germany or the United States. Often scathingly "I remember Alvar was about to return to Finland, and he said to me: 'Veli, remember that these are not Scandinavian students you're drawing for, these are lads. You are not capable of drawing a detail badly enough not to be too good for these boys'. [...] my details should be more coarse." Interview 6, Veli Paatela.

⁹⁶ Interview 1, Kale Leppänen.

⁹⁷ Interview 5, Jaakko Suihkonen and Leif Englund.

NOTES TO CHAPTER 10: CONCLUSION

¹ Alvar Aalto (1955b), p.179.

² Arnold Berleant (1995).

³ Alvar Aalto (1947a), p.107.

⁴ Alvar Aalto (1924a), p.16.

⁵ Maurice Merleau-Ponty (1962), p.vii.

⁶ I am indebted to Sune Frølund for this observation, private conversation with author, November 2005.

⁷ “They (his buildings) thus present themselves as prototypes to those architects working in irrevocably suburban places, for whom the formal conventions of the European city are too precise and those of the Anglo-American suburb too weak”. Andres Duany (1985), p.119.

⁸ Alvar Aalto (1958a), p.16. Alvar Aalto (1963a), pp.154-5.

⁹ “...you have to be careful with similes, because they may be poetic, but they don’t prove much”. Primo Levi (1978), p.77.

¹⁰ Alvar Aalto (1928), p.256.

¹¹ W H Auden & Elizabeth Mayer (1970), p.13.

¹² “Methodological accommodation to circumstance” is Stuart Wrede’s translation for Göran Schildt (1973) rendered as “methodical development of flexibility” in Alvar Aalto (1941a), p.118. See also Stanford Anderson (1987), p.29.

¹³ Alvar Aalto (1970s), p.11.

¹⁴ Alvar Aalto (1958a), p.16.

¹⁵ Alvar Aalto (1958a), p.16.

¹⁶ Henri Lefebvre (1974), p.370 quoted in Adrian Forty (2000), pp.274.

¹⁷ Hannah Arendt (1958). Alvar Aalto (1963b), p.140.

¹⁸ A communal, rather than individual “state of mind that is ultimately as life-affirming as it is negating.” Orhan Pamuk (2005).

¹⁹ The cobbles may also be unsuitable.

²⁰ Alvar Aalto (1921a), p.36.

²¹ Joseph Albers (s.a.) quoted in *Back to Zero: Black Mountain College 1933-57* Exhibition.

²² For more on this see Mark Cousins (1994).

²³ Alvar Aalto (1958a), p.16.

²⁴ Alvar Aalto (1921a), p.36.

²⁵ Vilhelm Helander, private conversation with author, February 2007.

²⁶ Paul Ricoeur (1961), p.283 quoted in Kenneth Frampton (1983), p.148.

²⁷ Alvar Aalto (1958a), p.16.

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The London School of Economics and Political Science

**THE MAKINGS OF A SURROUNDING WORLD:
THE PUBLIC SPACES OF THE AALTO ATELIER**

Harry Charrington

**A thesis submitted to the Department of Sociology of the
London School of Economics for the degree of Doctor of
Philosophy, London, April 2008**

Volume 2: Illustrations & Appendices

THESES
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fig 1.1 Alvar Aalto sketch, glassware and
Finnish landscape.
Komonen (1980)

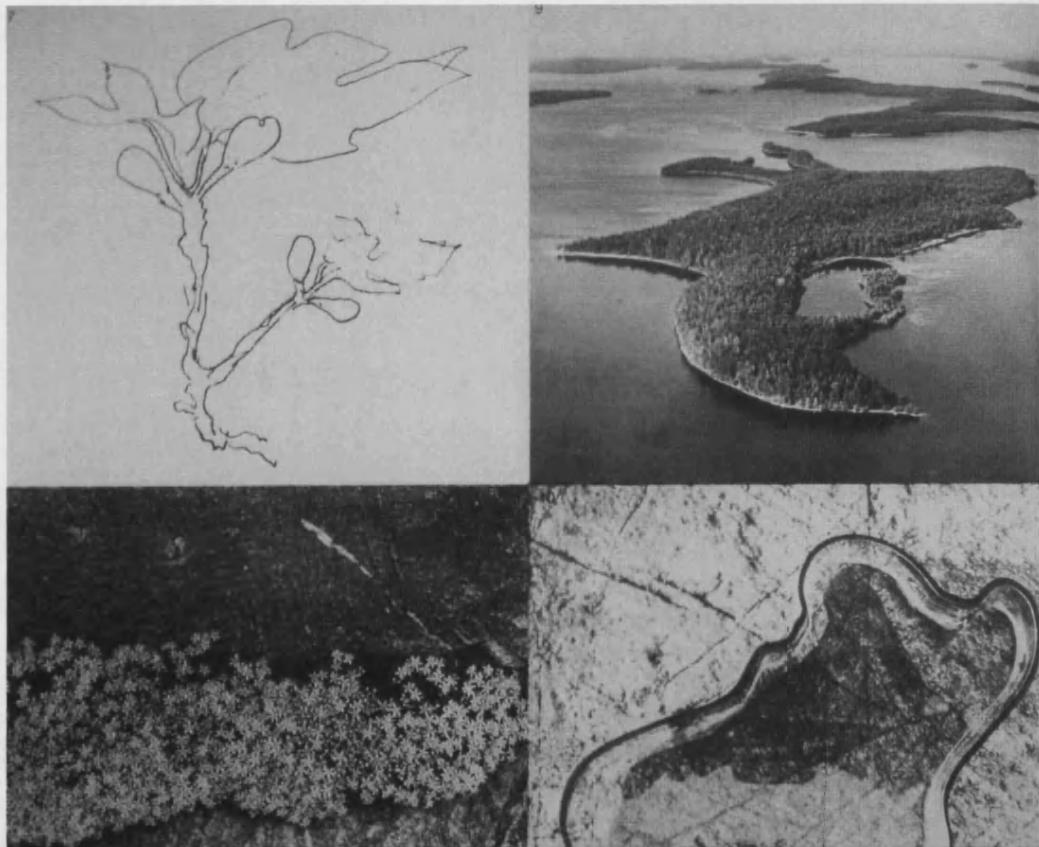


fig 1.2 Page from Neuenschwander (1954)

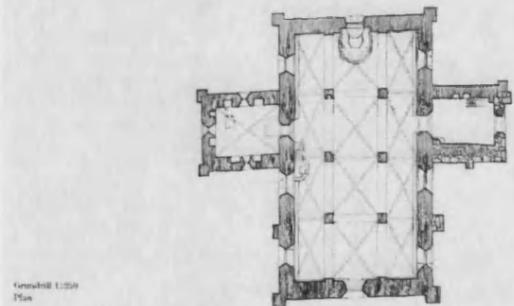


fig 1.3 Page from Wickberg (1959)

Talvipalokastala, Pielavesi. Asuinrakennuksen ryhmän läheysrakennuksen sijainti näytetään.

Ylämpi. Tinen talo Kirkkonummen Maatalossa. Päärakko ja talon punamuurais uottilin mossaedullila kivijentöövaro voivat olla myös uottila sitten. Tuulimyllyjä oll. 1800-

keruulla. Pato-Koristekorukuvatoinnan ja kastellin Suomessa, miltä venetsianni noolimmin näte esityn. Varsinais-Suomea ja Etelä-Pohjanmaalla. Tämä hollantilaista myölyistä mutteutava typpi on myös hienodä parua kain polkileikkauksistaan seikkumaisest kuulimyynti. Se oll erityisesti kaupungissa ylläinen.

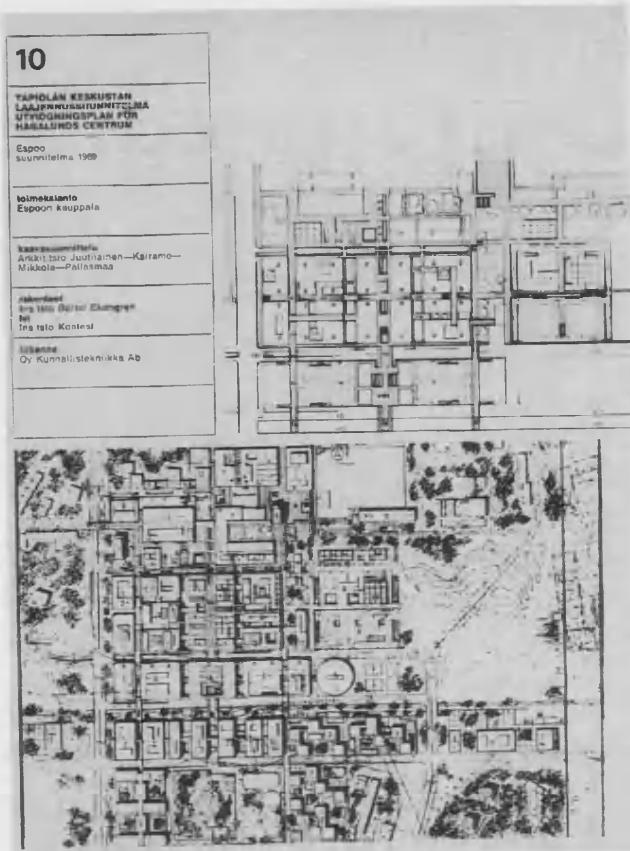


fig 1.4 Page from *Suomi Rakentaa*
Maunula (1970)

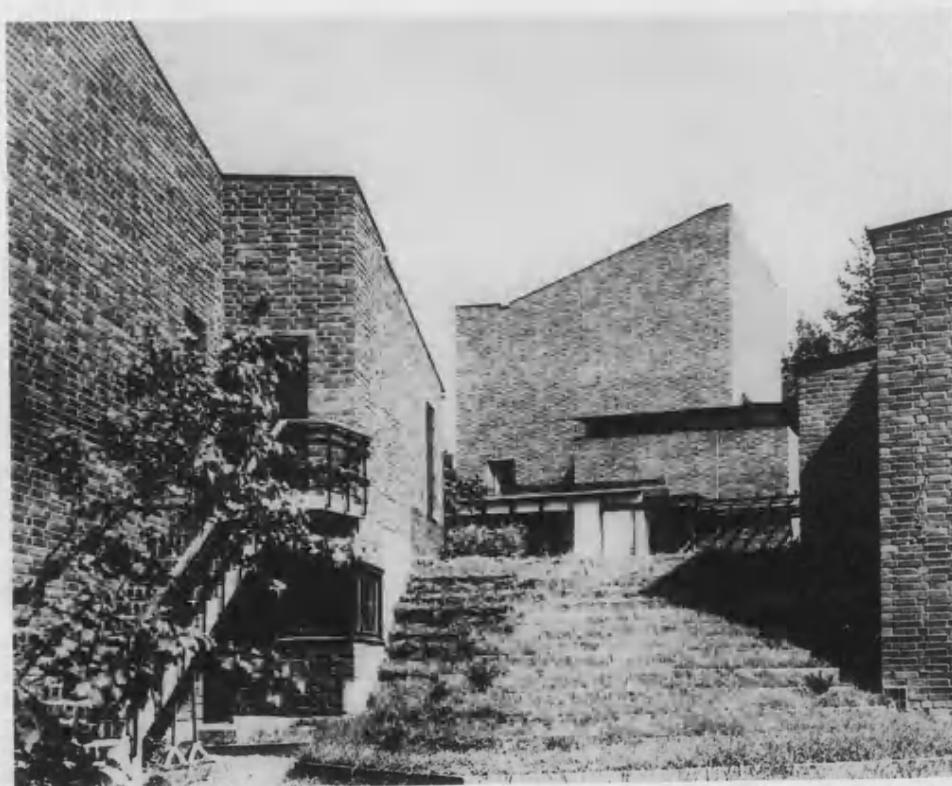
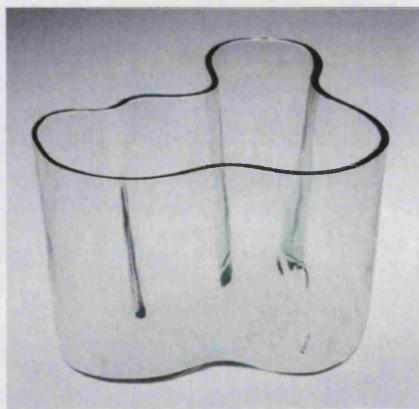


fig 1.5 Eino Mäkinen photograph of
Säynätsalo Town Hall -
note hand at bottom left;
Ceferin (2002)



1.6a

fig 1.6a Savoy Vase (1936)
1.6b Savoy Vase adapted as a
cake mould by littala (2005)



1.6b



1.7a

fig 1.7a S60 stool stacked
1.7b S60 stool laminated
'knee' joint.



fig 1.8a Alexander Calder maquette of Alvar Aalto 1930s
Schildt (1984b)

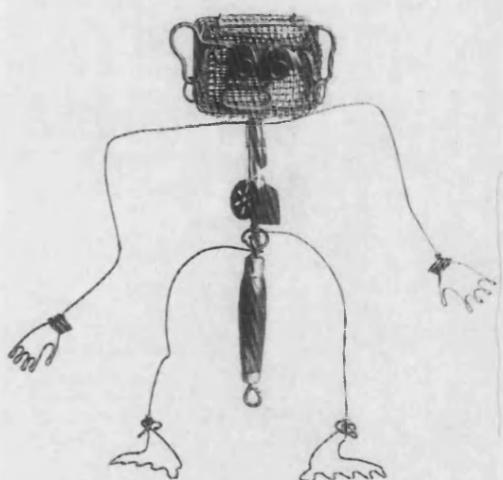


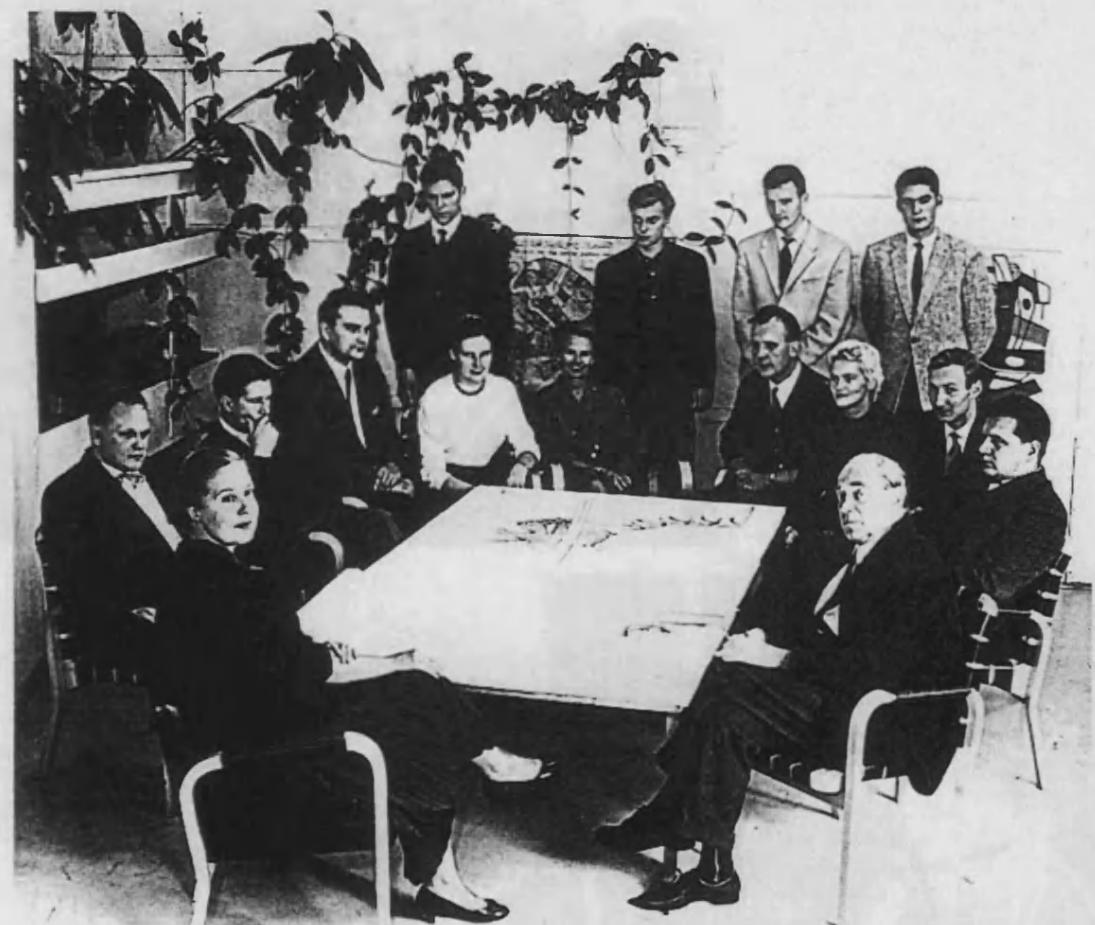
fig 1.8b Aino Marsio-Aalto and Alvar Aalto at their Finnish Pavilion for the New York World's Fair 1939
Schildt (1984b)



fig 1.8c Alvar Aalto and Elissa Aalto 1950s
Finnish Communist Party Archive



fig 1.9 Members of the Aalto atelier
in the early 1960s
Mikko Merckling



ELISSA AALTO KAARLO LEPPÄNEN ERKKI LUOMA KALEVI HIETANEN MAINA YATARA
HELGA MATTSSON JAAKKO KONTIO RITVA LEENA HARTIKAINEN WALTER MOSER (TST.
1958) MATTI ITKONEN ALVAR AALTO
(TAUST) ERIC ADLERCREUTZ KIMMO SÖDERHOLM ARTO SIPINEN JORMA SALMENKIWI



fig 1.10a Paimio Sanatorium 1928-32
Fleig (1963)

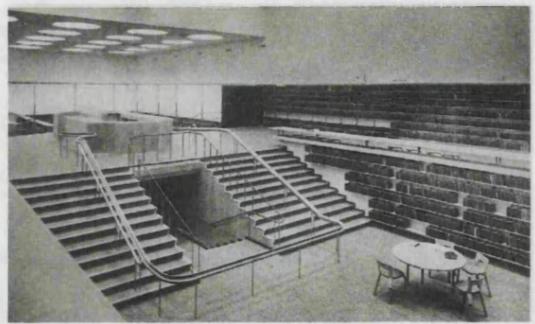


fig 1.10b Viipuri Library 1927-35
Saivo (1953)

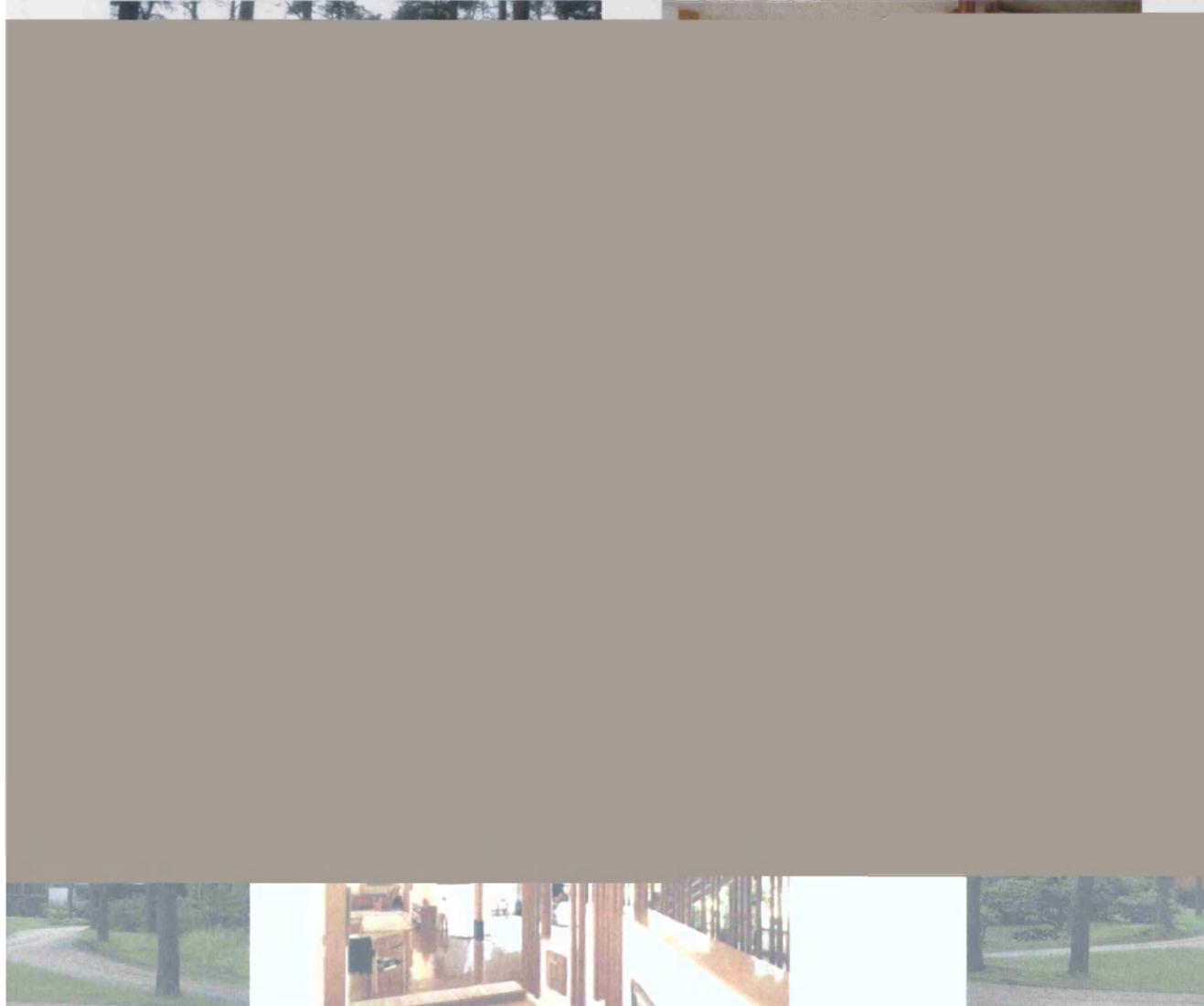




fig 1.10e Rautatalo, Helsinki 1951-55
AAF



fig 1.10f National Pensions Institute, Helsinki 1953-58



fig 1.10g Vuoksenniska Church 1955-58



fig 1.11a Academic Bookshop, Helsinki 1961-69



fig 1.11b Finlandia Hall, Helsinki 1962-75
unknown

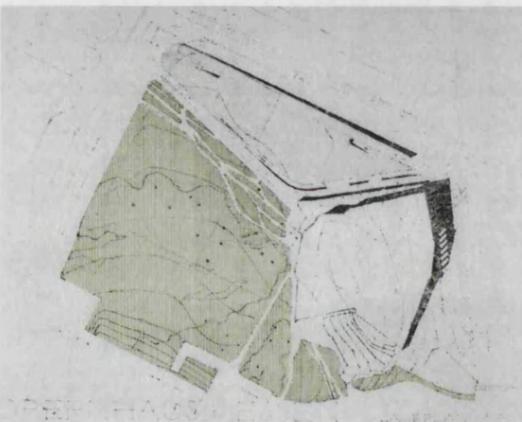


fig 1.11c Essen Opera House 1959-87
Fleig (1963)

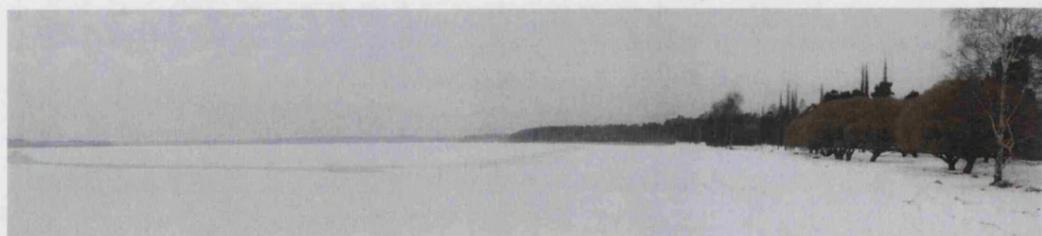
fig 2.1 Map of Finland 1898;
Tweedie (1898)



fig 2.2a The coast at Espoo in spring
2.2b The coast at Ekenäs in winter



2.2a

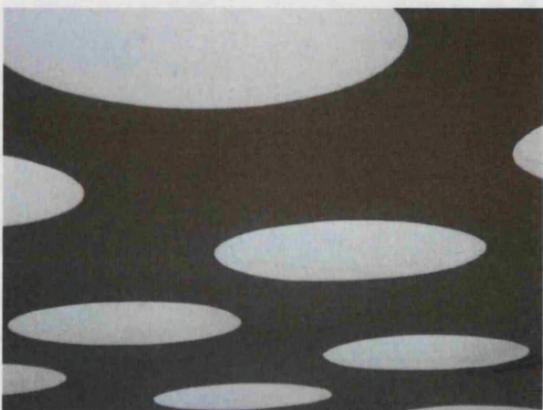


2.2b

fig 2.3 Nordic Bank,
extension, Helsinki 1960-5



2.4a



2.4b

fig 2.4a Rooflights at Enso-Gutzeit,
Helsinki 1959-62)
2.4b Rooflights at the Viipuri Library
1927-35



2.5a



2.5b

fig 2.5a, b Tiilimäki atelier,
Munkkiniemi 1953-55



2.6a



2.6b

fig 2.6a, b Main building of Jyväskylä
University 1951-86



2.7a

fig 2.7a Ostrobothnian barley-fields;
<http://www.helsinki.fi/maantiede/>
2.7b Landscape near Jyväskylä;
www.easyboy.fi/
2.7c Signe Brander: photograph of
Unioninkatu, Helsinki 1912;
Helsinki City Museum



2.7b



2.7c



2.8a

fig 2.8a Alvar Aalto and family 1898;
Schildt (1984a)
2.8b Alvar Aalto and family 1903;
Mikkola (1985a)
2.8c Alvar Aalto and family 1935;
Mikkola (1985a)



2.8b



2.8c



2.9a

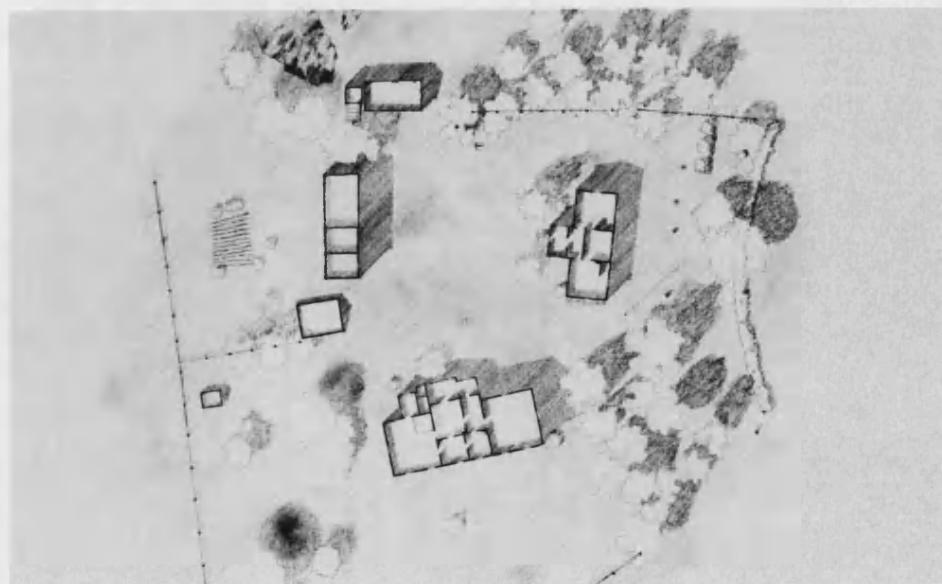
fig 2.9a Peltonen farmstead, Kuortane;
Mikkola (1985a)

2.9b Typical urban yard, Kemi;
Neuenschwander (1954)

2.9c Ostrobothnian farmstead plan;
Freese (1997)



2.9b



2.9c



2.10a

fig 2.10a Akseli Gallen-Kallela:
Lemminkäinen's Mother 1897;
www.gallen-kallela.fi
2.10b Kalela, Gallen-Kallela's studio
Ruovesi 1894-5



2.10b



2.11a

fig 2.11a, b Hvitträsk,
Kirkkonummi 1901-3



2.11b



2.12a

fig 2.12a 'Judgement', Civil War postcard 1918;
<http://www.sodatkuvina.cjb.net>

2.12b Alvar Aalto sketch of 'Red Agitator'; Schildt (1984a)

2.12c Alvar Aalto's year at Helsinki Polytechnic 1916. He is in the light coat; Schildt (1984a)



2.12b



2.12c



fig 2.13 J.S. Sirén, extension to
Helsinki University 1931-7



fig 2.14 Pauli Blomstedt, Union Bank,
Helsinki 1930;
Norri (2000)

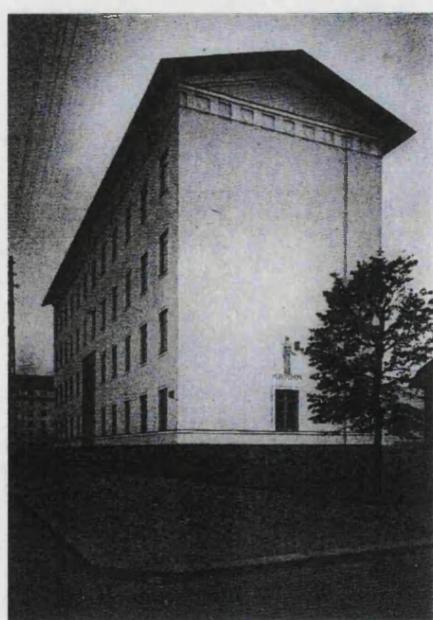


fig 2.15 Gunnar Taucher, Helsinki Adult
Education College 1927-8;
Arkkitehti III 1929



fig 2.16 *Architecta* the Finnish Female Architects' Association celebration of the architect Wivi Lönn's 70th Birthday, 1943; MFA

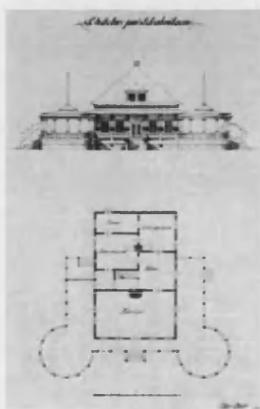
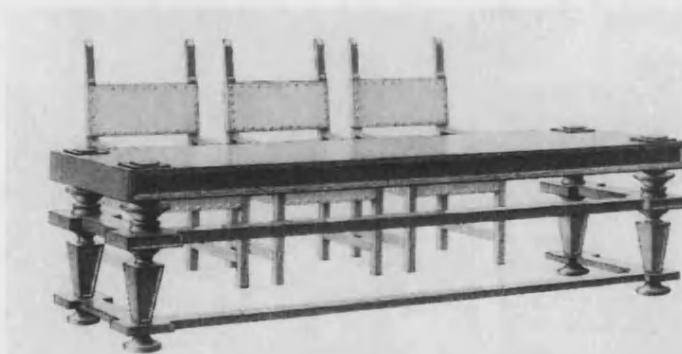


fig 2.17 Alvar Aalto drawing exercise at Helsinki Polytechnic; Schildt (1984a)



2.18a



2.18b

fig 2.18a, b Aino and Alvar Aalto table and chairs for the Jyväskylä Defence Corps and a settee 1920s; Pallasmaa (1984)



2.19a

fig 2.19a Aira Railway Workers Apartments, Jyväskylä 1924-6

fig 2.19b Seinäjoki Defence Corps Building 1924-9

1987 Saari (1988)

2.19c 2005 after restoration of the original

1926 colour scheme

2.19d Plan;

AAF



2.19b



2.19c

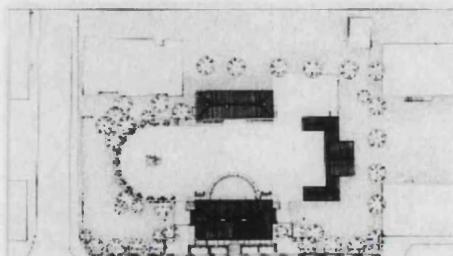


fig 2.20 Paimio Tuberculosis Sanatorium
1929-32
Site Plan;
Fleig (1963)

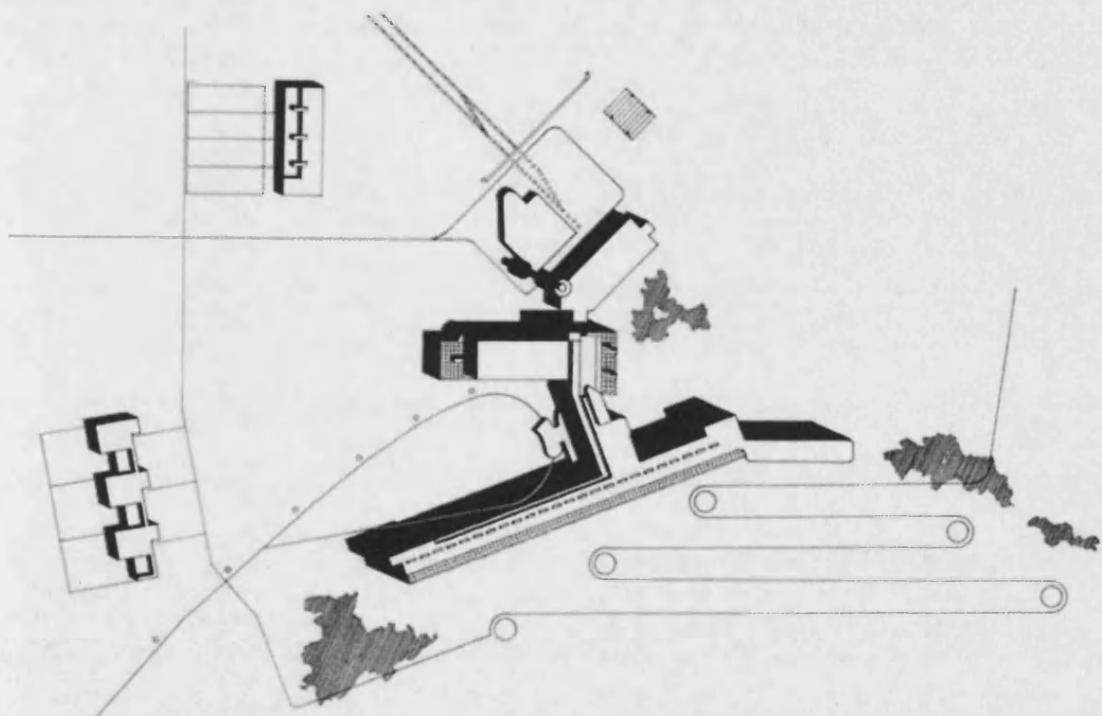


fig 2.21 Alvar Aalto Stage Set
for Hagar Olson's *S.O.S.* 1930;
Mäkkilä & Grägg (2004)

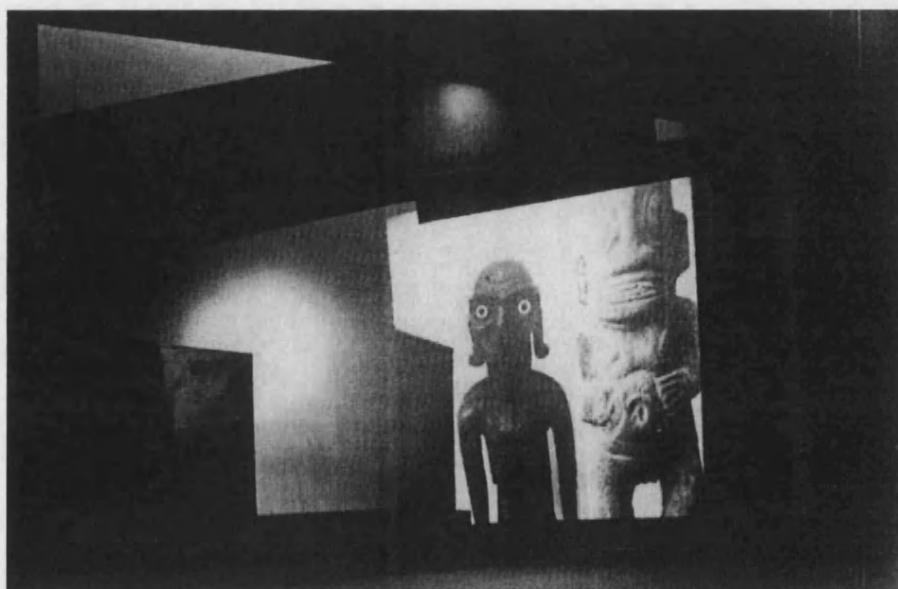




fig 2.22 Alvar Aalto design for Sunila Oy share certificate 1937;
Schildt (1994)



2.23a

fig 2.23a AA Type houses at Varkaus, late 1940s;
Ålander (1952)
2.23b Page from A-talo brochure 1945;
AAF



2.23b



2.24a

fig 2.24a Kokemäenjoki River Regional Plan 1942;
Regional Plan 1942;



2.24b

2.24b Imatra Regional Plan
1947-53;
Schildt (1994)

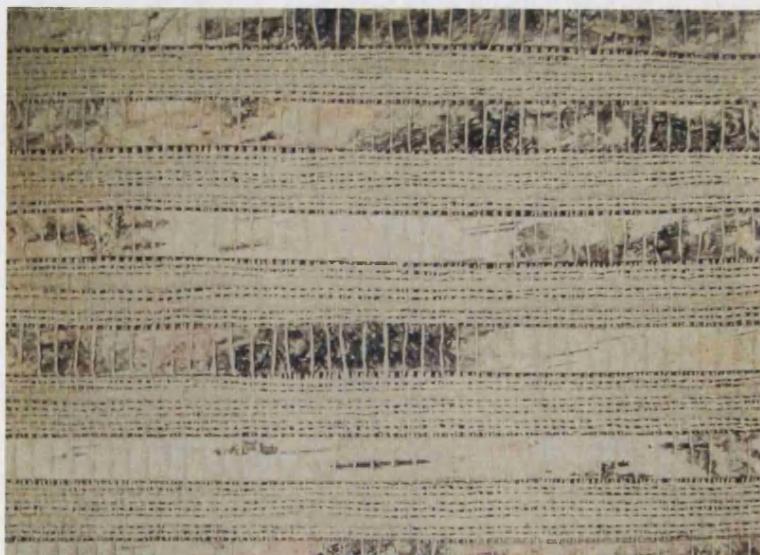


fig 2.25 Greta Skogster-Lehtinen
Birch-bark wall covering 1942;
Komonen (s.a.)



fig 2.26 Amuri, Tampere;
Anonymous postcard (1960s)



fig 2.28 Still from *Isäntä soittaa hanuria*
Matti Kassila 1954;
<http://www.sea.fi>

fig 2.29 Page from *Suomi Rakentaa 4* 1969
Maunula (1970)

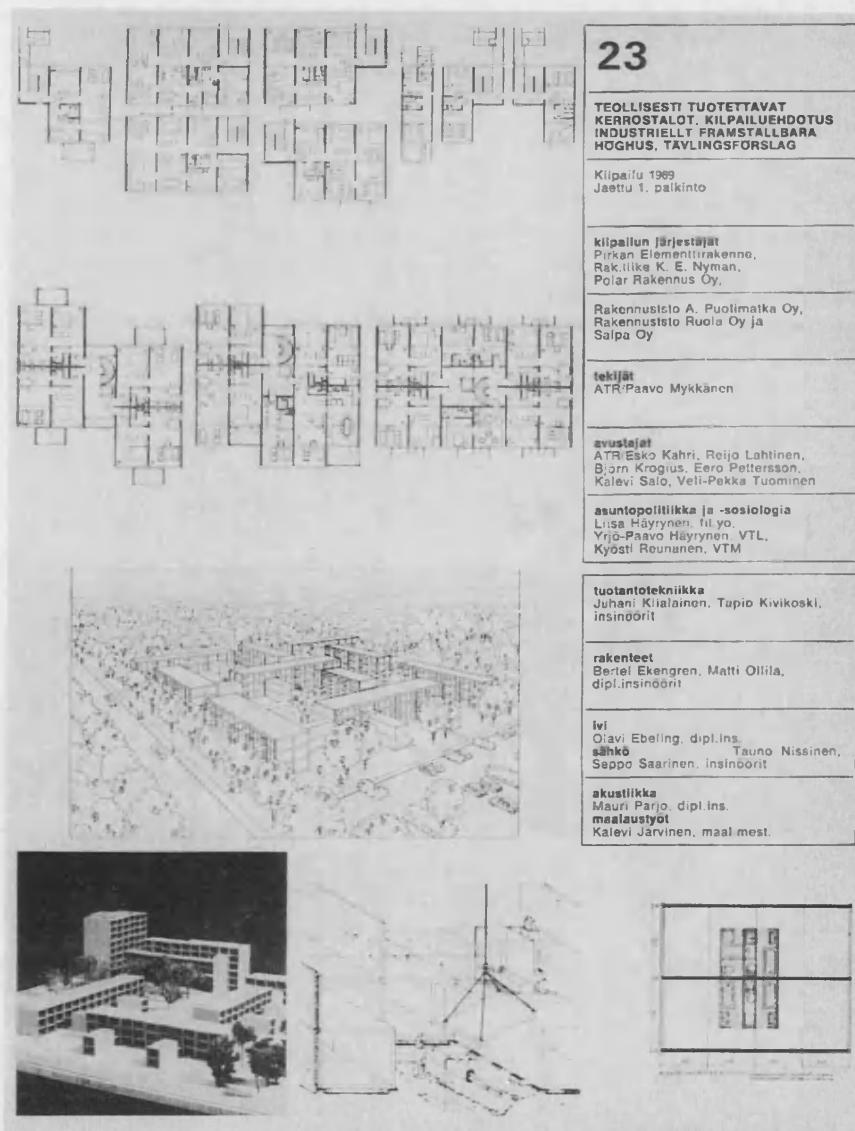




fig 3.1 Eero Järnefelt
Burn Beating 1893;
<http://www.jmrw.com>



fig 3.2 Magnus Enckell
Mrs. Emmy Frosterus 1908;
Koja (2006)



fig 3.3 Paul Cézanne
Viaduct à l'Estaque 1893;
Ateneum, Helsinki



3.4a

fig 3.4a Tyko Sallinen *The Fanatics* 1918
Koja (2006)

3.4b Marcus Collin *Factory Workers Going Home* 1917
Koja (2006)

3.4c Alvar Aalto *Winter Landscape* 1914;
Schildt (1994)

3.4d Tyko Sallinen *Paussunvuori Hill* 1910;
Koja (2006)



3.4b

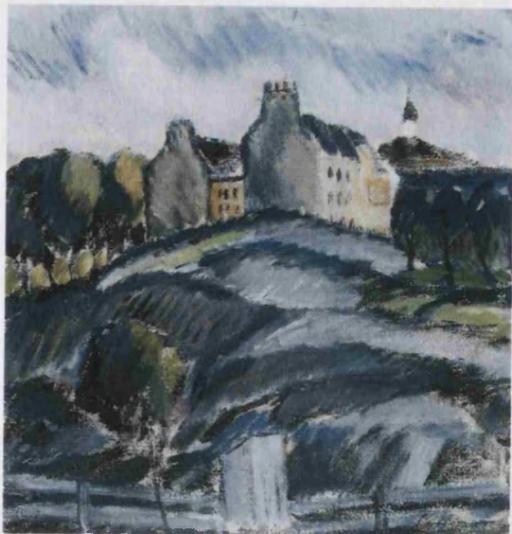


3.4d



3.4c

3



3.5a

fig 3.5a Tyko Sallinen
Site for Parliament Building 1916
Koja (2006)

fig 3.5b Ragnar Ekelund
Grey Street 1916
Koja (2006)

fig 3.5c Alvar Aalto painting of
Riga Old Town 1921;
Schildt (1984a)



3.5b



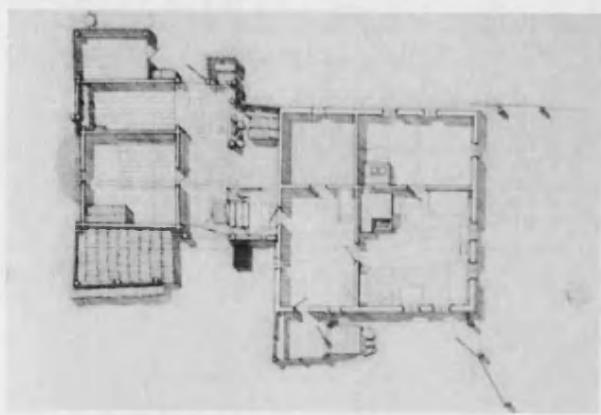
3.5c



fig 3.6 Paul Letarouilly
Edifices de Rome Moderne 1874



fig 3.7a Niemelä Farmstead;
Wickberg (1959a)



3.7b

fig 3.7b Vernacular Farmhouse Plan;
Freese (1997)

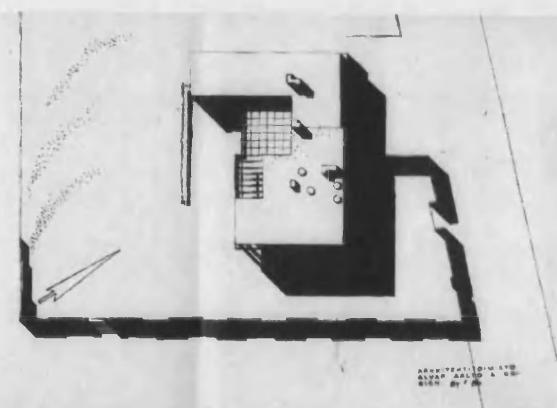
3.7c Suur-Merijoki Plan,
Gesellius, Lindgren and Saarinen 1903;
Komonen (1984)

3.7d Riihitie House 1936 Plan;
AAF

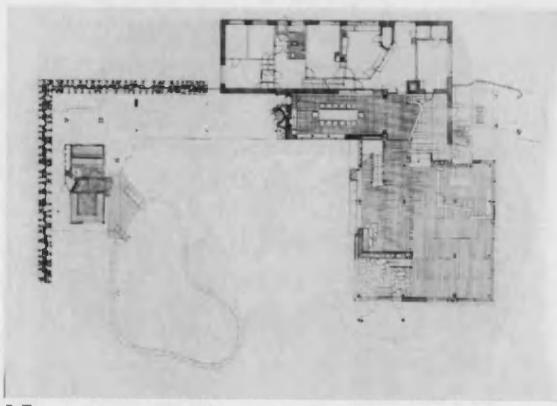
3.7e Villa Mairea Plan;
Fleig (1963)



3.7c



3.7d



3.7e

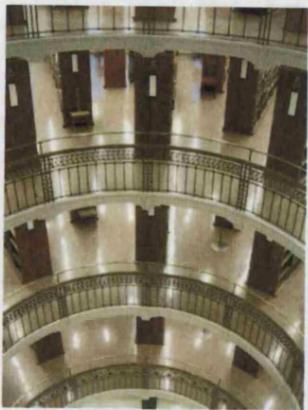
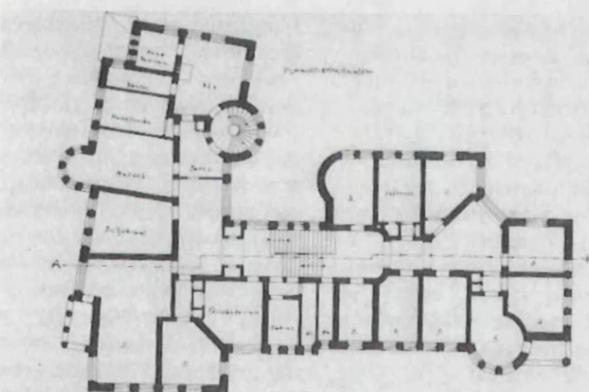


fig 3.8 Gustaf Nyström, Helsinki University Library Extension 1902-6)



fig 3.9a,b Lars Sonck, Eira Hospital in Helsinki 1904; MFA

3.9a



3.9b

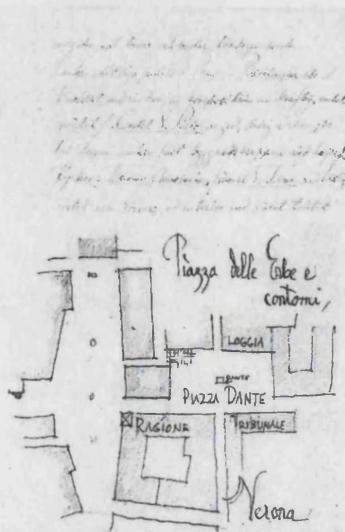


fig 3.10a Hilding Ekelund, Italian sketchbook 1921; Brörlund (2004)



3.10b

fig 3.10b Ragnar Ekelund
painting in France 1920s;
Herler (1979)

3.10c View of Cordes;
Brinckmann (1920)

3.10d Erik Bryggman Italian
sketchbook 1921;
Nikula (1991)



3.10c





3.11a

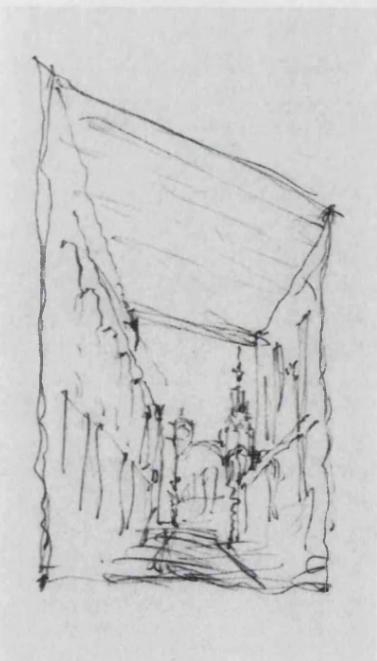
fig 3.11a Andrea Mantegna
The Calling of SS. James and John,
St. James Preaching
fresco in the Chapel of S. Eremitani,
Padua 1449-50

3.11b Andrea Mantegna
The Martyrdom of St. Christopher
fresco in the Chapel of S. Eremitani,
Padua 1454-7

3.11c Alvar Aalto
Italian sketchbook 1924;
Schildt (1973)



3.11b



3.11c

fig 3.12 Hakon Ahlberg: Pavilion for the Swedish Guild of Arts and Crafts, Gothenburg Jubilee Fair 1923; Paavilainen (1982)

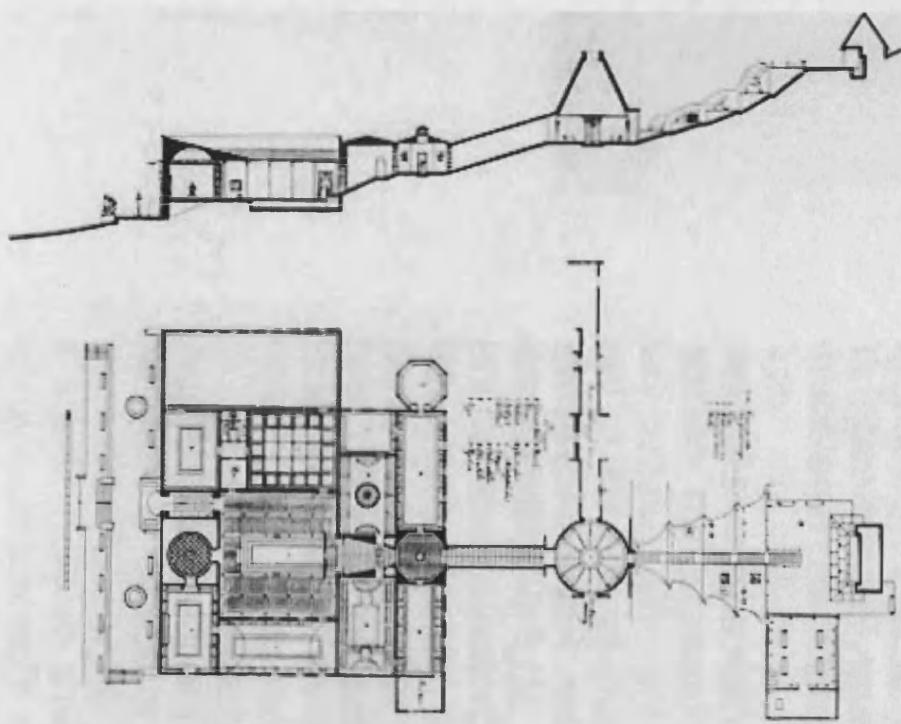
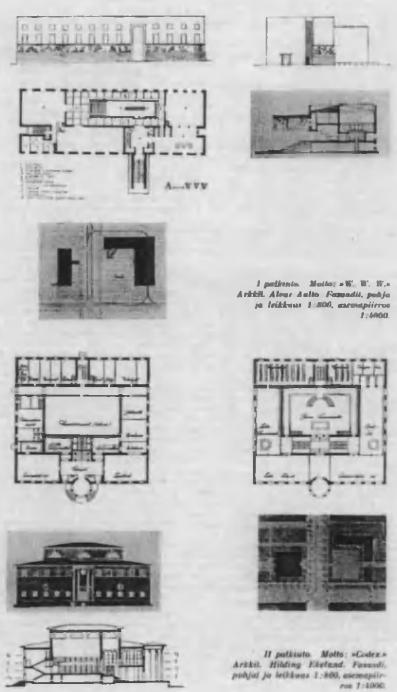


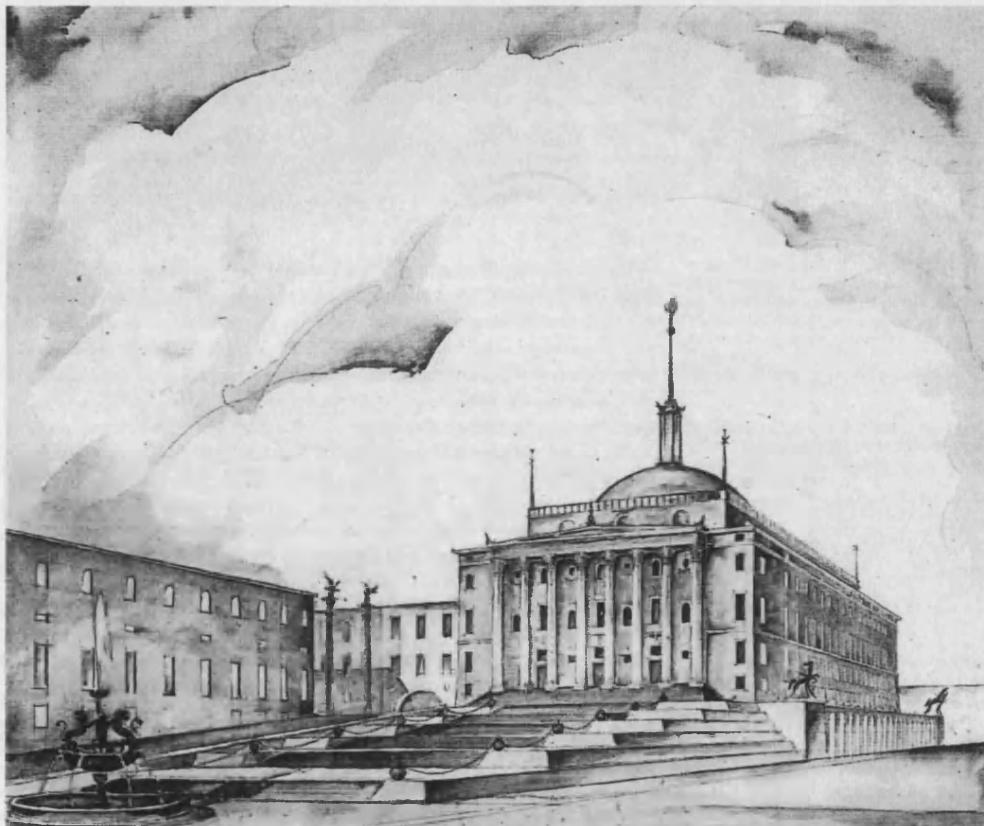
fig 3.13 Entries for the Viipuri Library Competition, 1927; Arkkitehti 3/1928



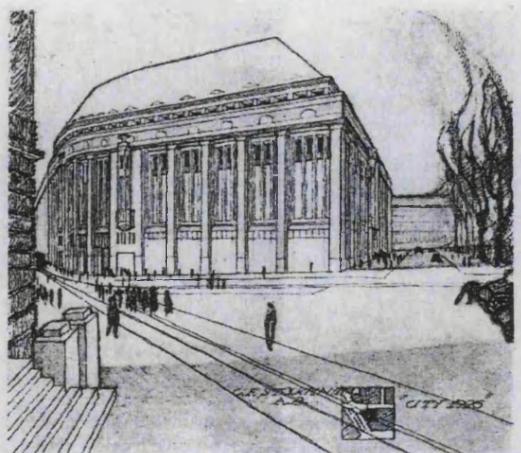
29

fig 3.14a Hilding Ekelund 2nd prize entry in
Finnish Parliament Competition 1924;
Tuomi (1997)

3.14b J. S. Sirén 1st prize entry in
Finnish Parliament Competition 1924;
Arkkitehti 7/1924



3.14a



TÄVLAN OM VARUHUS FÖR G. F. STOCKMANN A. B. (K. C.)
II PRIS
SIGURD FROSTERUS

3.15a

fig 3.15a Sigurd Frosterus: Stockmann Department Store 1916-30;
Arkkitehti 3/1916
3.15b Sigurd Frosterus:
Vanajanlinna 1919-24
3.15c Sigurd Frosterus: Isohaara
Hydro-electric Plant 1949
Estormiz (2006)



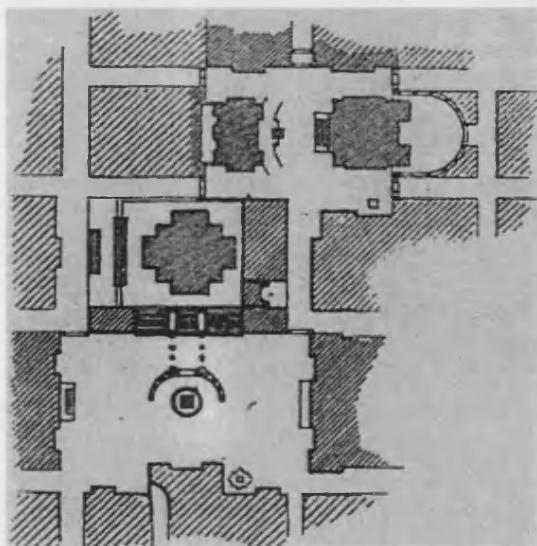


fig 3.16 Lars Sonck: proposal to reorder
Senate Square and the House of Estates,
Helsinki 1898;
Nikula (1981)

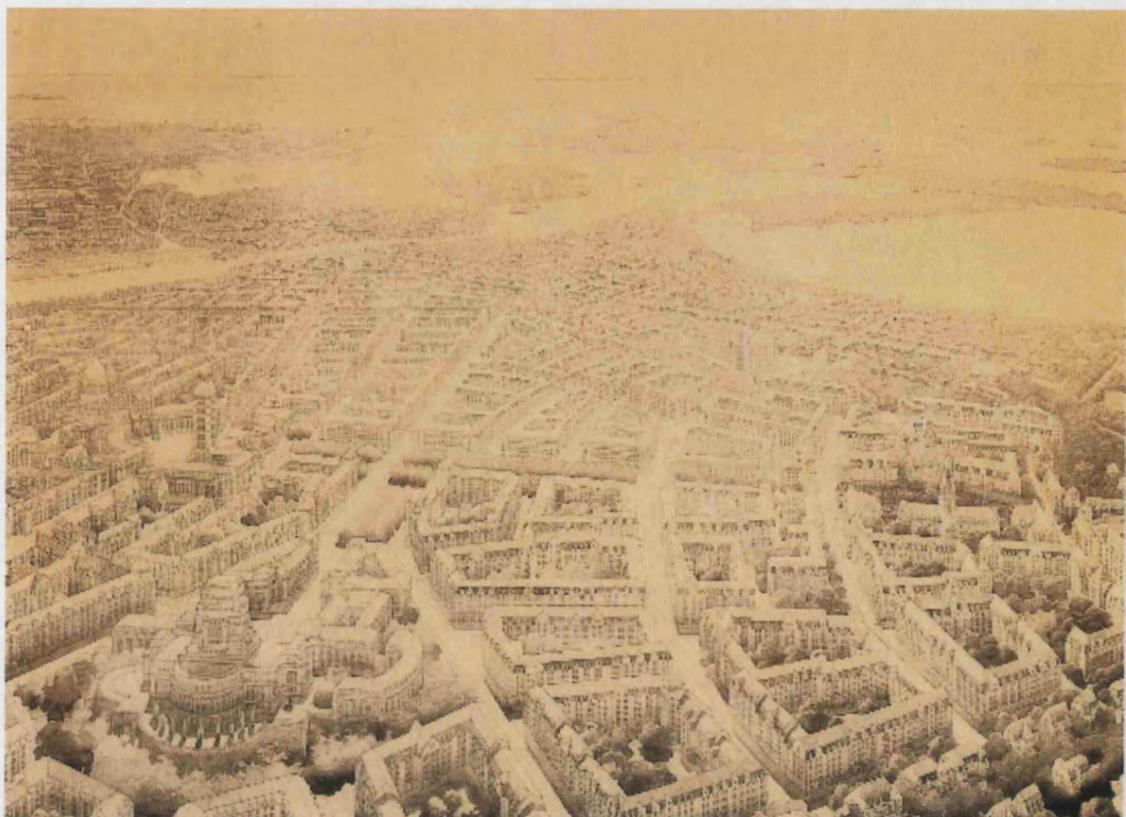


fig 3.17 Gustaf Nyström and
Lars Sonck:
Töölö masterplan 1906;
Nikula (1981)

fig 3.18a,b,c Prize-winning master-plans for Töölönlahti 1925;
Arkkitehti 2/1925



fig 3.19 Eliel Saarinen: Munkkiniemi-Haaga masterplan 1916; MFA



183. Genomgående horisontallinjer är ett ytterst värdefullt stadsbyggnadskonstnärligt bindemedel. De åstadkomma enhet och sammanhang t.o.m. i bruten terräng. Det skuggande taköverhänget jämte att antal listband sammabinda här de olika byggnaderna till en helhet, trots terrängens stora plastik. Följden är att rumkuber får, med bibehållande av sammanhanget, ökad rikedom, dels genom att rymda

fig 3.20 Gustaf Strengell: Stadens som konstwerk 1922





3.21a

fig 3.21a Erik Bryggman:
Hospits Betels sketch 1928;
Nikula (1991)
3.21b Erik Bryggman:
Hospits Betels 1928-30;
Wickberg (1959a)





fig 3.22 Hilding Ekelund:
Poster for SAFA
Conference in Turku 1928;



fig 3.23 South-Western Finland
Agricultural Cooperative
Building 1928;
<http://www.docomomo-fi.com>

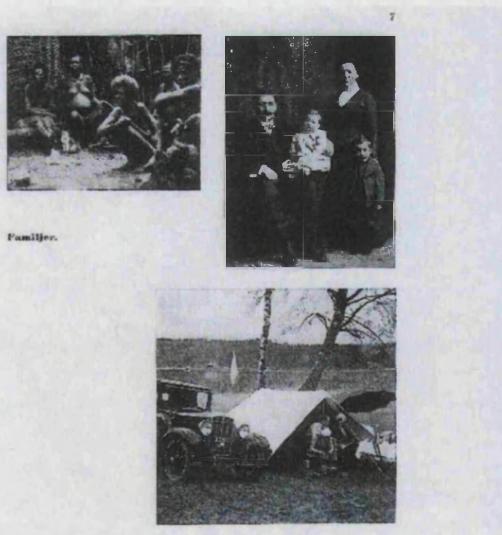
fig 3.24a,b Alvar Aalto's illustrations from:
From Doorstep to Living Room 1926;
Schildt (1998)



3.24a



140. Aalto's caption: "Fra Angelico: L'Annunziazione. The picture was chosen to illustrate this article because of the harmony between the figures and the forms of both the building and the garden."

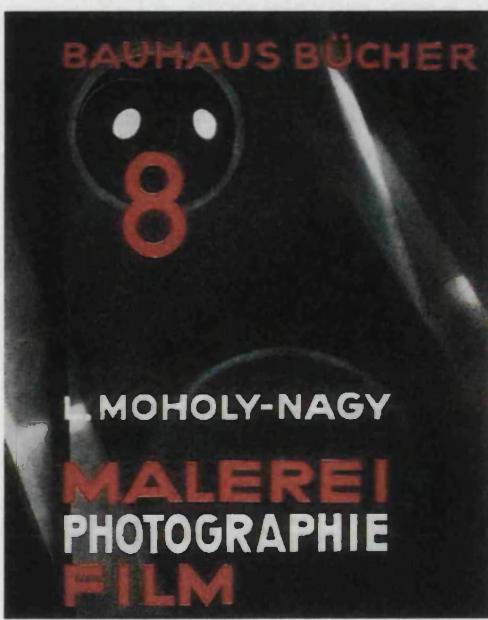


3.26a

fig 3.26a Page from *acceptera* (1931)
 3.26b Cover of *Tulenkantajat* magazine
 with Turun Sanomat courtyard 1928;
 Mäkkilä & Grägg (2004)



3.26b



3.27a

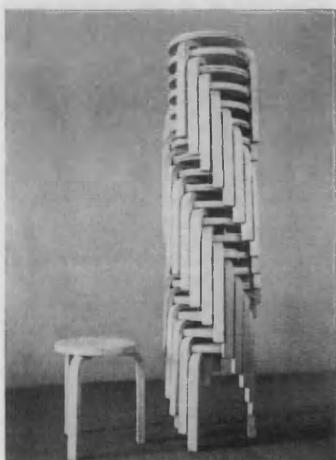


3.27b

fig 3.27a Cover of *Malerei Photographie Film* 1927
 3.27b László Moholy-Nagy
 at the Bauhaus 1926;
 anonymous photograph

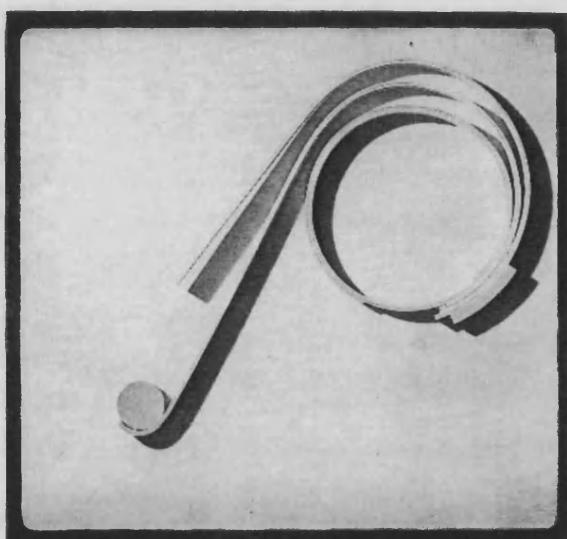


3.28a



A standardised solid wood three-legged stool with hidden Articulated joints; and on right a pile of these stools as stacked for packing. The table in the background of the top left-hand picture on this page is of similar construction but is veneered in Flame-birch.

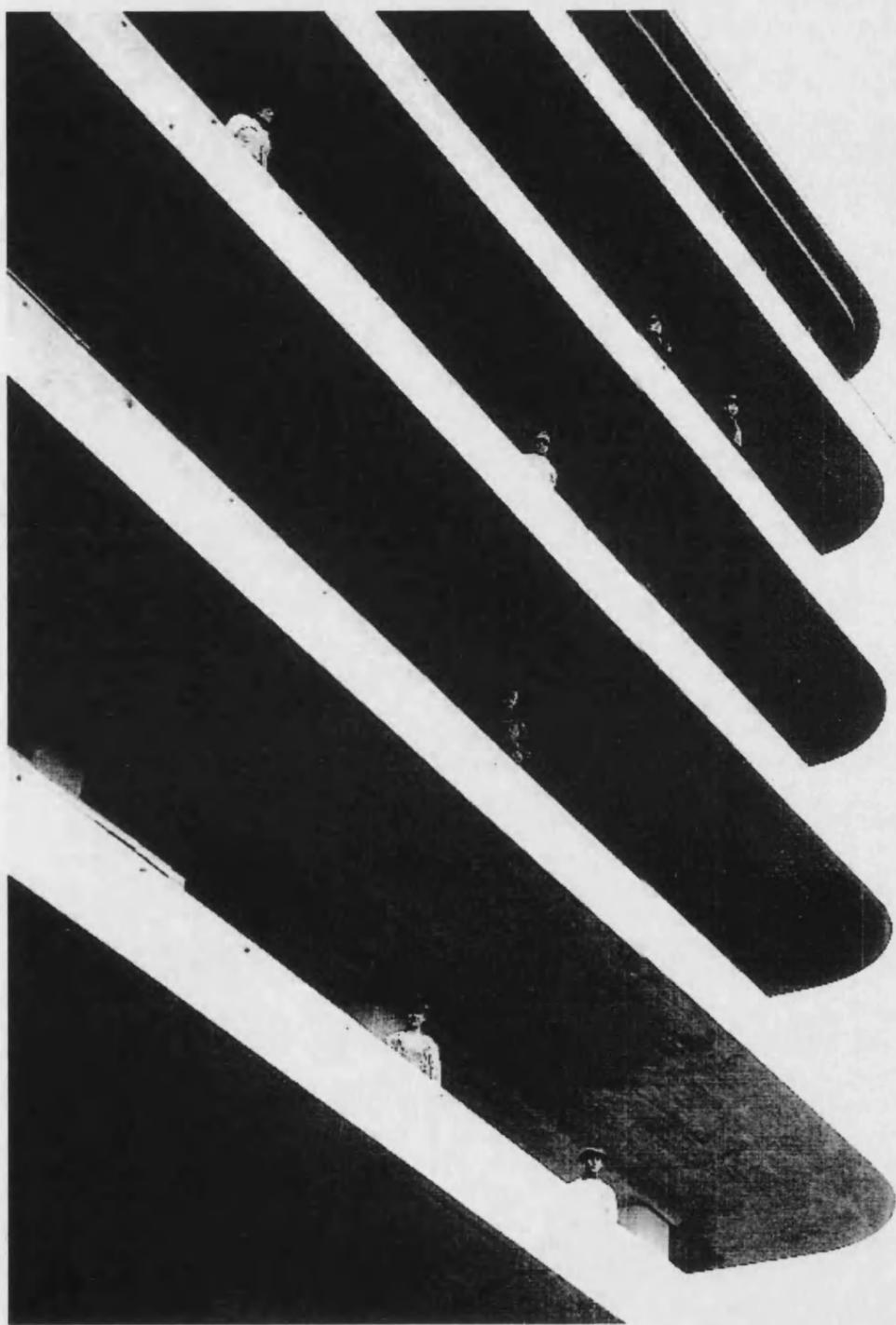
3.28b



A wood-plastic model illustrating the elastic properties of the laminated strips of timber from which a sheet of plywood is made up.

3.28c

fig 3.28a,b,c Illustrations from
The Architectural Review
December 1933



3.29a



3.29b

fig 3.29a, Aino Marsio-Aalto: photograph of Paimio Sanatorium
3.29b Aino Marsio-Aalto and László
Moholy-Nagy in London 1933;
Kinnunen (2002)

3.29c Aino Marsio-Aalto:
photograph of Toppila Mill;
Kinnunen (2004)



3.29c

fig 3.30 Aino Marsio-Aalto:
photograph of the Turun
Sanomat roof terrace
Kinnunen (2004)

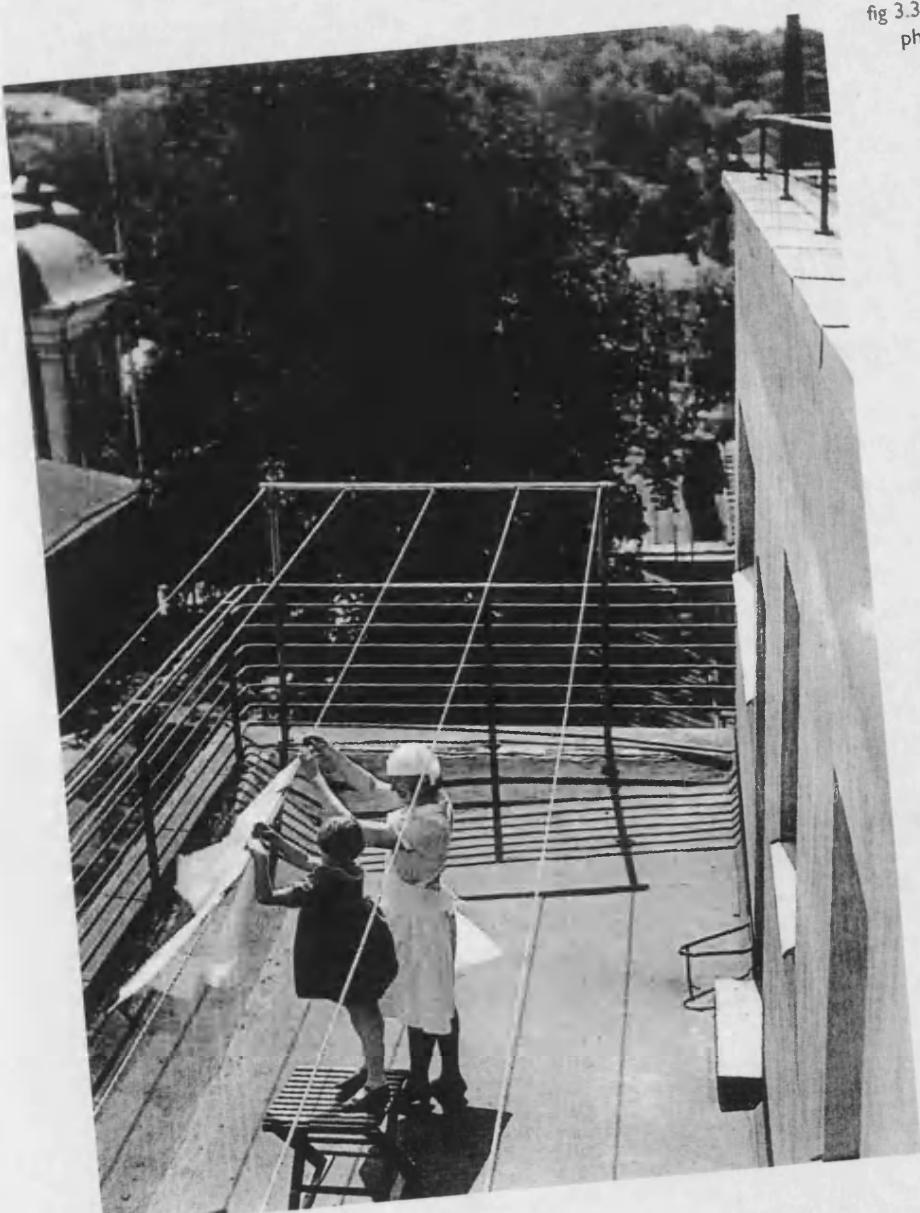




fig 3.31 Turun Sanomat
1928-30;
MFA

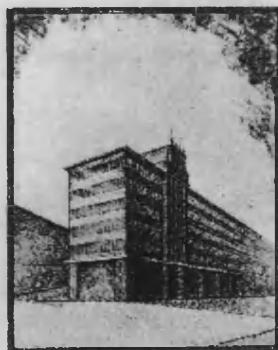
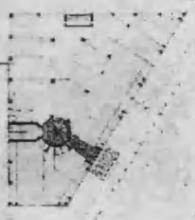
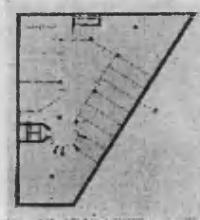
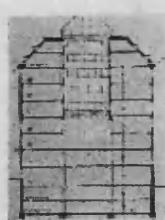


fig 3.32 Oiva Kallio: 1st prize in 'Pohja'
Insurance competition;
Arkkitehti 8/1928

SPHILJANs KH.PAELG. 1 peksiula.
Nimme: «Pohja» pihustus.
Arkk. Oiva Kallio.
Maaala 1: 500.



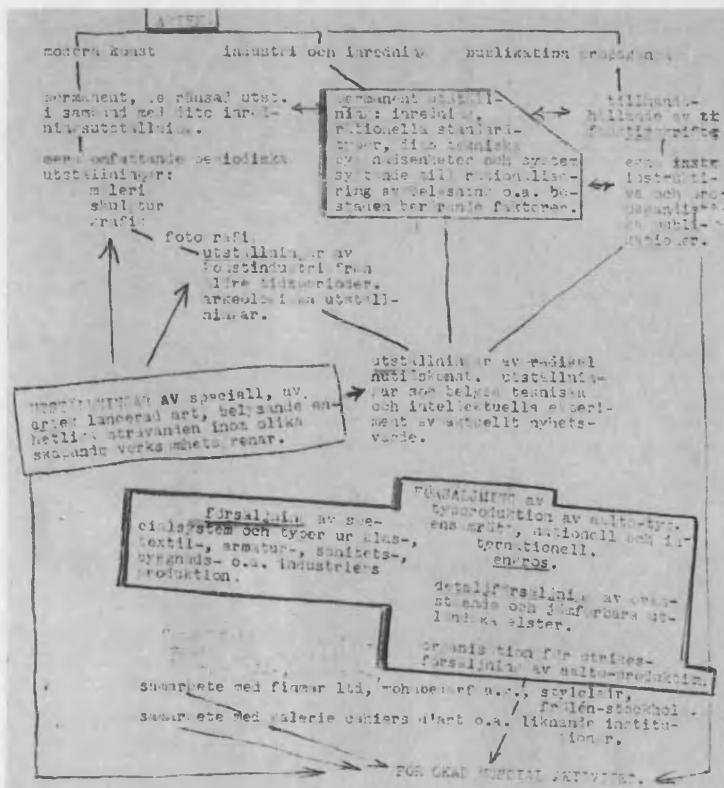


fig 3.33a Artek Manifesto 1935;
Schildt (1984b)

3.33b Artek Manifesto translation; AAF

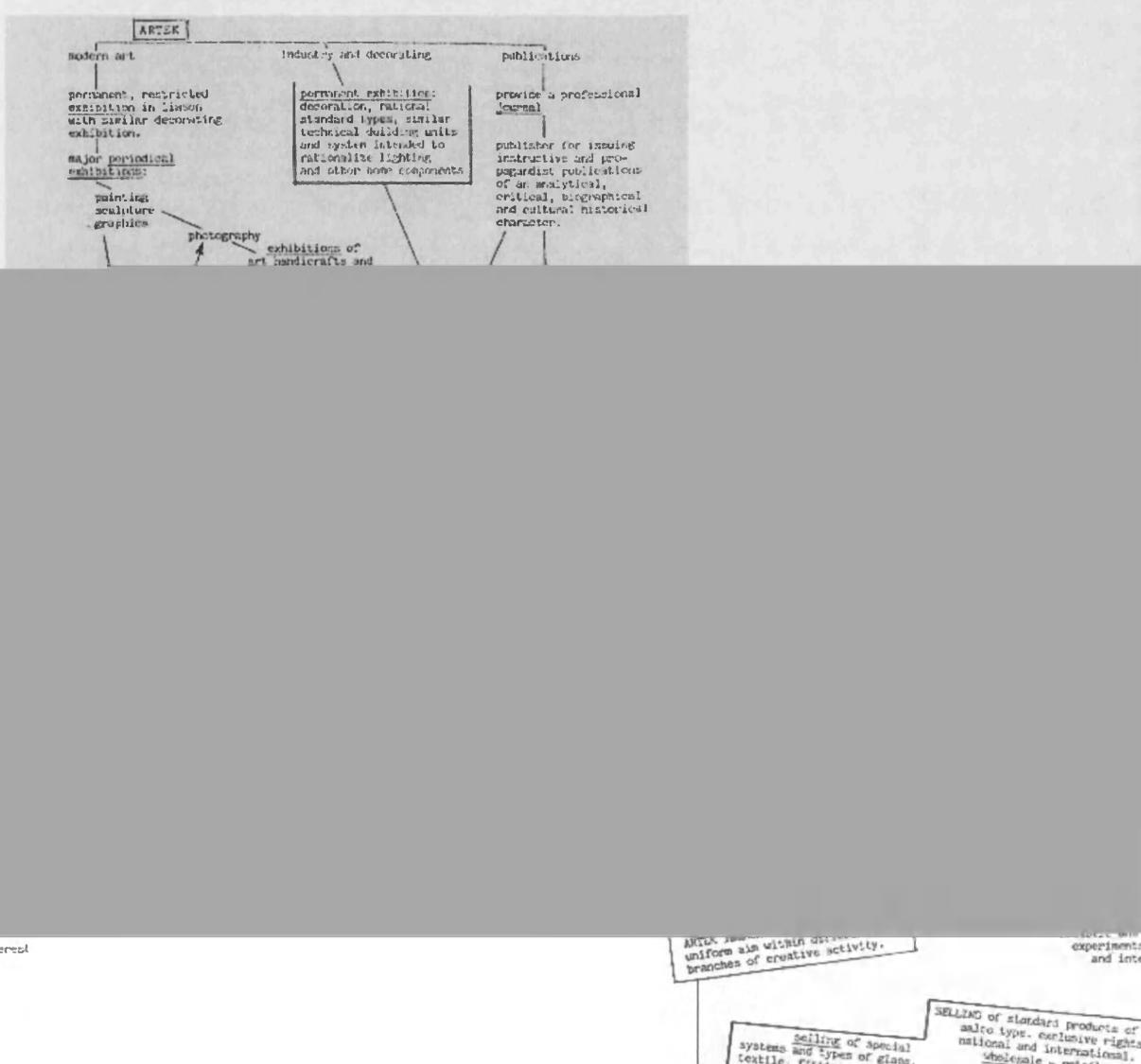
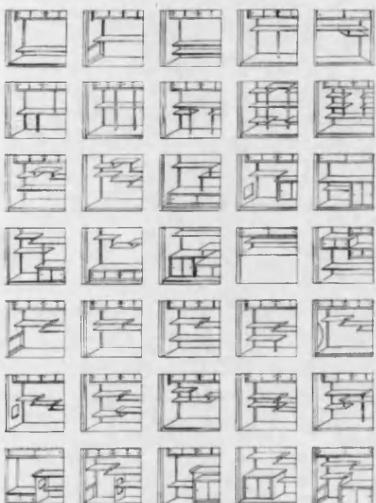




fig 3.34a,b,c Illustrations from Tetsuro Yoshida: *Das Japanische Wohnhaus* 1935

3.34a



3.34b

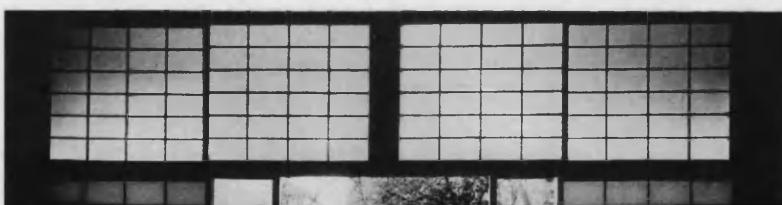
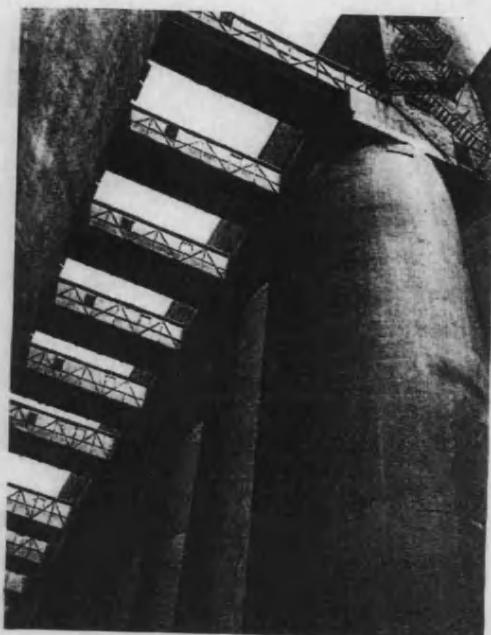


fig 3.35a Page from Erich Mendelsohn
Amerika: Bilderbuch eines Architekten (1926).

3.35b Page from Richard Neutra
Wie baut Amerika? (1927)



3.35a



Abb. 6. Der berühmte Stahlkran von Neu-Mexiko, U.S.A., ist von einem gewölbten Bunker auf der unteren Hälfte des 18. Achthunderts durch stählerisch eingerichtete Ebenenstufen nur wenig verändert worden. Kirche in Trampas, Neu-Mexiko, U.S.A. (Foto W. D. Morgan.)



Abb. 7. Milder als den über Jahren zägernde Bedeutung Los Angeles gewöhnlich aus Gebäuden wie die hier abgebildeten bestimmt. Gekrönt am Marktstand: Minervae. Um 1880.

Abb. 8. Klassische Hingebungsfähigkeit und schlichte Durchsichtung kennzeichnen manche Kolonial-Häuser im Süden und Westen, gleichzeitig der Ausstattung der Ober-Kalifornien-Bauten eine schmeichelnde, überbewußte, zarter Klassizismus. In einem klassizistisch und vom post-romantischen Gesinnung aufnehmbar. Haus an Polkstreet, Monterey, Calif. Um 1880.

Abb. 9. Gebäude des amerikanischen Konsuls in der moskauischen Puschkin. Ober-Kalifornien. Etwa 1825.

3.35b

fig 3.36 Page from Frederick Kiesler:
Architecture as Biotechnology (1939)

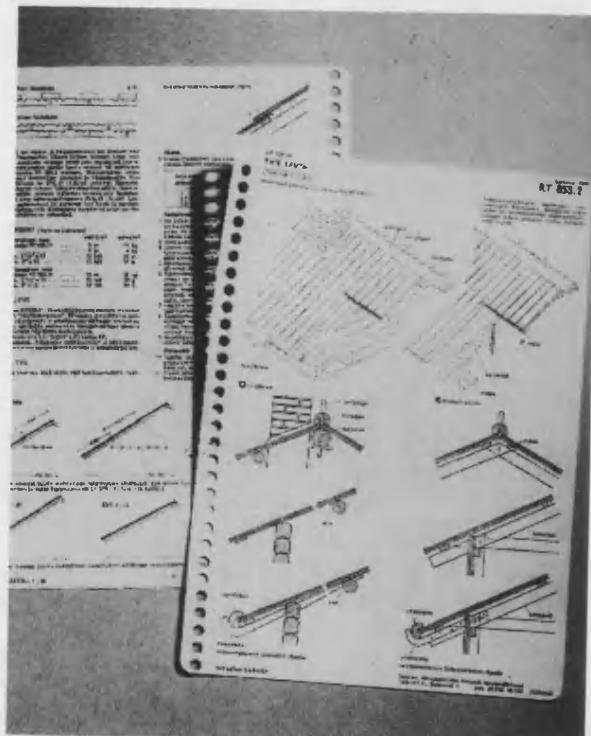
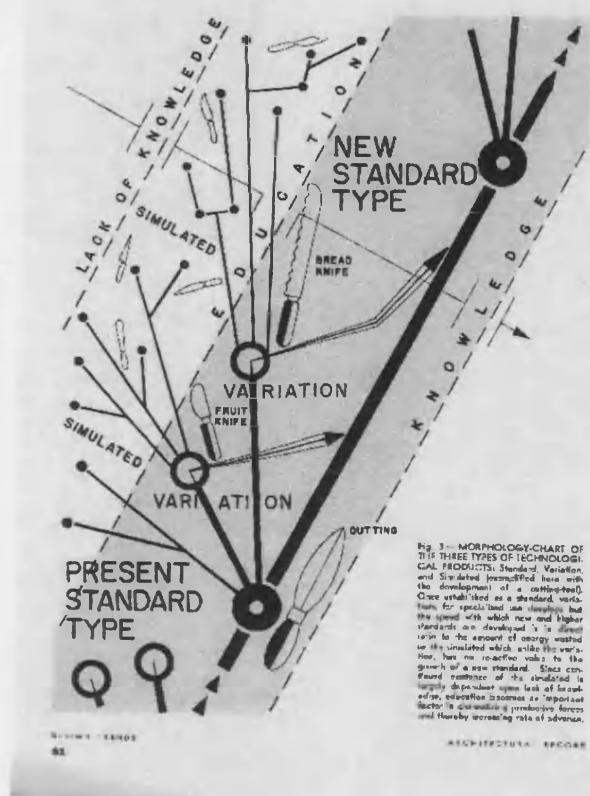


fig 3.37 Samples of the rt-kortisto;
Korvenmaa (1992a)

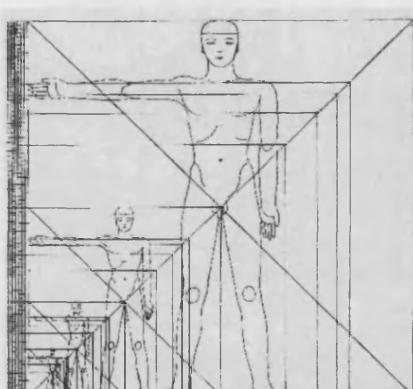


3.38a

fig 3.38a Erik Bryggman: Atrium Apartments, Turku 1926-8;
Piironen (1967)
3.38b Erik Bryggman: Läntinen Rantakatu 21 Apartments, Turku 1951;
Nikula (1991)



3.38b



3.39a

fig 3.39a Aulis Blomstedt anatomical study 1952;
Salokorpi & Kärkkäinen (1983)
3.39b Aulis Blomstedt: Veteran's Housing, Turku 1951-2;
Arkkitehti 5/1952



3.40a

fig 3.40a Bengt Lundsten:
Kortepohja Housing,
Jyväskylä 1968-72;
Maunula (1970)

fig 3.40b Juutilainen,
Kairamo, Mikkola, Pallasmaa:
Tapiola masterplan 1969;
Maunula (1970)





fig 4.1a

fig 4.1a Aerial view of the Seinäjoki Centre, looking south mid-1960s

4.1b Aerial view of the Seinäjoki Centre, looking north mid-1960s;

anonymous postcards

4.1c Aerial view 2005;
<http://netti.nic.fi/>



fig 4.2a View towards the railway station from the Church tower, 2005
4.2b Town Square, 2005



fig 4.2a



fig 4.2b



fig 4.3a

fig 4.3a Aerial view of Kauhava plain;
Putkonen (1993)
fig 4.3b Still from Ilmari Unho:
Härmästä poikia kymmenen 1950



fig 4.3b

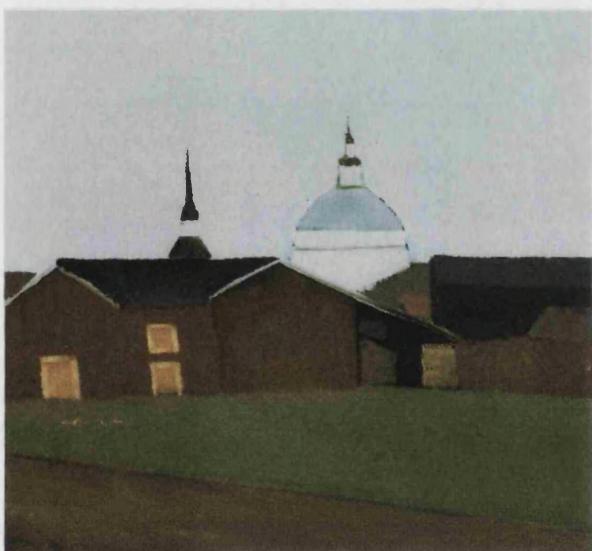


fig 4.4 Eero Nelimarkka
Lapua Church 1916;
Koja (2004)



fig 4.5a



Ilmakuva rakennusalueesta ympäristöineen mittakaavassa n. 1:4000

fig 4.5b

fig 4.5a Site plan, Seinäjoki Church competition programme 1951

- darkened patch indicates site

4.5b Aerial photograph, Seinäjoki Church competition programme 1951

- coloured patch indicates site;

MFA

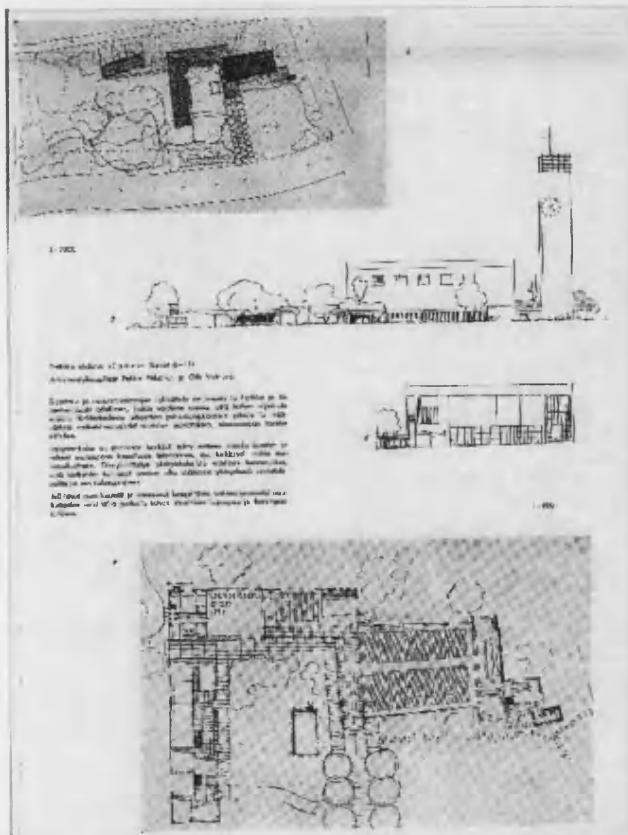


fig 4.6a Pitkänen & Vahtera Codex
Prize-winner
Arkkitehti 11-12/1951

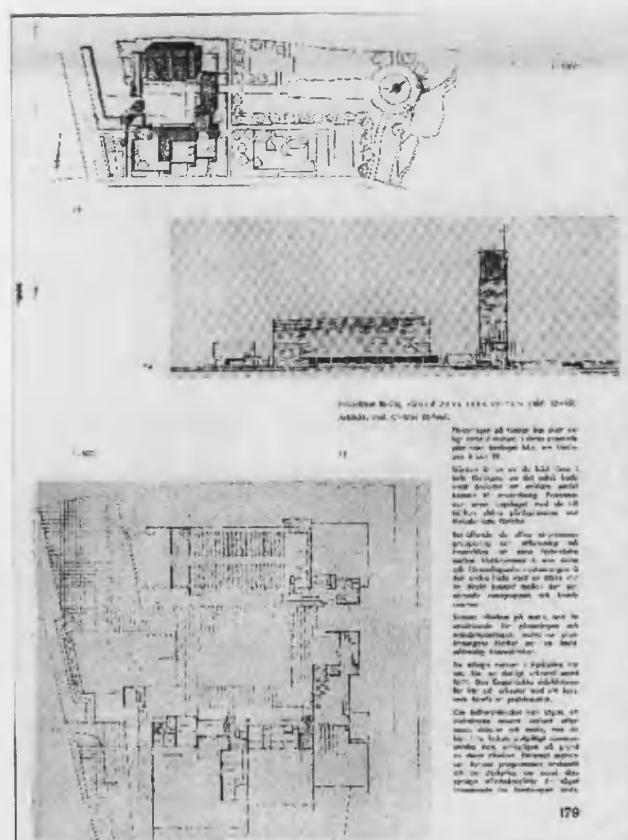


fig 4.6b Christer Bärlund
Quod deus bene vertat
Prize-winner
Arkkitehti 11-12/1951

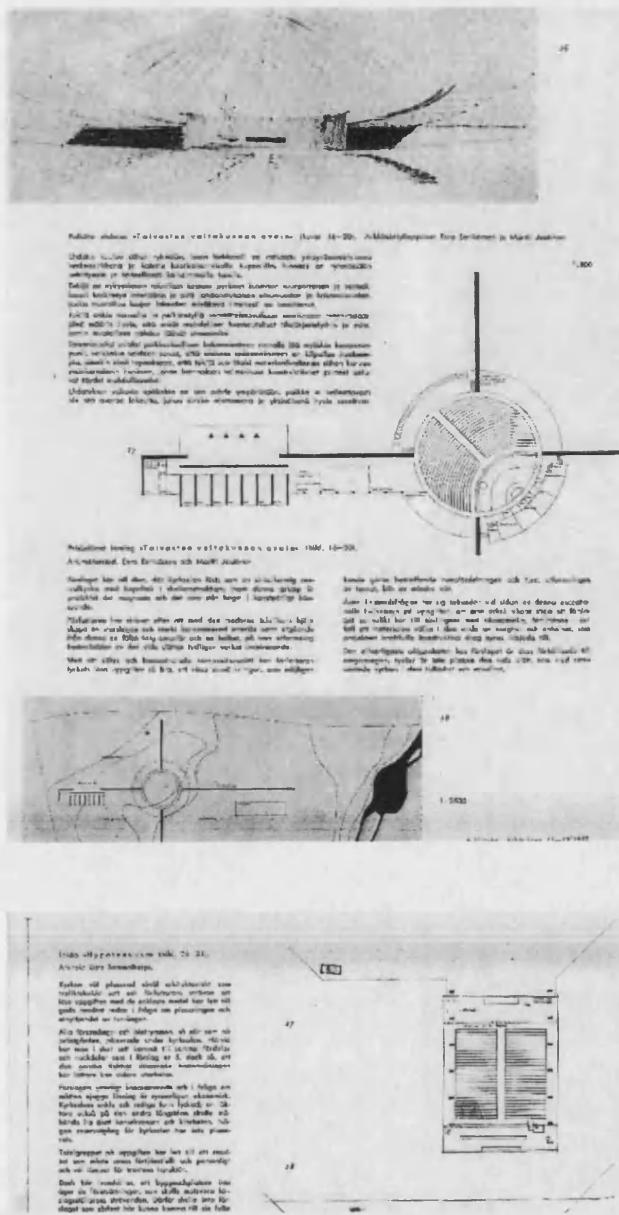


fig 4.6c Eerikäinen and Jaatinen
Taivasten valtakunnan avain
 Prize-winner
 Arkkitehti 11-12/1951

fig 4.6d Risto Sammelkorpi Hypotenuusa
Purchase
Arkkitehti 11-12/1951

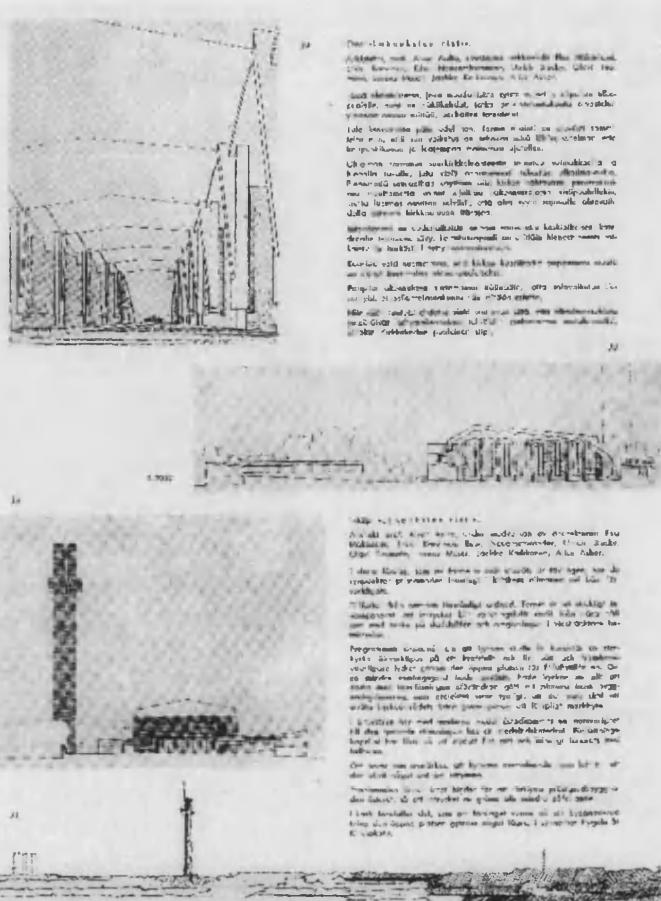


fig 4.6e Aalto Laskeuden Risti
Purchase
Arkkitehti 11-12/1951

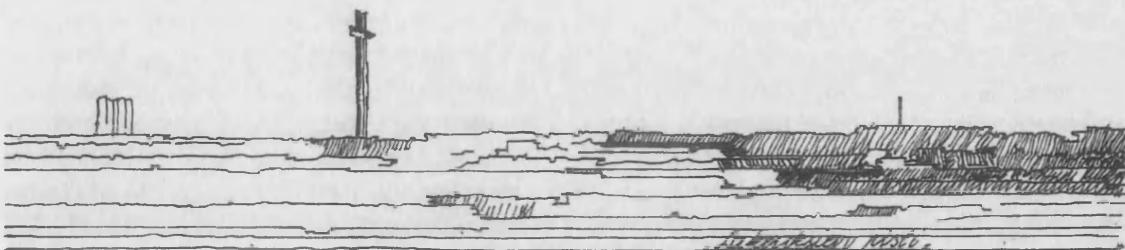
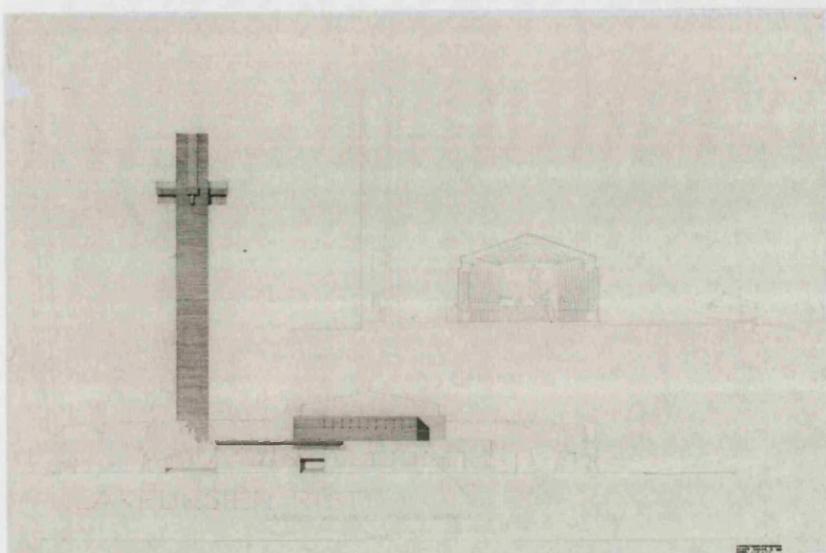
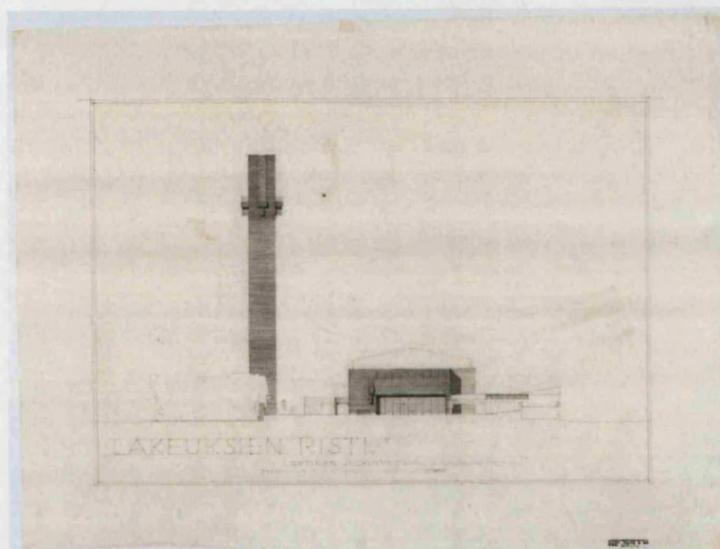


fig 4.6f Aalto Laskeuden Risti
Competition perspective;
Aaltonen (2004)

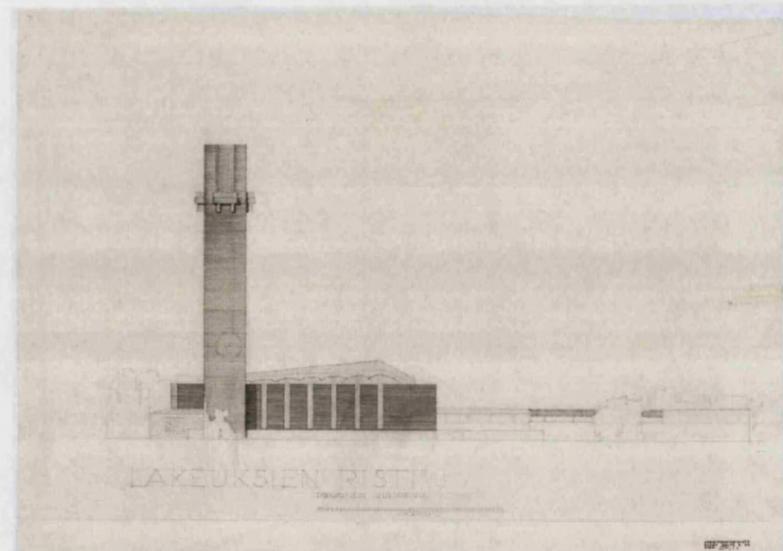
fig 4.7a,b,c Competition drawings for the Seinäjoki Church 1951; AAF



4.7a

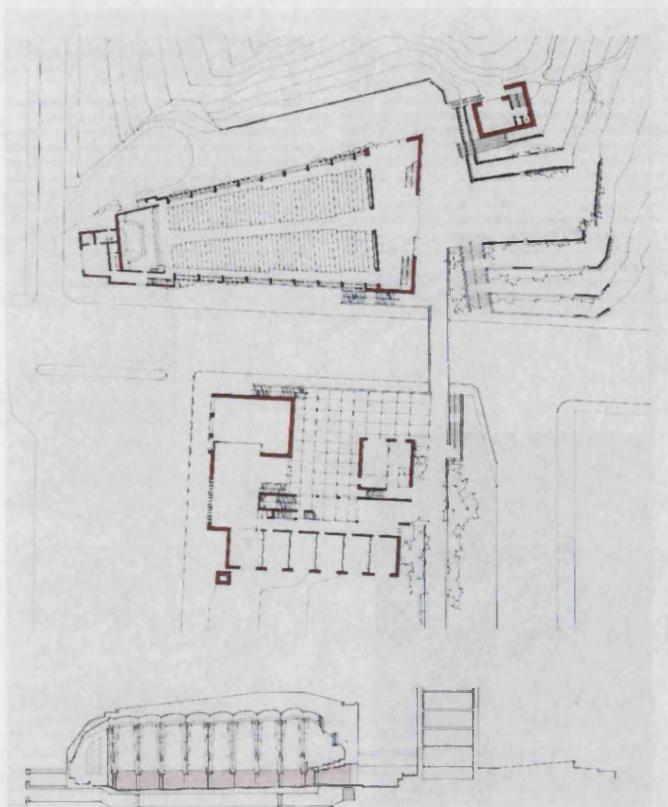


4.7b

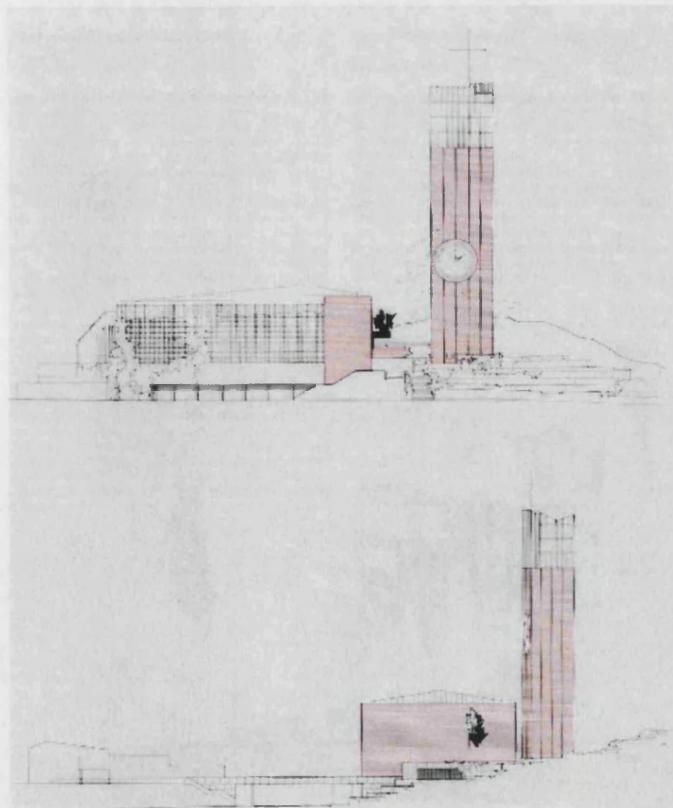


4.7c

fig 4.8a,b Aalto Sinus 1st prize Lahti
Church competition 1950;
Fleig (1963)



4.8a



134
4.8b

fig 4.9a Surveyors on the Lavala Farm site for the Seinäjoki Church, Aaltonen (2004)

4.9b Site Model late 1950s

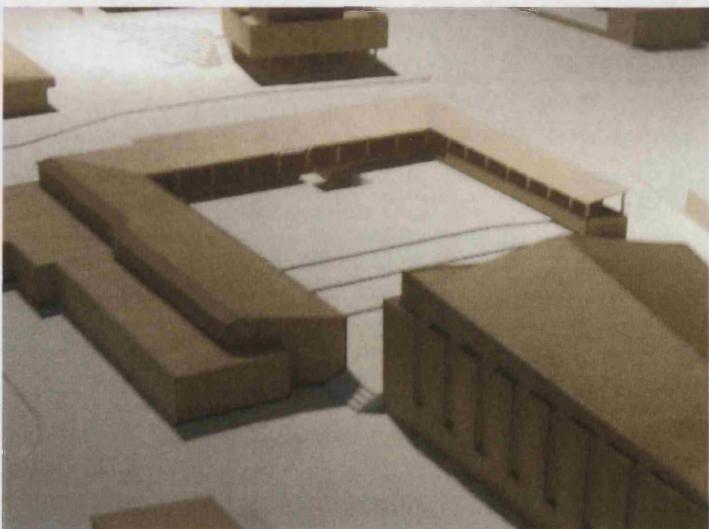
4.9c Site Plan

18.12.56;

AAS



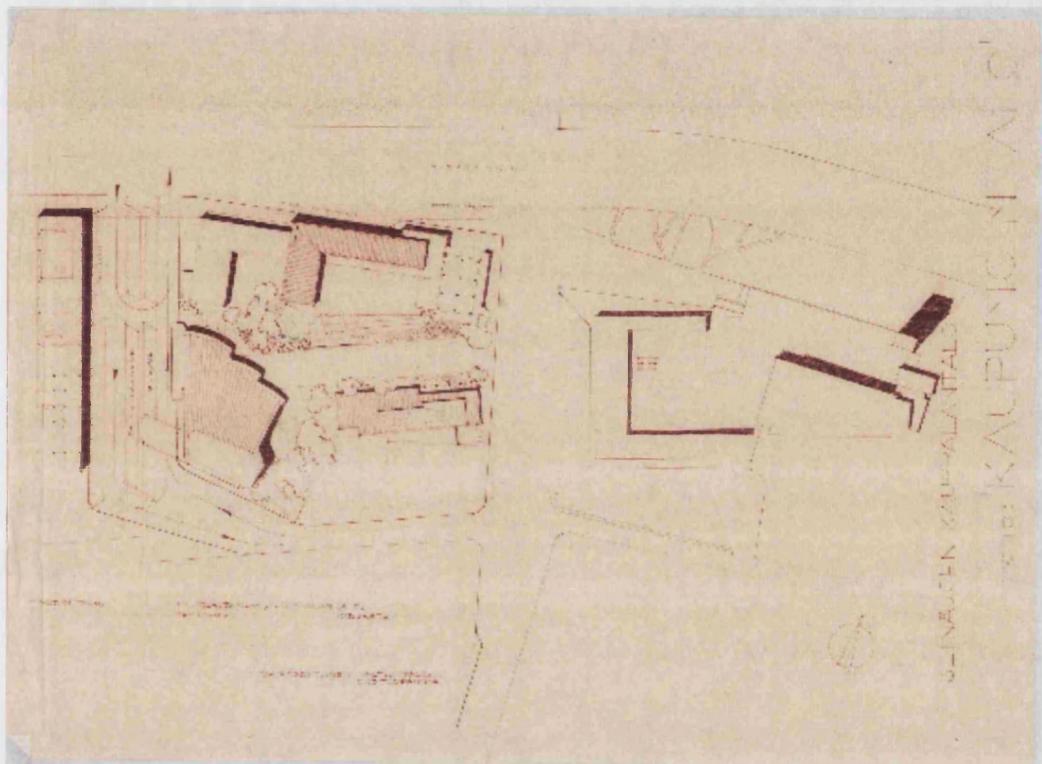
4.9a



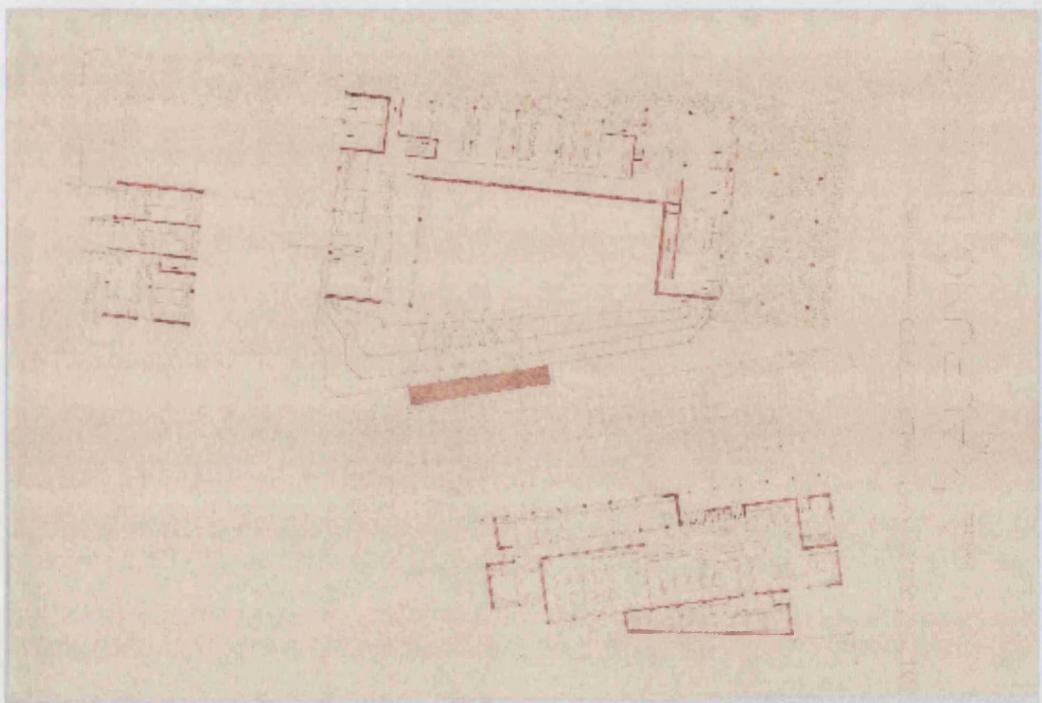
4.9b



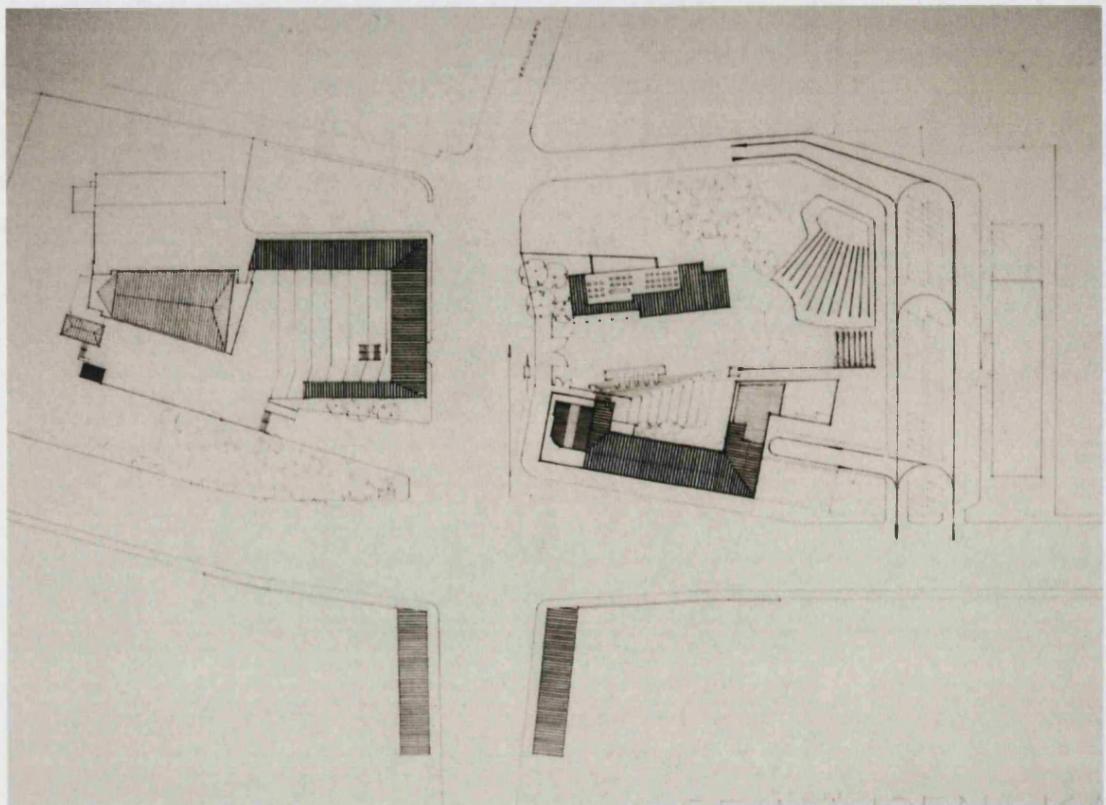
fig 4.10a,b Site plan and ground floor plan
1st Town Hall competition
October 1958;
AAF



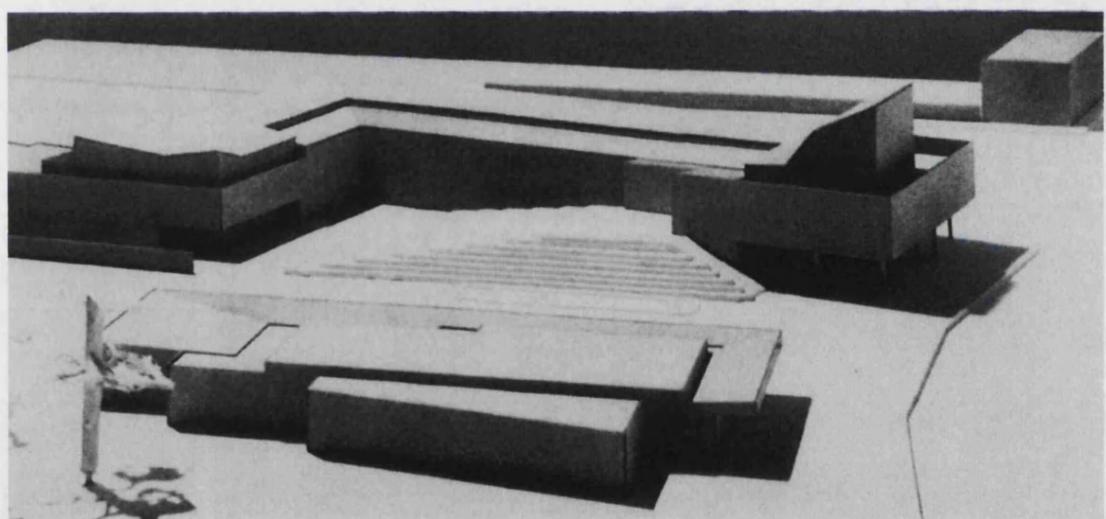
4.10a



4.10b



4.11a



4.11b



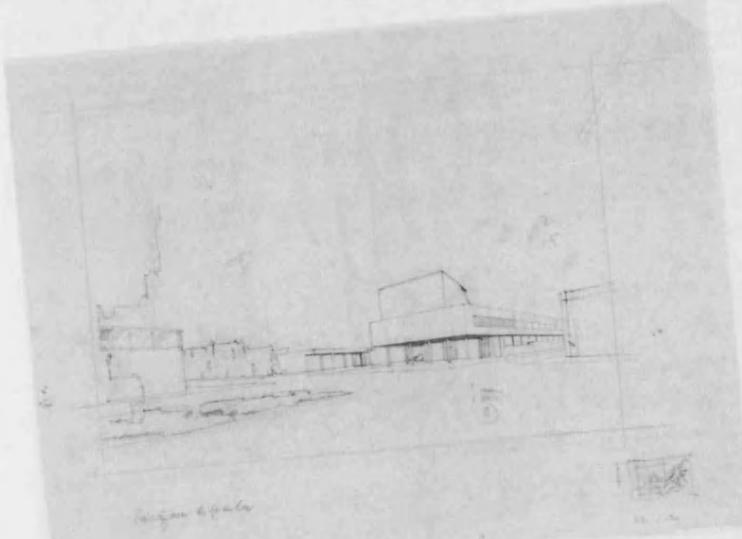
4.11c

fig 4.11a Site plan 2nd Town Hall competition December 1958; AAF

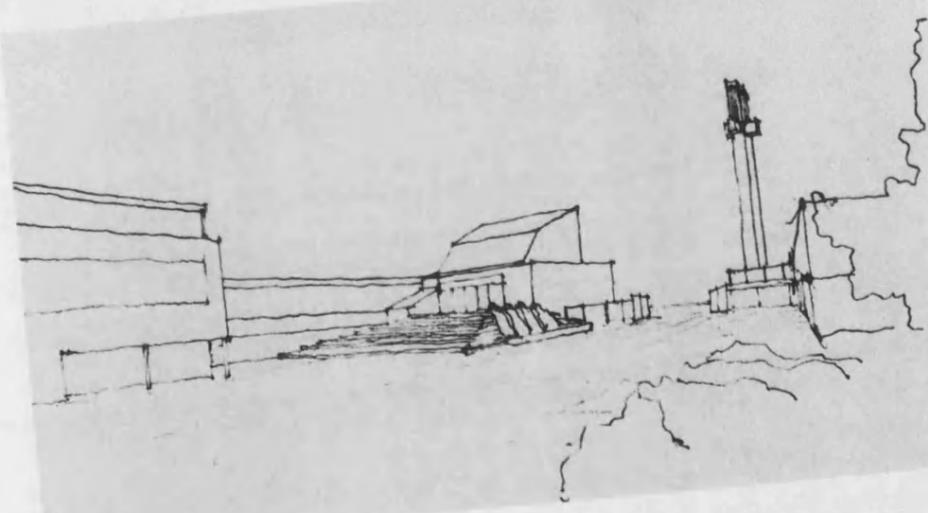
4.11b Site Model 2nd Town Hall competition; Fleig (1963)

4.11c Aino Marsio-Aalto; Pazzi Chapel, Florence 1947; Kinnunen (2004)

fig 4.11d,e Sketch perspectives
AAF



4.11d



4.11e

fig 4.12 Town Hall perspective
17.06.59;
AAF

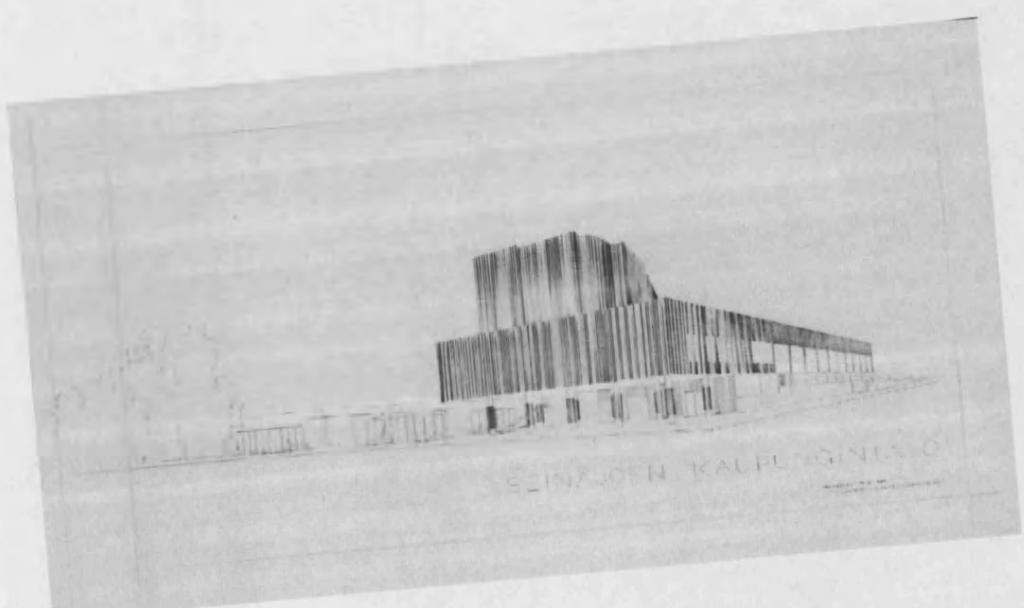
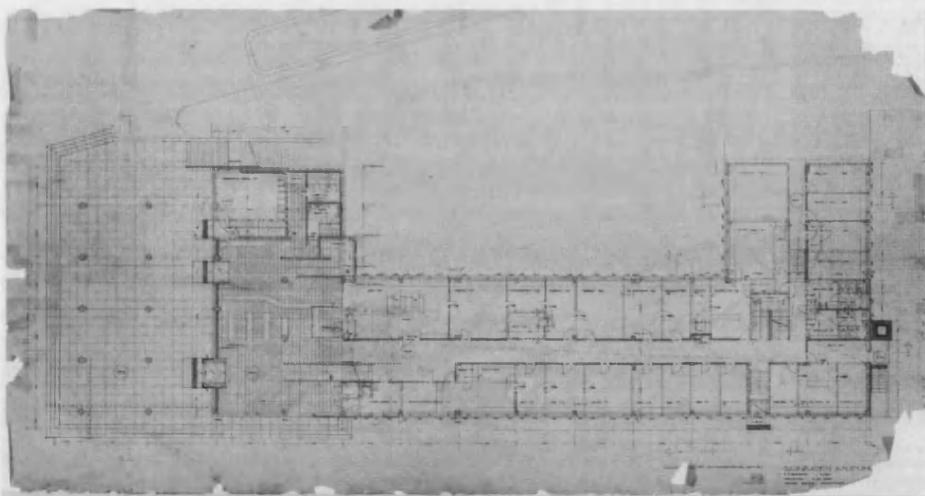
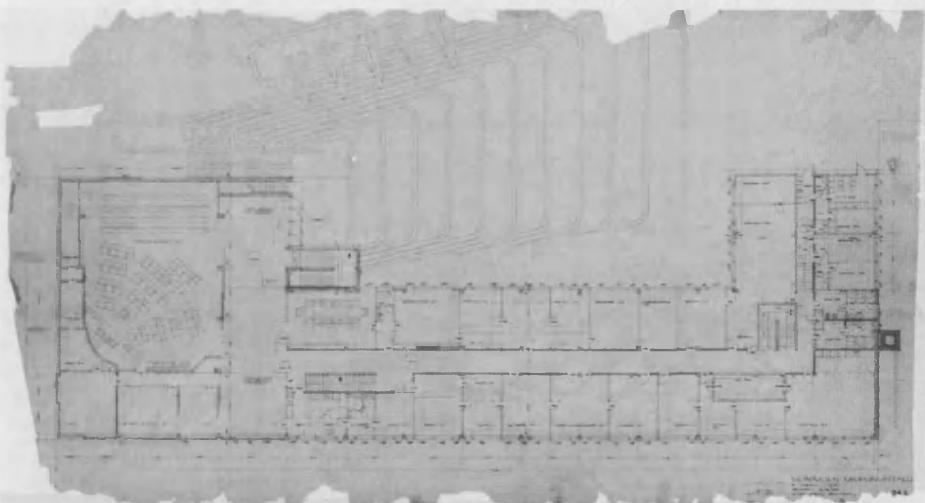


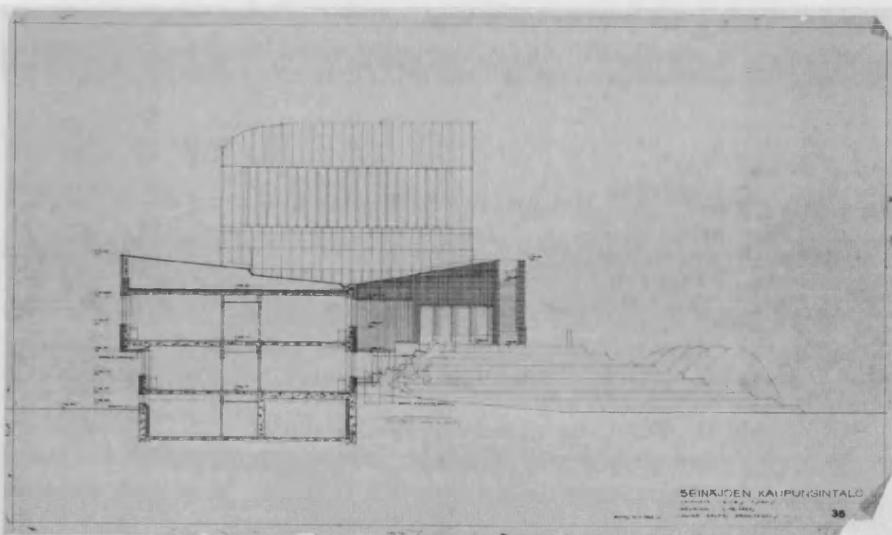
fig 4.13a,b,c Town Hall
Production drawings
01.12.59;
AAF



4.13a

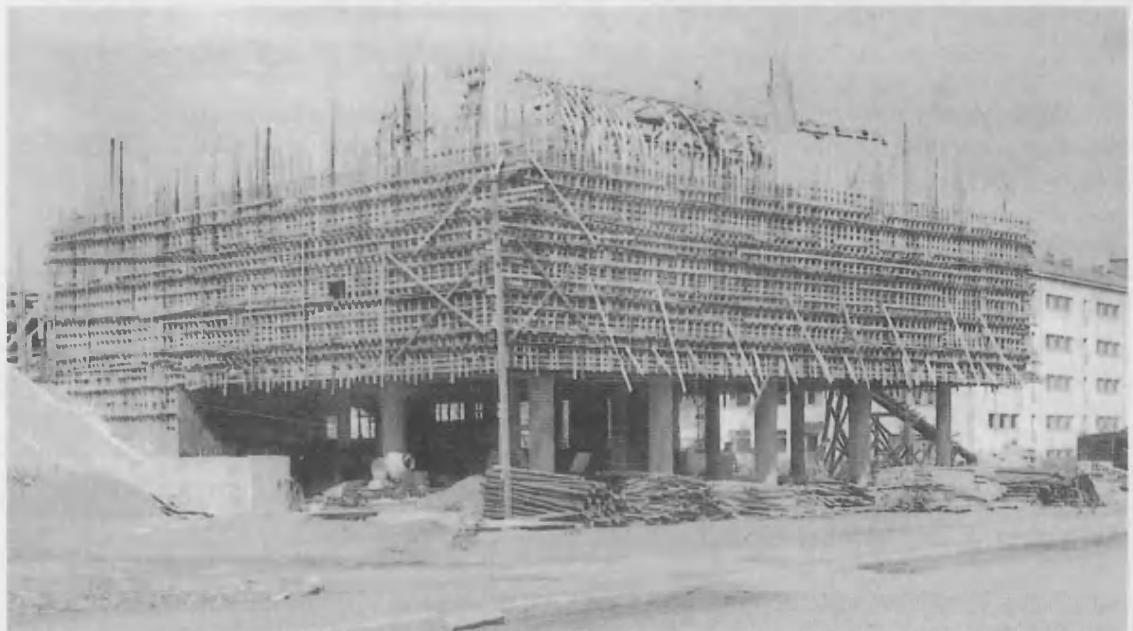


4.13b

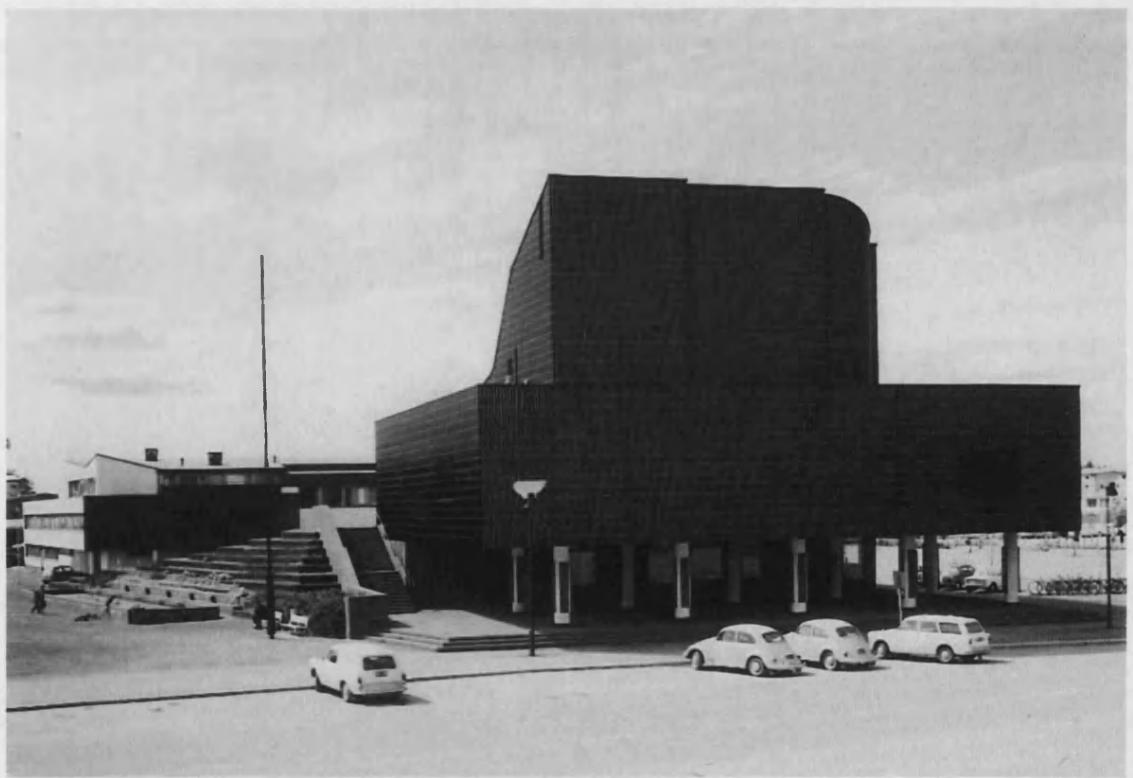


4.13c

fig 4.13d Town Hall under construction;
Aaltonen (2004)
4.13e Town Hall early 1960s;
anonymous postcard

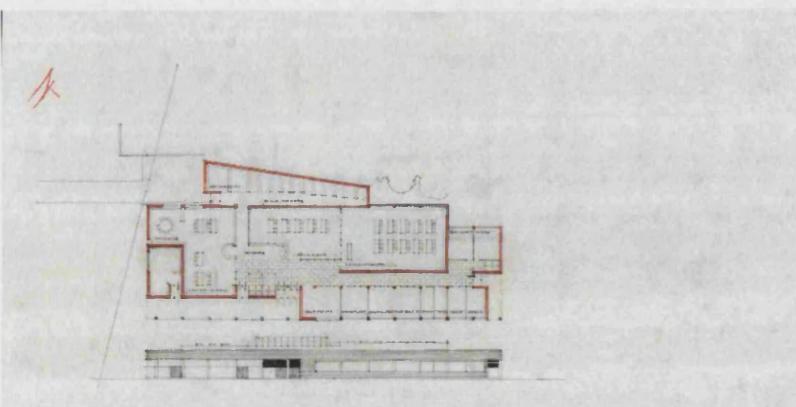


4.13d



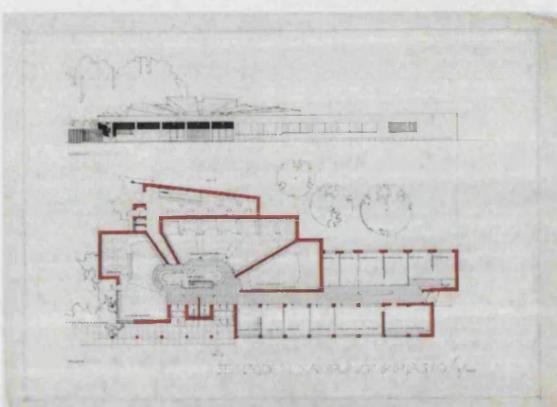
4.13e

fig 4.14a Library plan
1959;
AAF



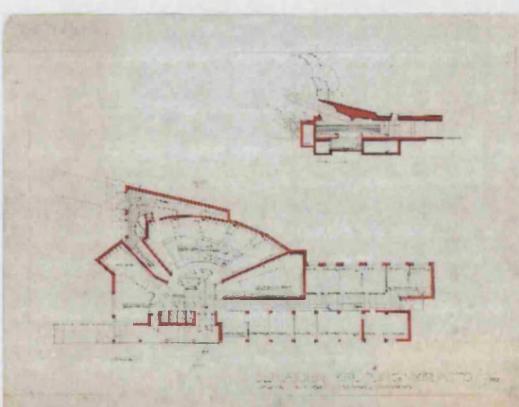
4.14a

fig 4.14b Library plan
1960;
AAF

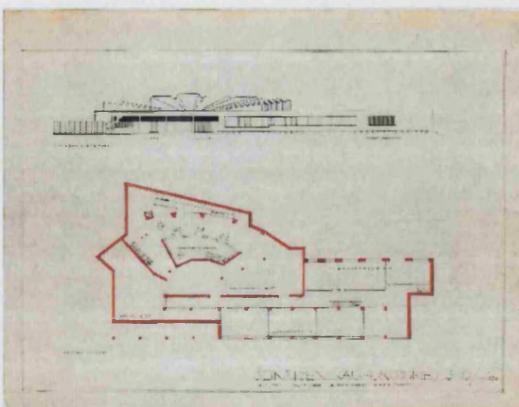


4.14b

fig 4.14c,d Library plans,
sections and elevation
17.11.60;
AAF

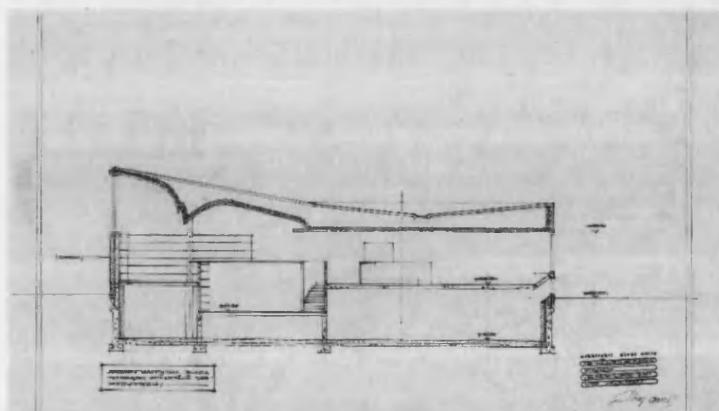


4.14c

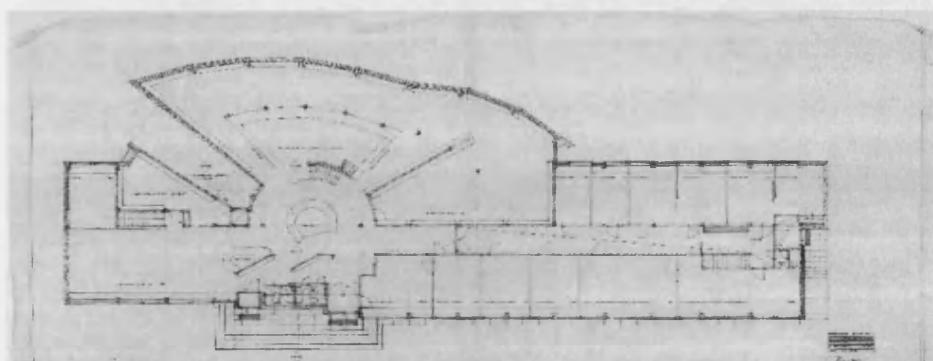


4.14d

fig 4.14e,f Library section
and plan
31.03.62;
AAF

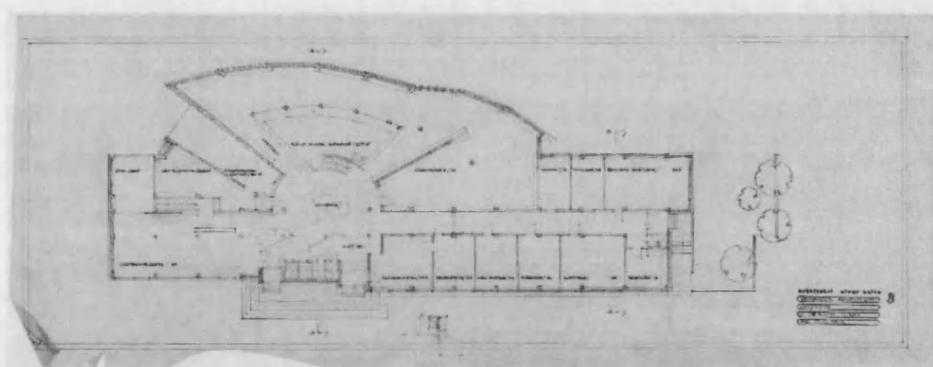


4.14e

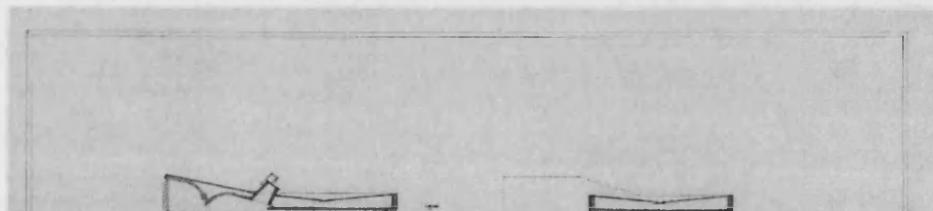


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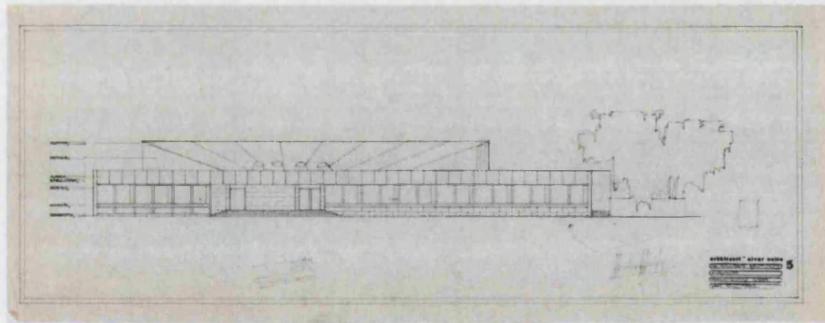
fig 4.14g,h Library plan
and section
10.12.62;
AAF



4.14g

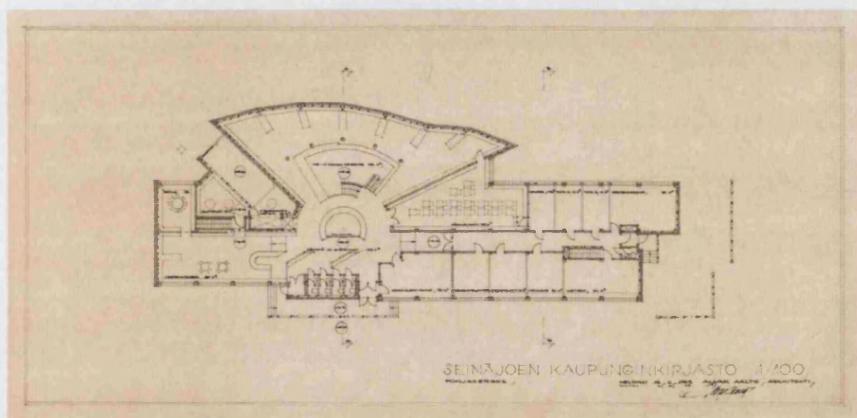


4.14h



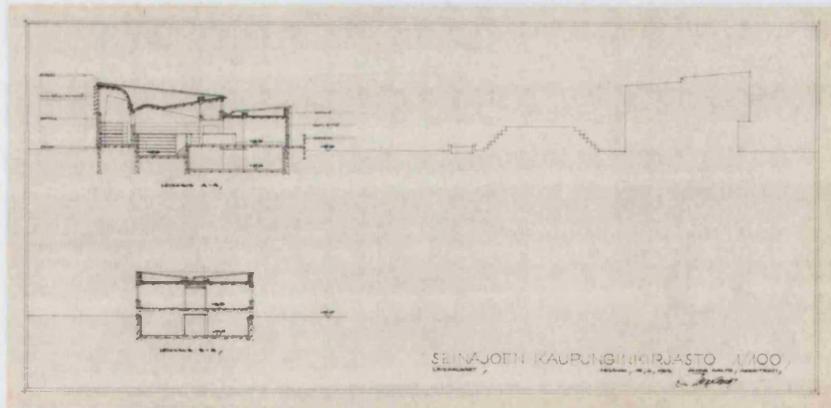
4.14i

fig 4.14i Library elevation to
Inner Square
10.12.62;
AAF

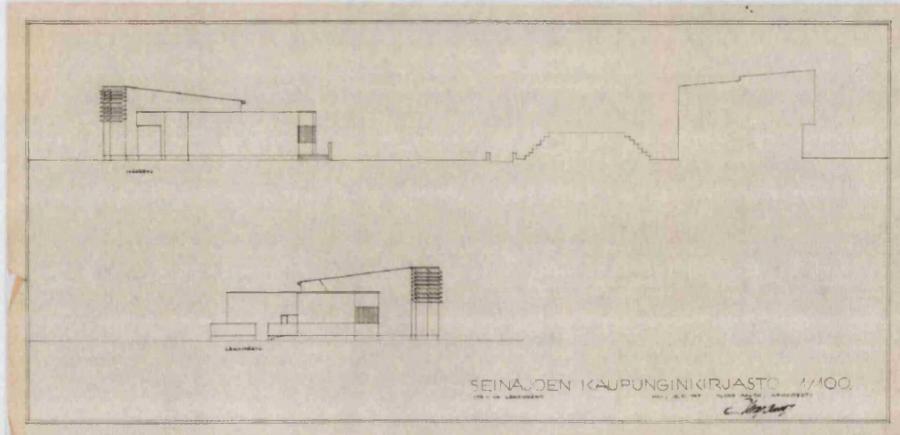


4.14j

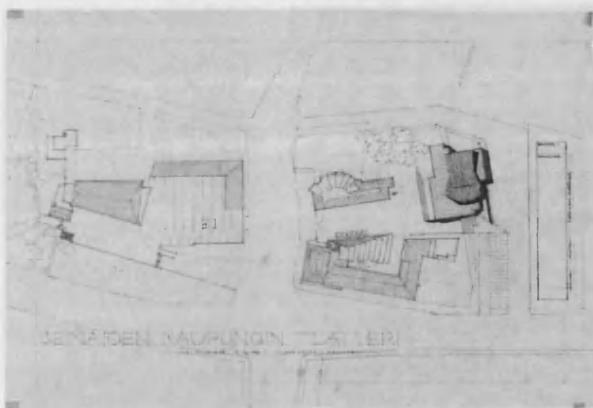
fig 4.14j,k,l Library plan,
sections and elevations
12.06.03;
AAF



4.14k

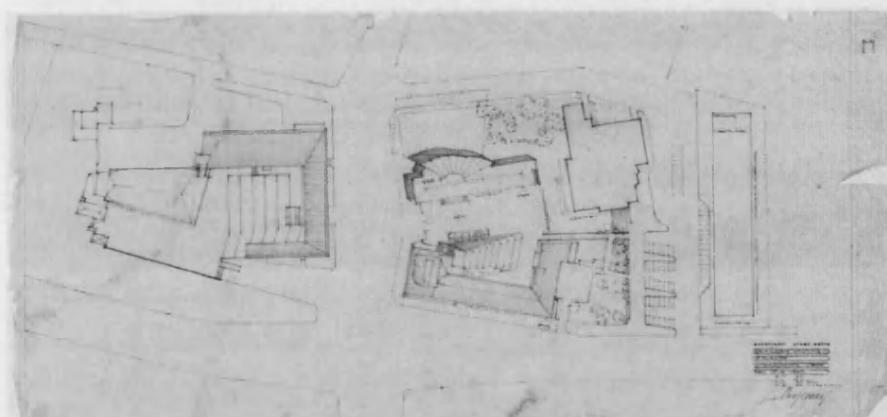


4.14l

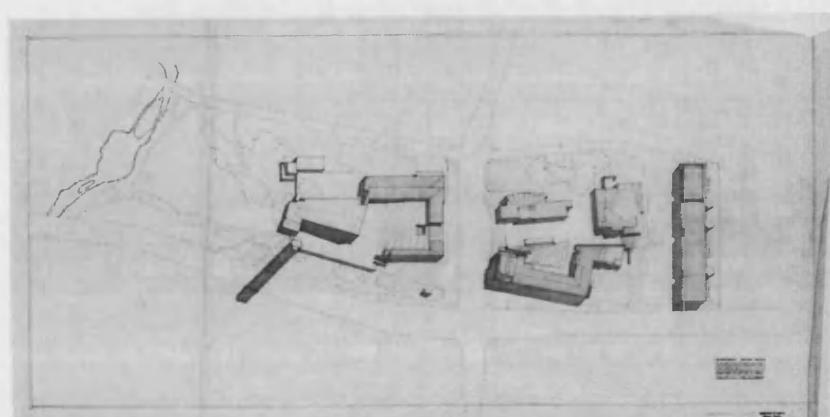


4.15a

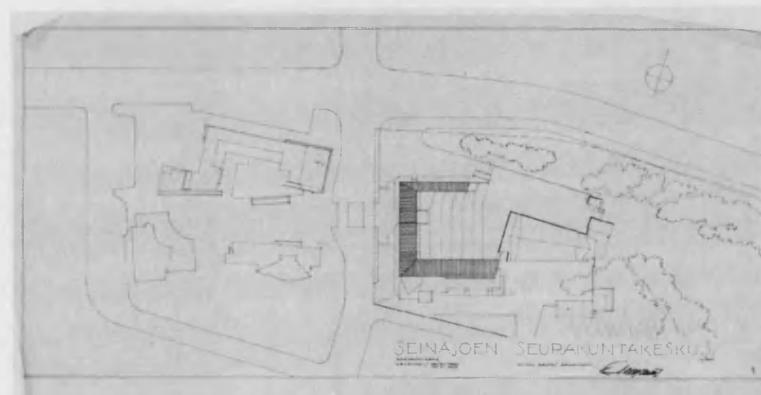
fig 4.15a Site plan
06.12.61
4.15b Site plan
31.03.62
4.15c Site plan
23.04.64
4.15d Site plan
23.09.64;
AAF



4.15b

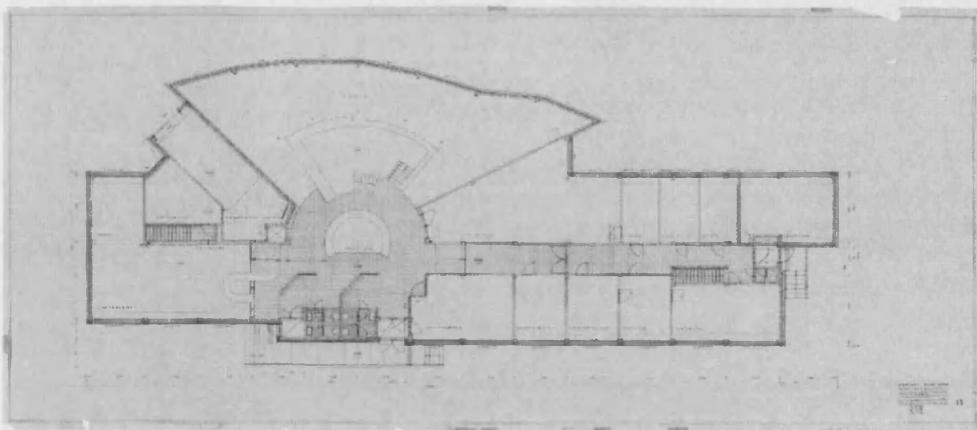


4.15c

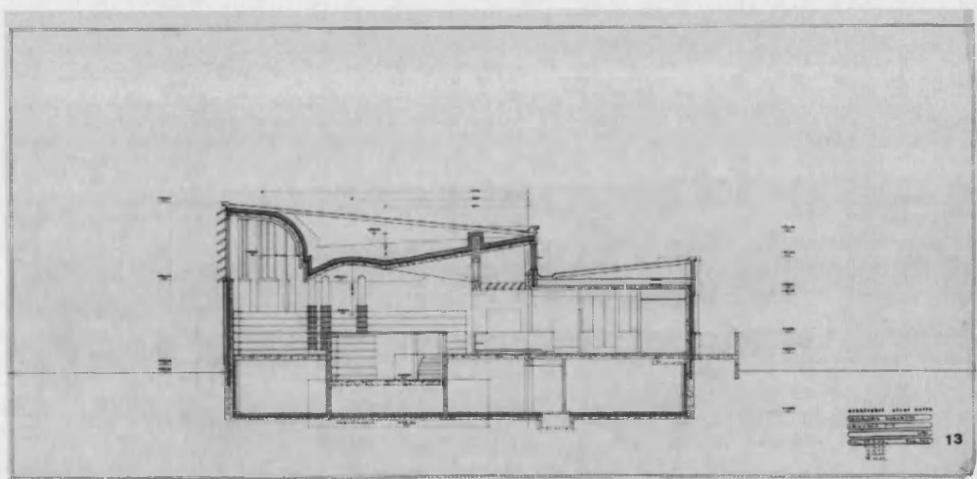


4.15d

fig 4.16a,b Library production
information plan and section
25.07.63;
AAF

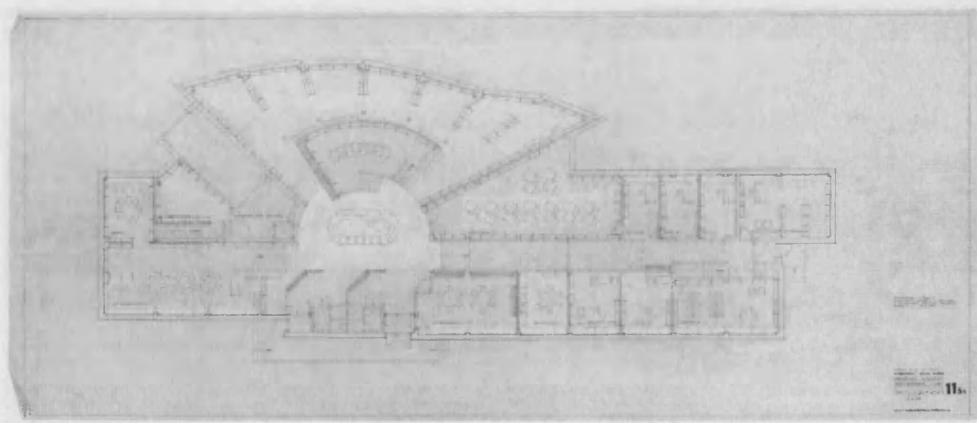


4.16a



4.16b

fig 4.16c Revision drawing
18.09.64

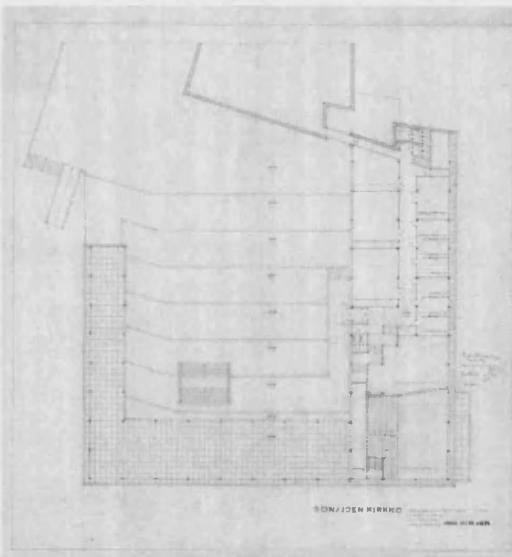


4.16c

fig 4.17a,b Library in the late 1960s;
Fleig (1971)

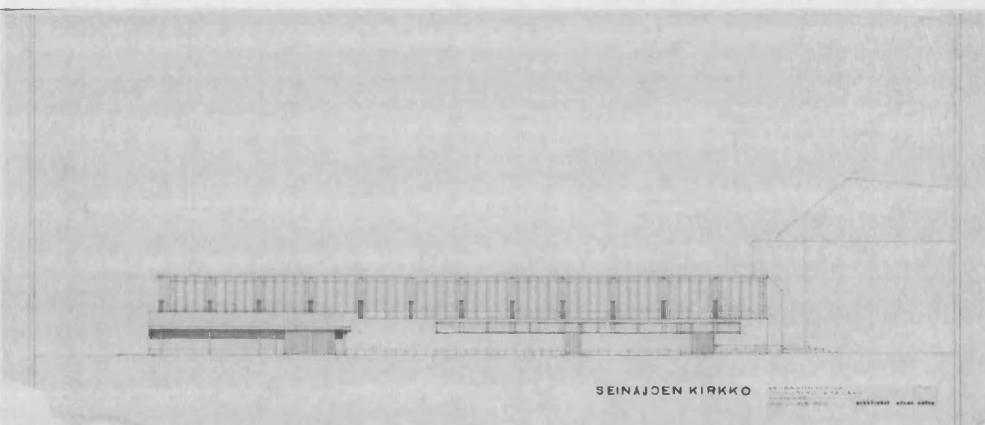


4.17a



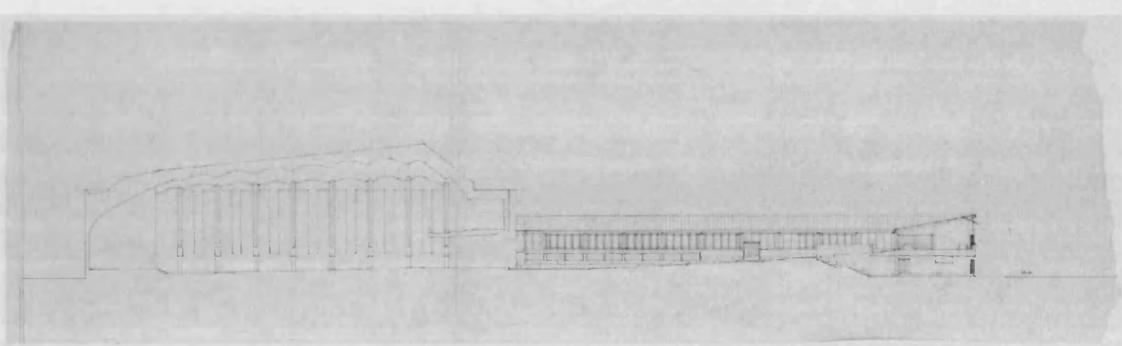
4.18a

fig 4.18a Parish Centre plans
19.06.62;
AAF



4.18b

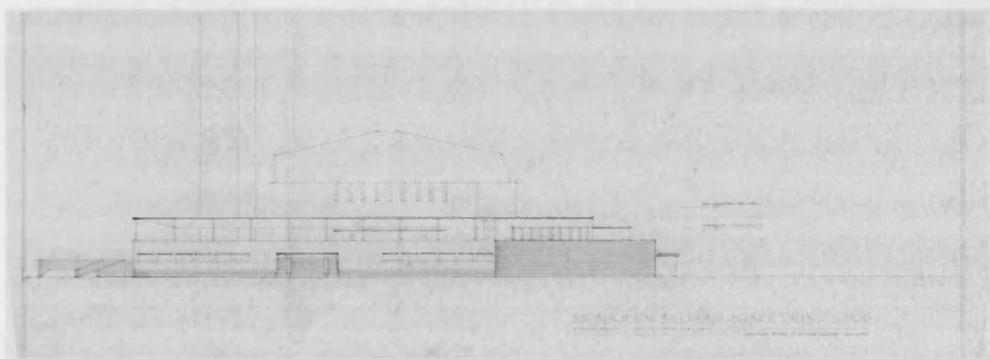
fig 4.18b Parish Centre elevation
12.10.62;
AAF



4.18c

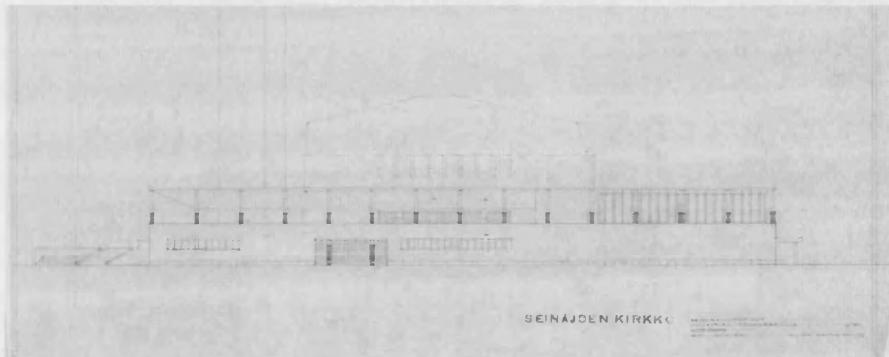
fig 4.18c Church and Parish Centre sec-
tion 1962?;
AAF

fig 4.18d Parish Centre elevation to
Koulukatu
08.03.64;
AAF



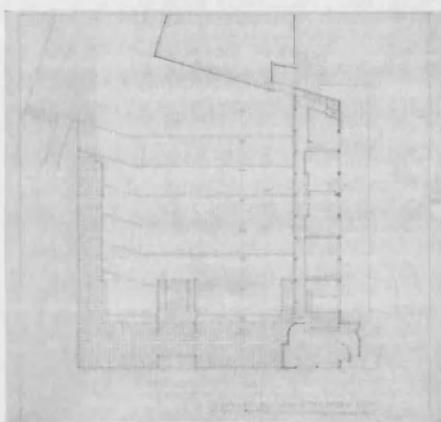
4.18d

fig 4.18e Parish Centre elevation to
Koulukatu
30.09.64;
AAF



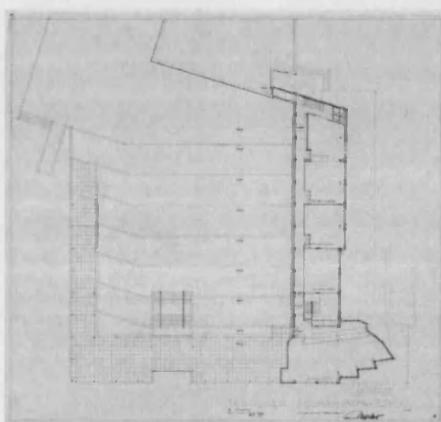
4.18e

fig 4.18f Parish Centre first floor plan
23.05.64;
AAF



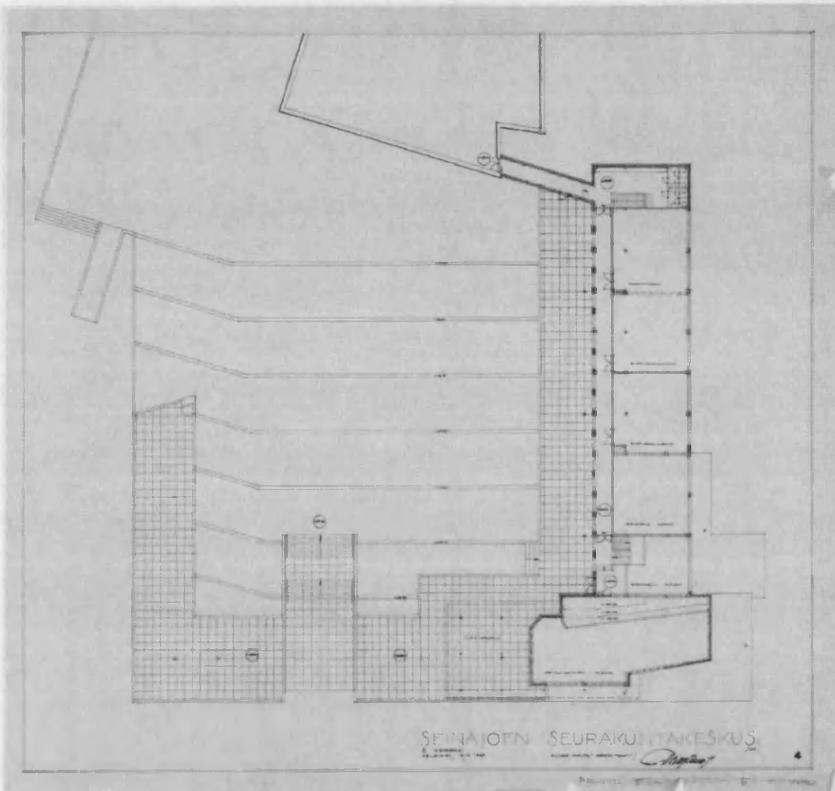
4.18f

fig 4.18g Parish Centre first floor plan
30.09.64;
AAF

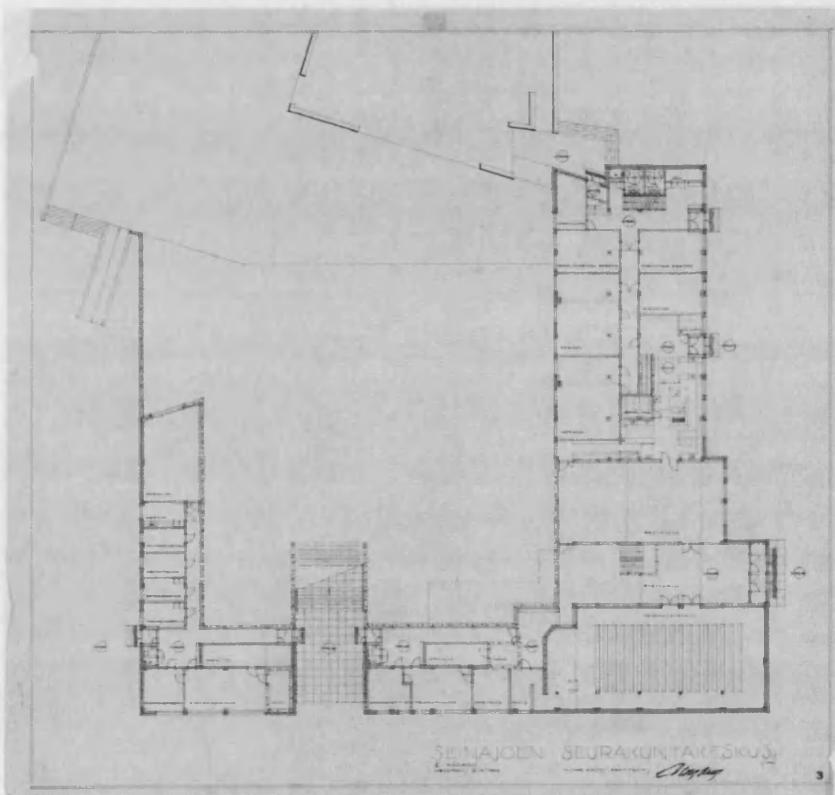


4.18g

fig 4.18h,i Parish Centre production
information plans
12.05.65;
AAF

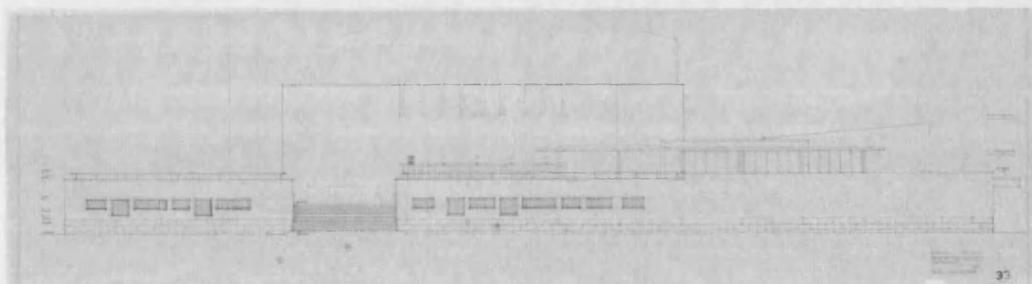


4.18h



4.18i

fig 4.18j,k Parish Centre production
information elevations
12.05.65;
AAF

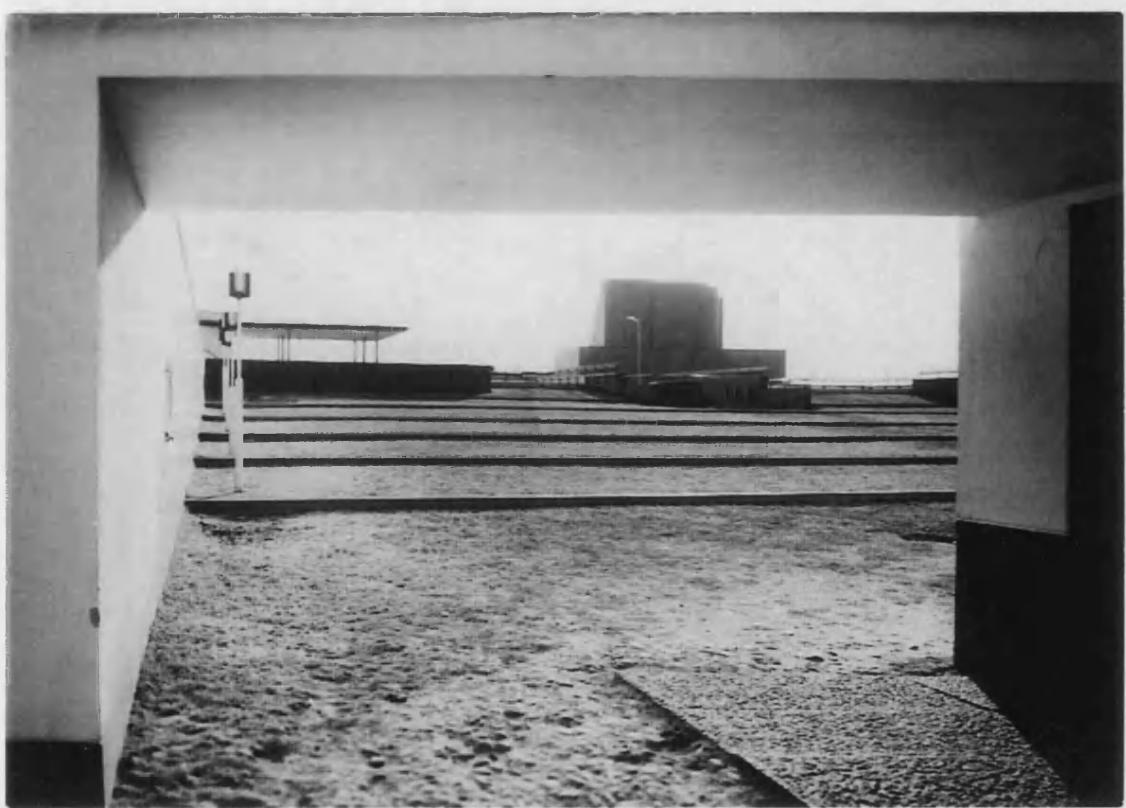


4.18j



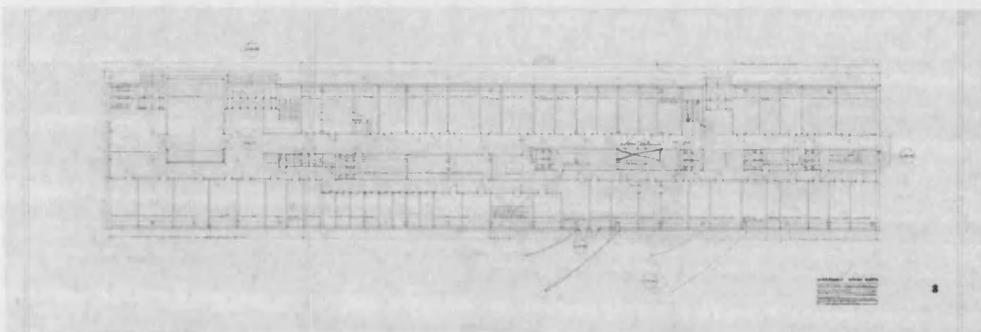
4.18k

fig 4.18l Churchyard;
anonymous postcard

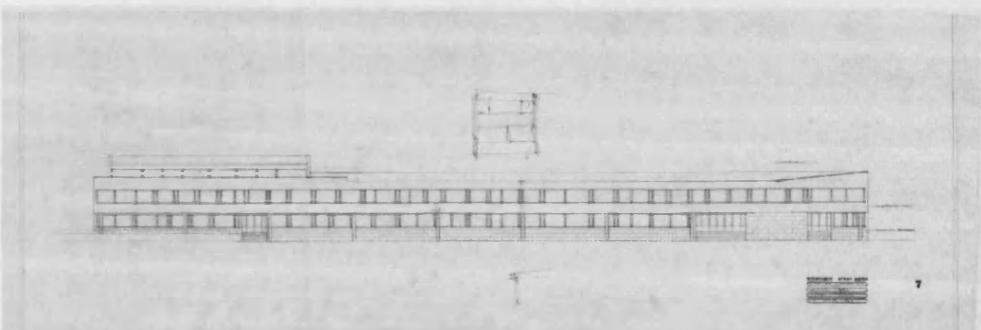


4.18l

fig 4.19a,b State Offices plan and elevation
31.08.62;
AAF

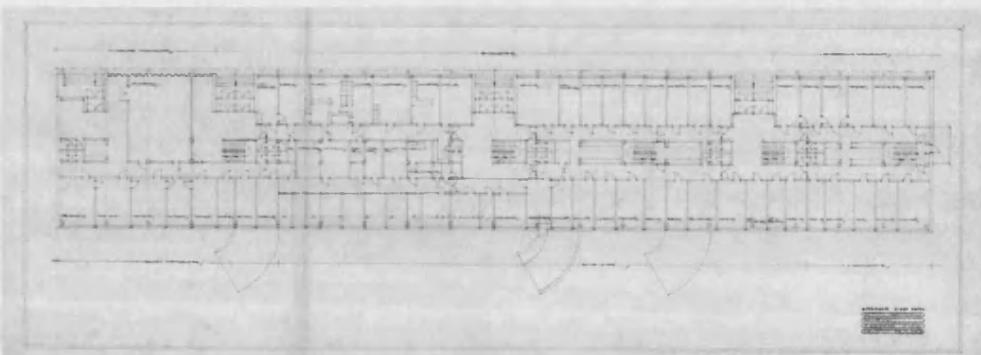


4.19a



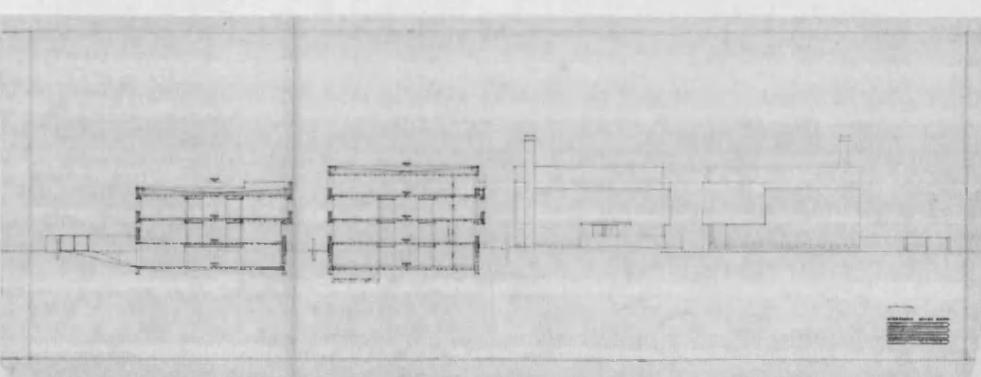
4.19b

fig 4.19c State Offices plan
23.04.64;
AAF



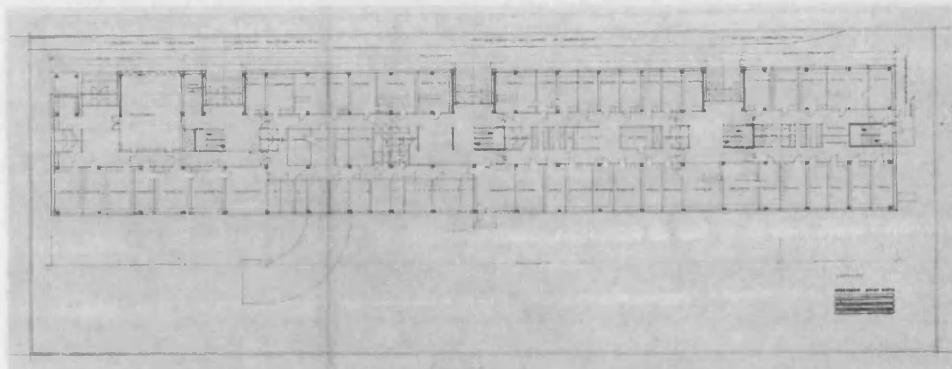
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fig 4.19d State Offices sections
05.06.64;
AAF



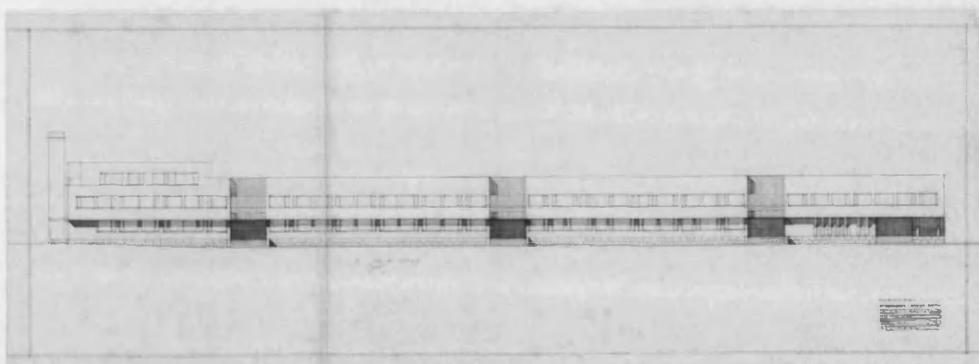
4.19d

fig 4.19e State Offices plan
05.06.64;
AAF



4.19e

fig 4.19f State Offices elevation
05.06.64;
AAF



4.19f

fig 4.19g,h State Offices production
information plan and sections
06.11.66;
AAF

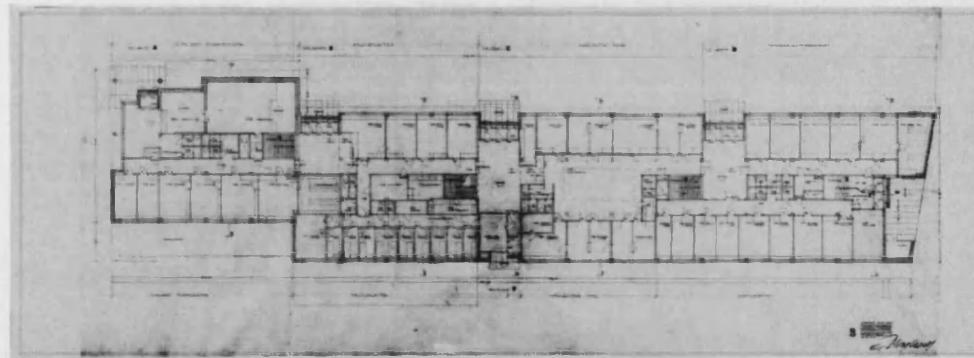
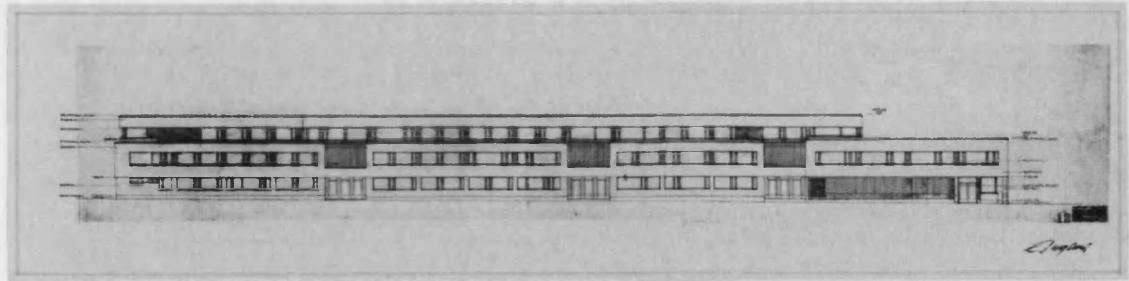


fig 4.19i State Offices production
information elevation
06.11.66;
AAF

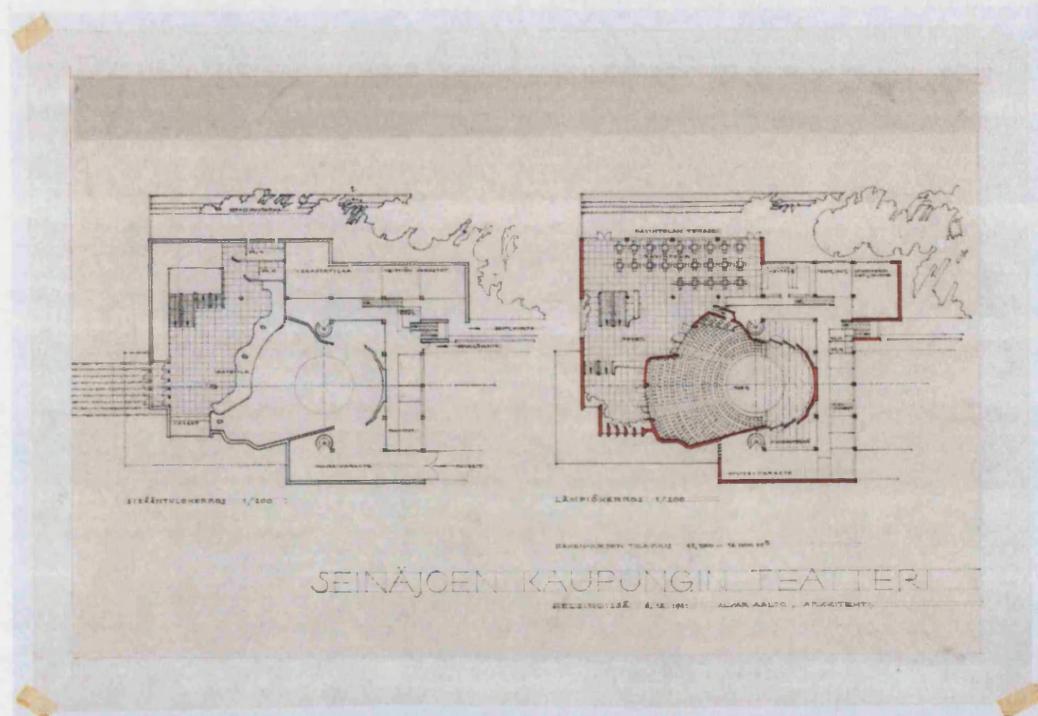


4.19i

fig 4.19j Aerial view of Seinäjoki Centre;
Rudberg (2005)



fig 4.20a,b Theatre plans
and section
06.12.61;
AAF



4.20a

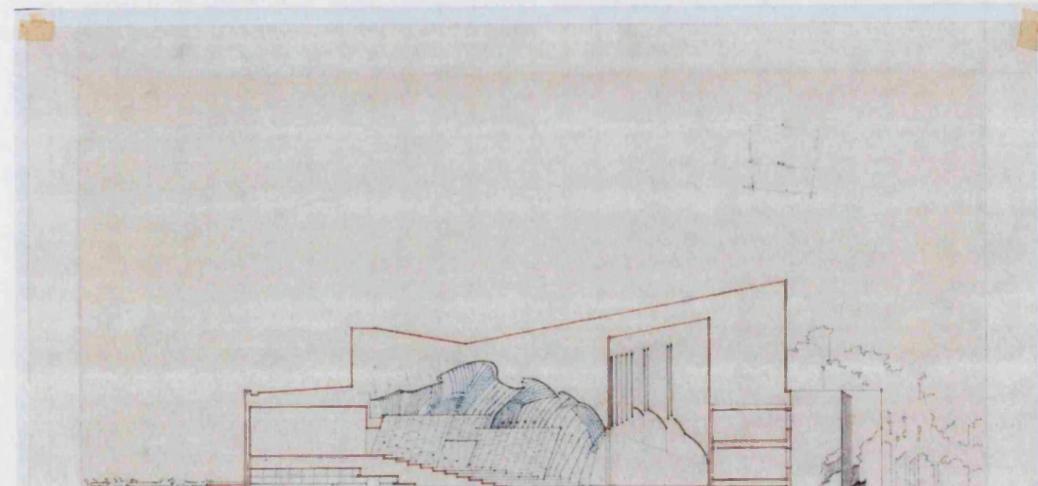
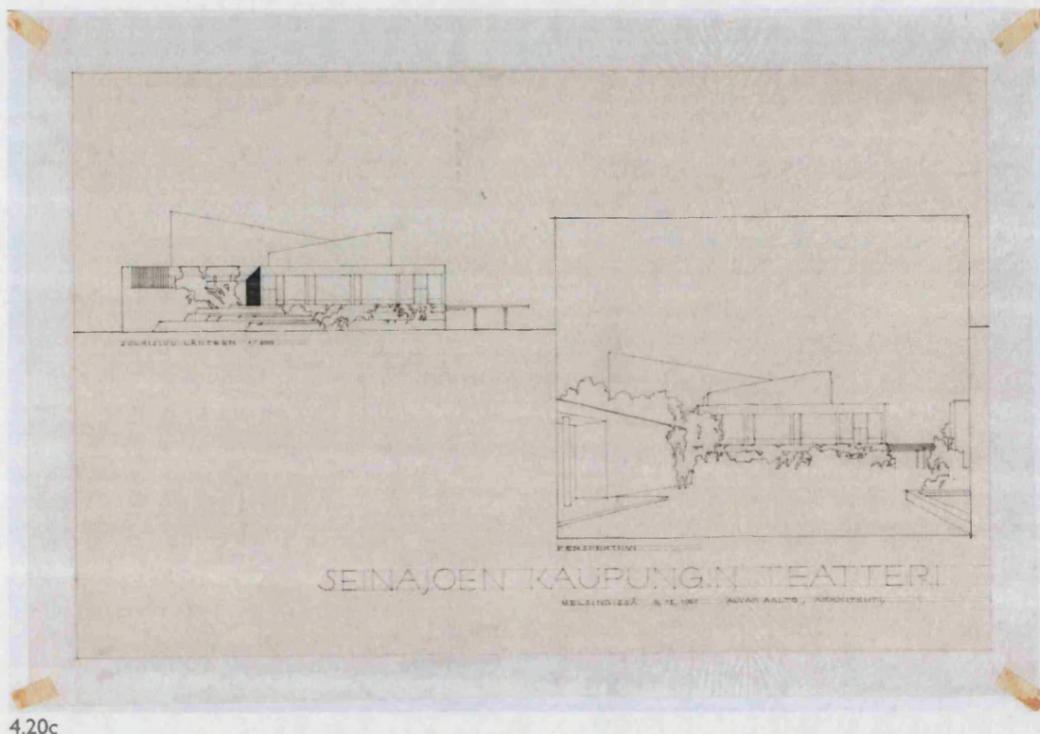
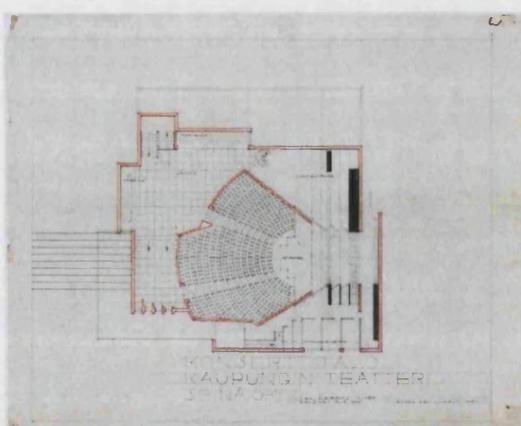


fig 4.20c Theatre elevation and view from Inner Square
06.12.61;
AAF



4.20c

fig 4.21a,b Theatre plan and section
11.06.63;
AAF



4.21a

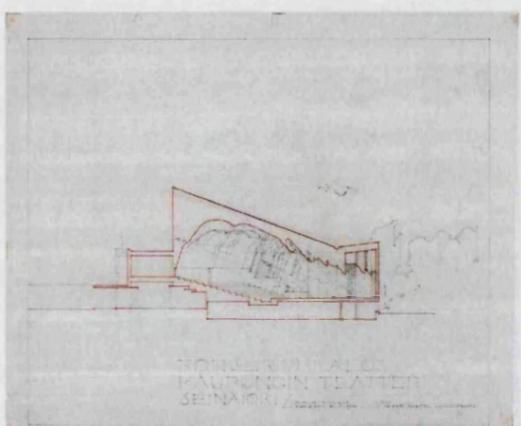
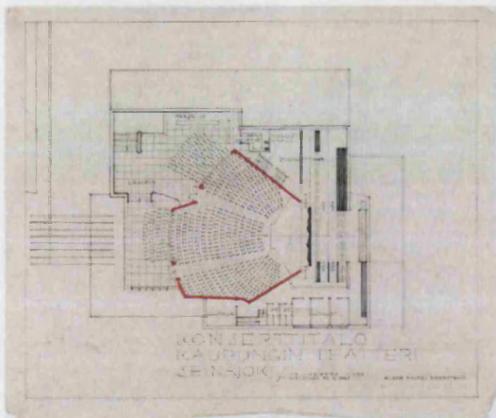
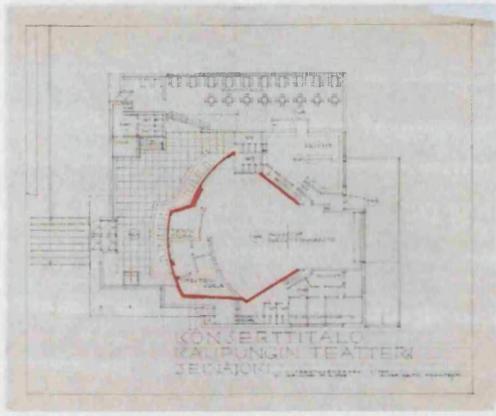


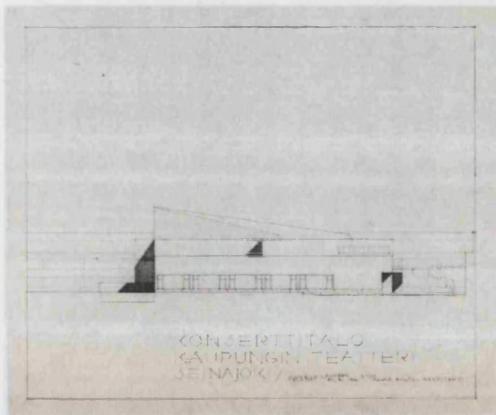
fig 4.22a,b,c,d, Theatre plan, section and elevations
30.03.66;



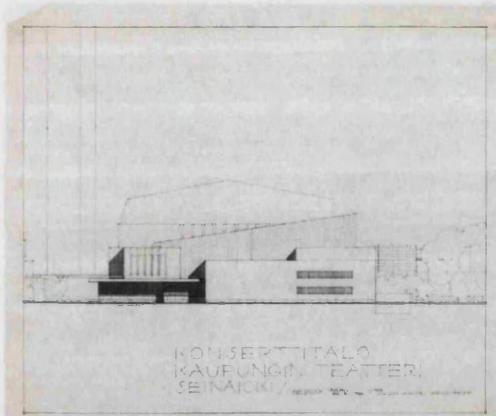
4.22a



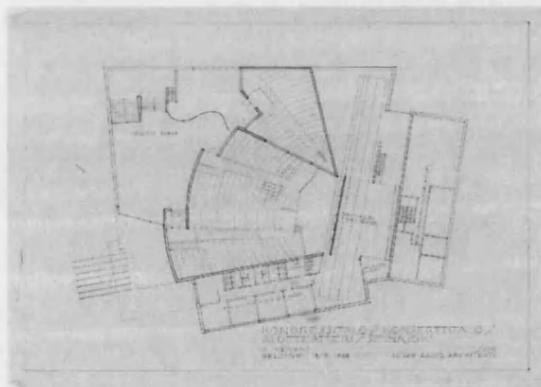
4.22b



4.22c

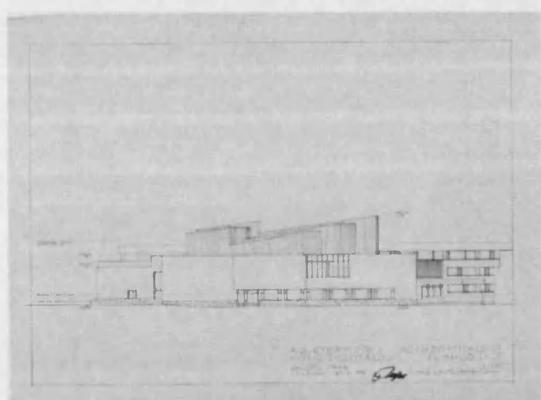


4.22d



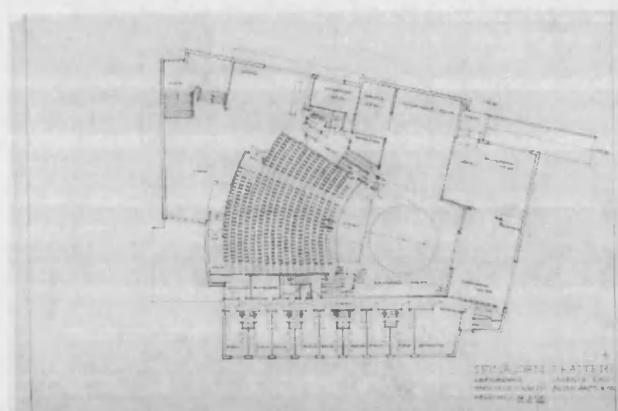
4.23a

fig 4.23a Theatre plan
08.05.68;
AAF



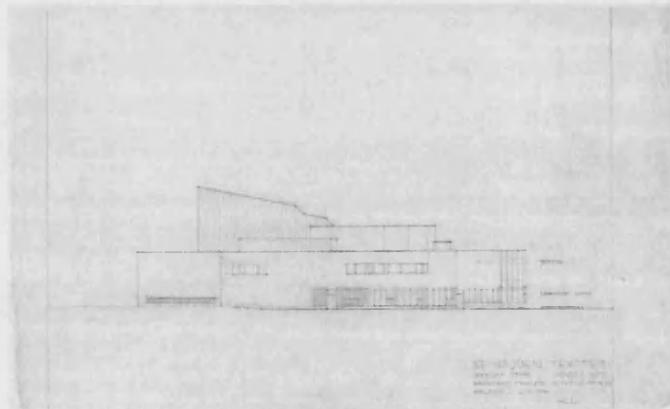
4.23b

fig 4.23b Theatre elevation
20.11.68;
AAF



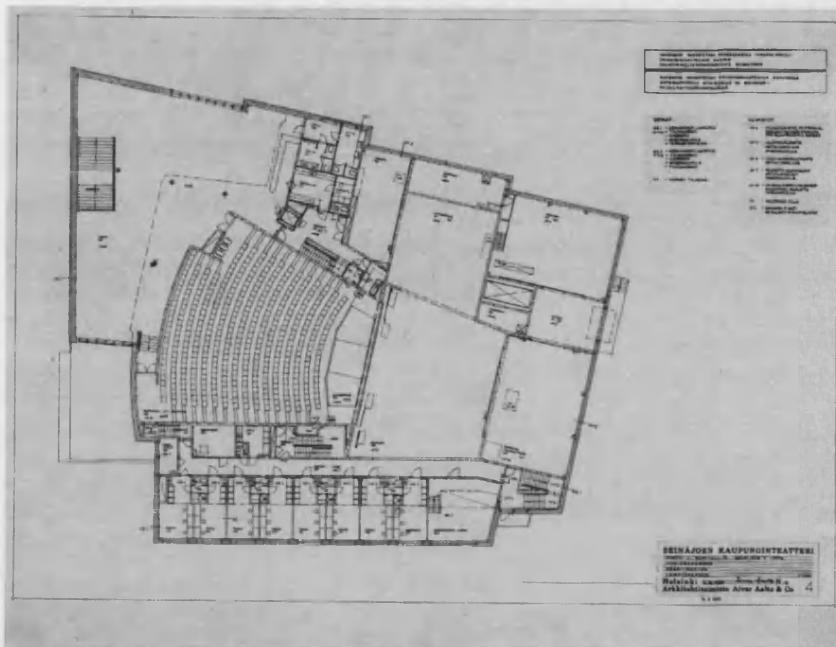
4.24a

fig 4.24a,b Theatre plan and elevation
12.02.80;
AAF

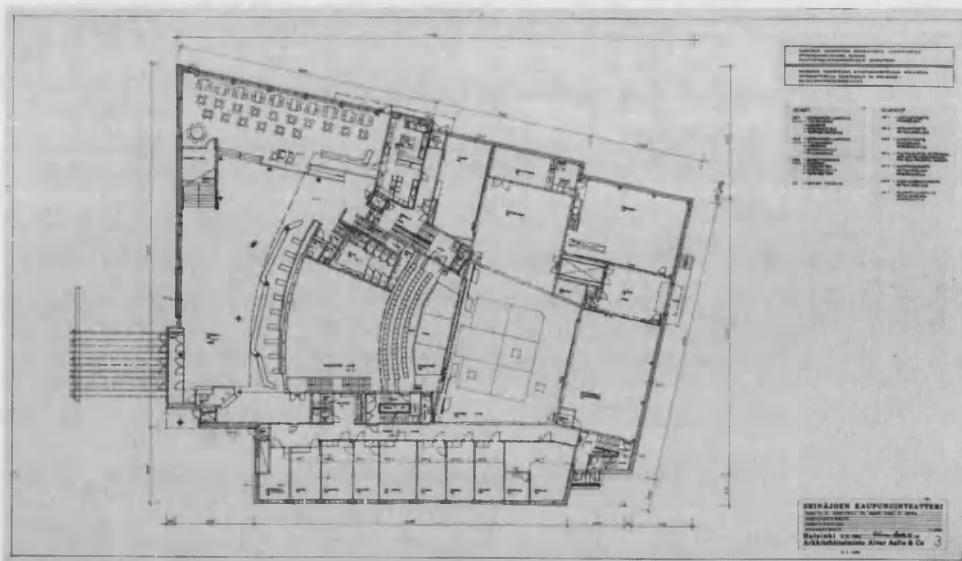


4.24b

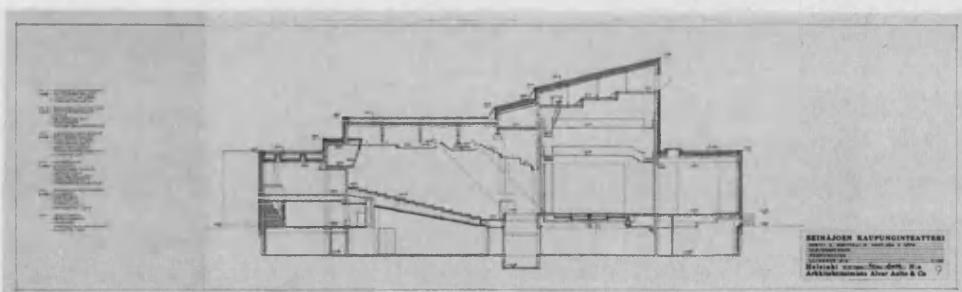
fig 4.25a,b,c Theatre production
information
plans and section
05.12.84;



4.25a



4.25b



4.25c

fig 4.25d Theatre garderobe
4.25e Theatre auditorium,
the stage curtain is by
Juhana Blomstedt;
Saari (1988)

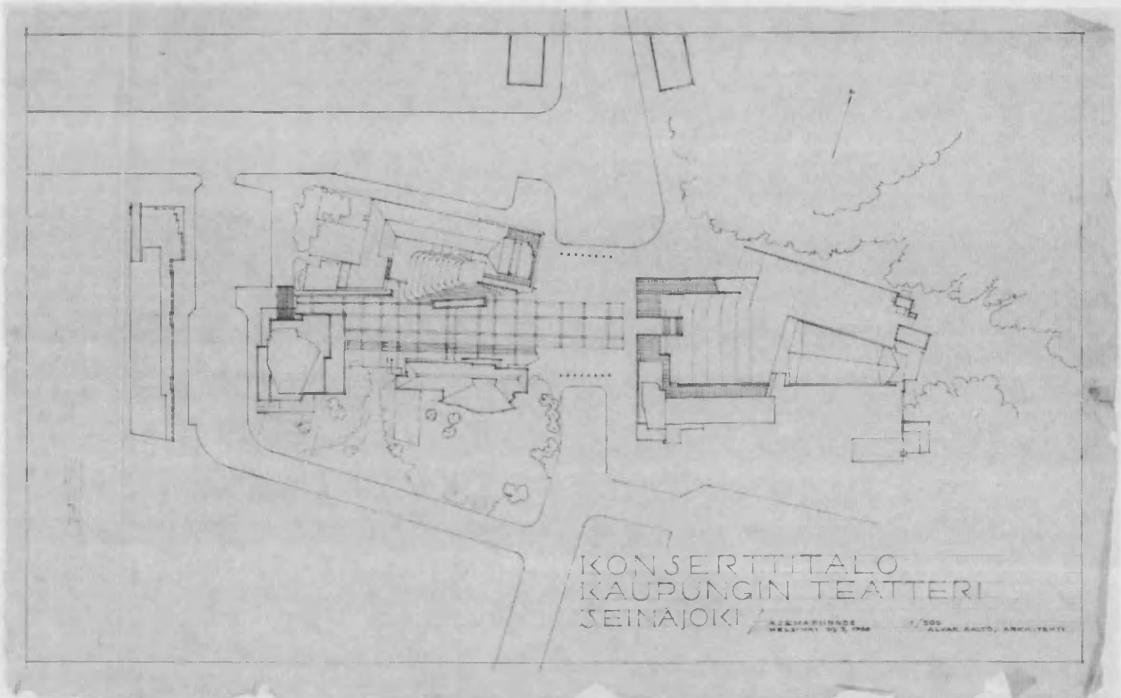


4.25d



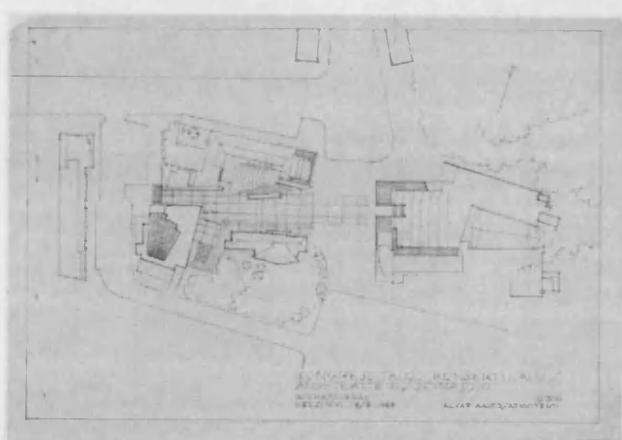
4.25e

fig 4.26a Site Plan
30.03.66;
AAF



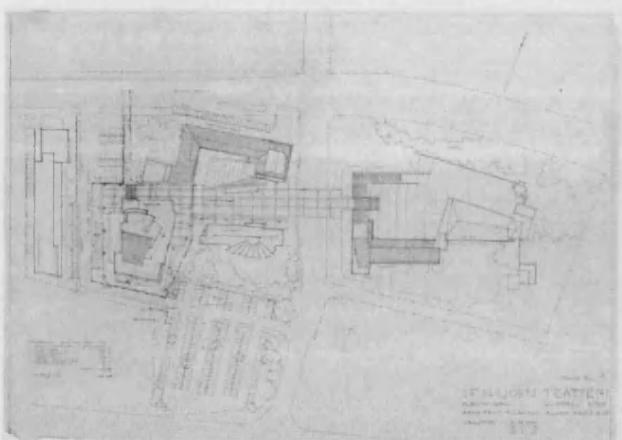
4.26a

4.26b Site plan
06.06.68;
AAF



4.26b

4.26c Site plan
02.12.80;
AAF



4.26c

fig 4.27 View from Church Tower
2007



fig 4.28a,b Parish Centre terrace before
and after extension;
AAF





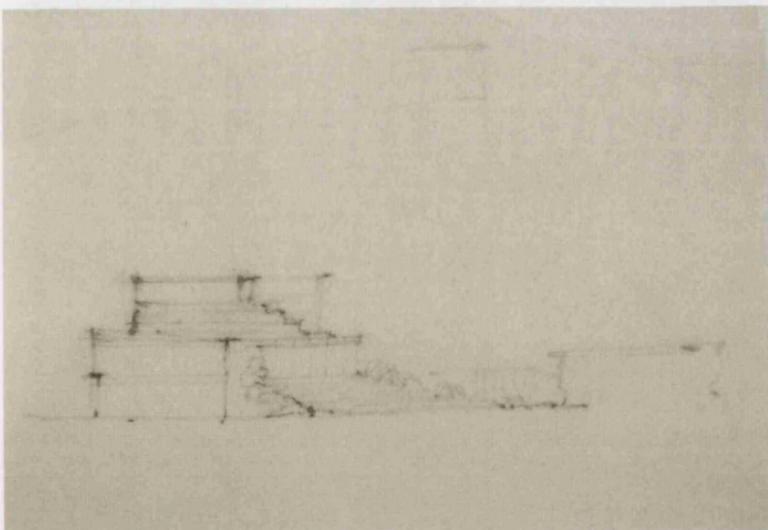
5.1a

fig 5.1a Academic Bookshop,
Helsinki, 1961-6. Corner
5.1b Looking along Keskuskatu
5.1c Looking along Etelä-Esplanadi



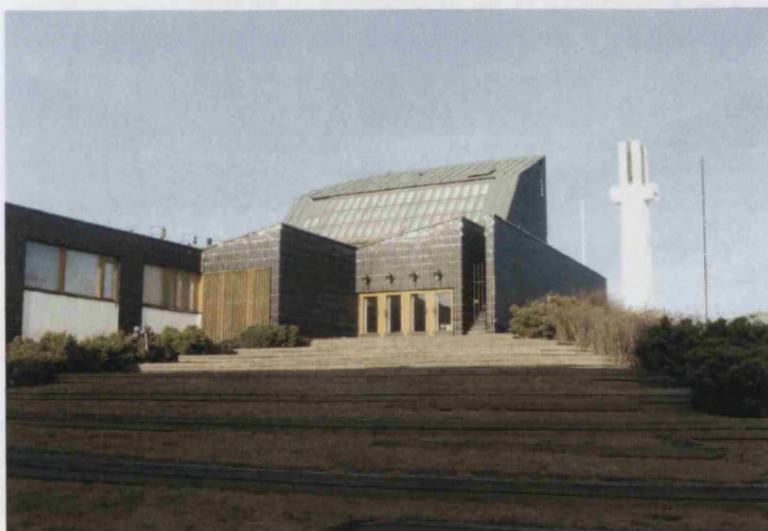
5.1b



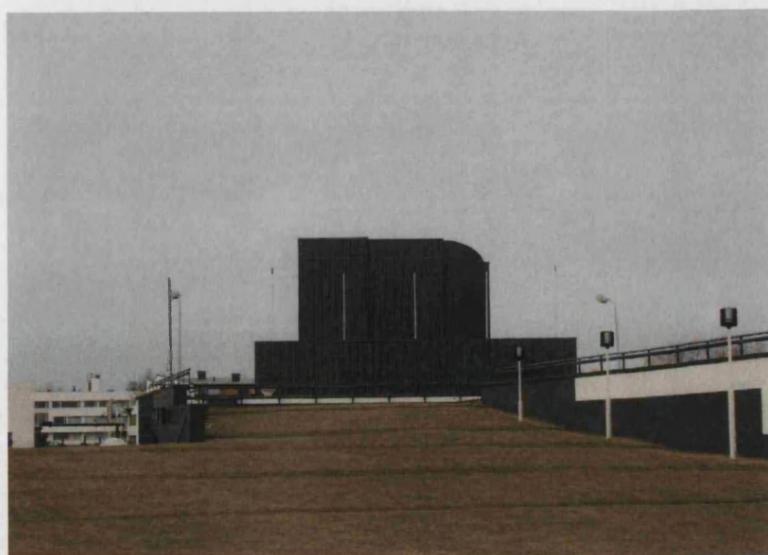


5.2a

fig 5.2a Sketch of Seinäjoki Town Hall;
AAF
5.2b Town Hall civic garden
5.2c Churchyard looking towards Town Hall



5.2b



5.2c

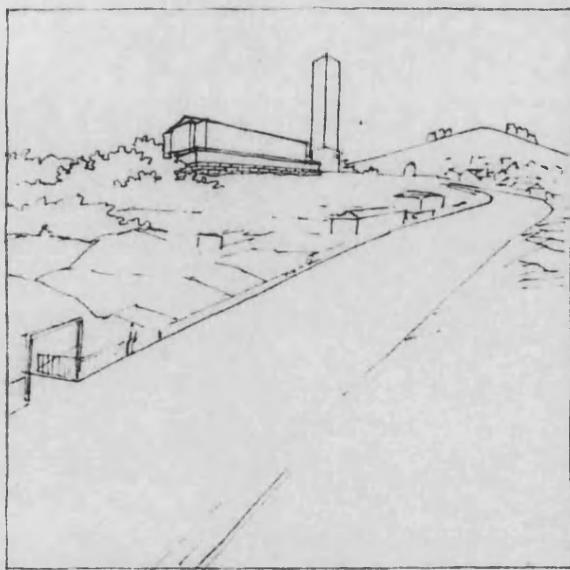


fig 5.3a Sketch of Taulumäki Church 1927;
AAF
5.3b Sketch of Lyngby Cemetery 1952;
Fleig (1971)
5.3c Tiilimäki atelier, Helsinki 1955

PERÄRANTTI, KOILLISESTA.

5.3a



5.3b



5.3d Pool, earthwork and gate at the Villa Mairea



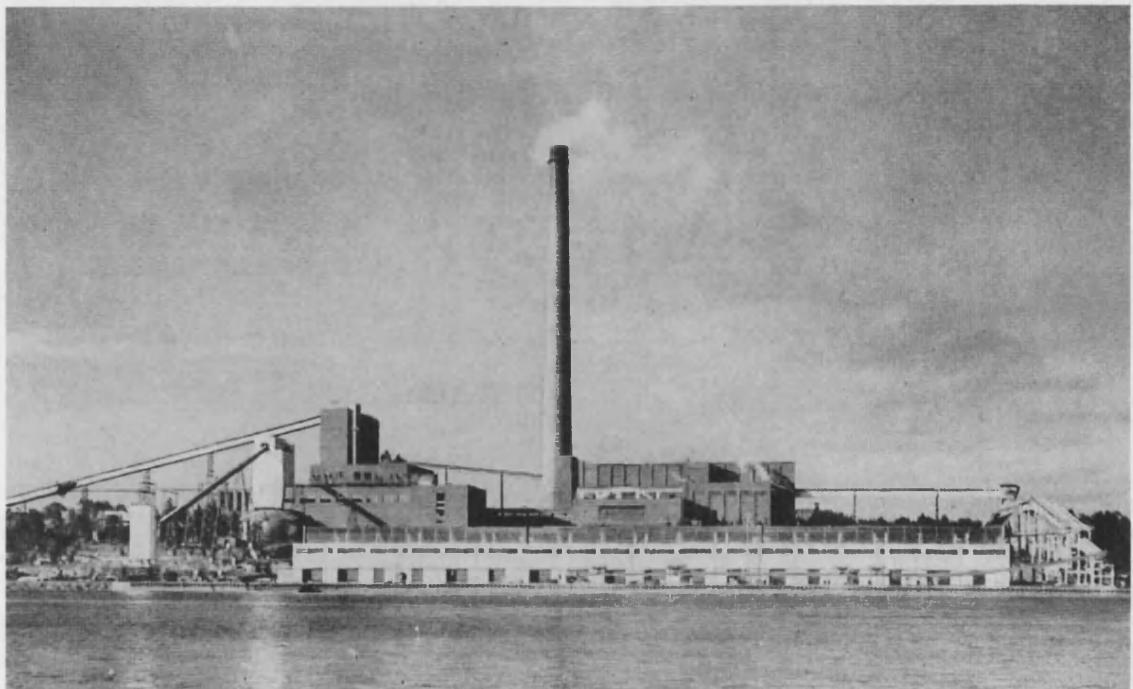
5.3d

fig 5.4a View from the Town Hall civic garden towards the theatre

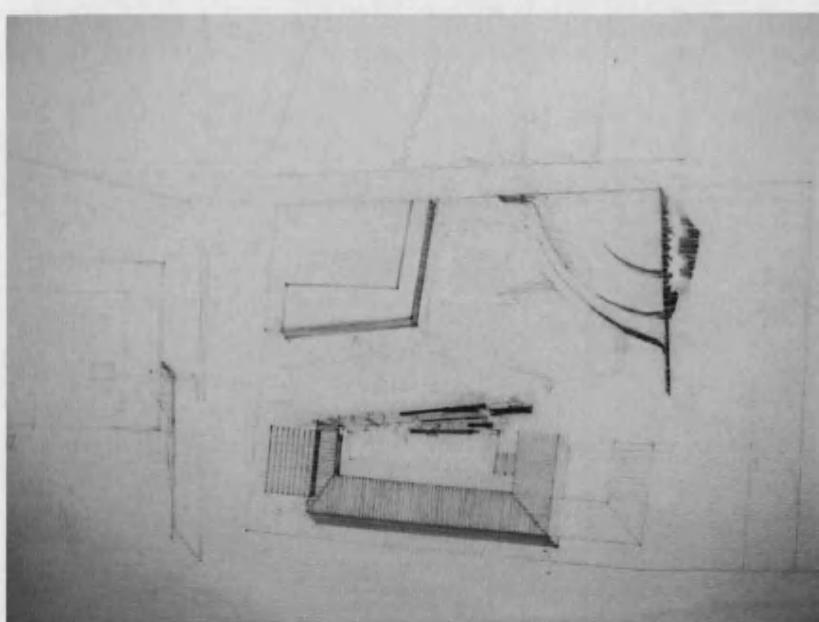
5.4b View from churchyard steps looking towards the Inner square



fig 5.5 a Sunila Cellulose Factory 1936;
Ålander (1952)
5.5b Sketch of the Seinäjoki Centre s.a.
AAF

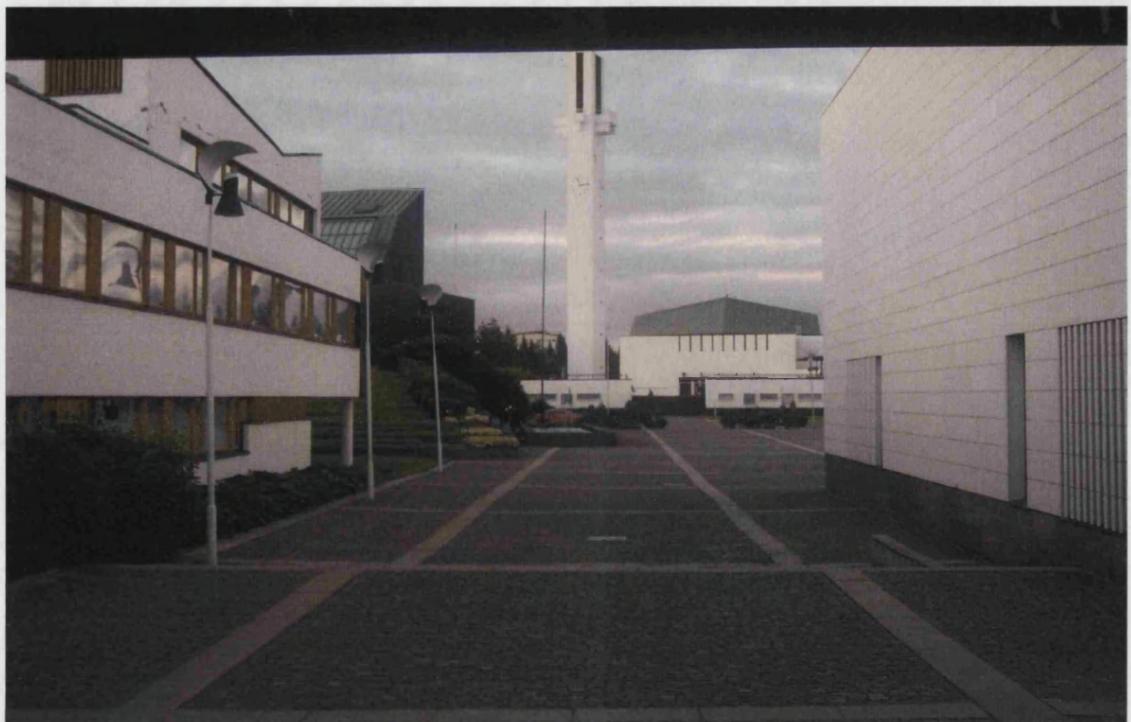


5.5a



5.5b

fig 5.6a,b Inner Square



5.6a



5.6b



5.6c



5.6d



5.6e

fig 5.6c,d,e Entrance to churchyard

fig 5.7 Page from Paul Frankl (1914)



fig 5.8 Page from Nils Erik Wickberg
article
Arkkitehti 10-12/1959



fig 5.9a Sketch of the
Seinäjoki Centre s.a.;
AAF

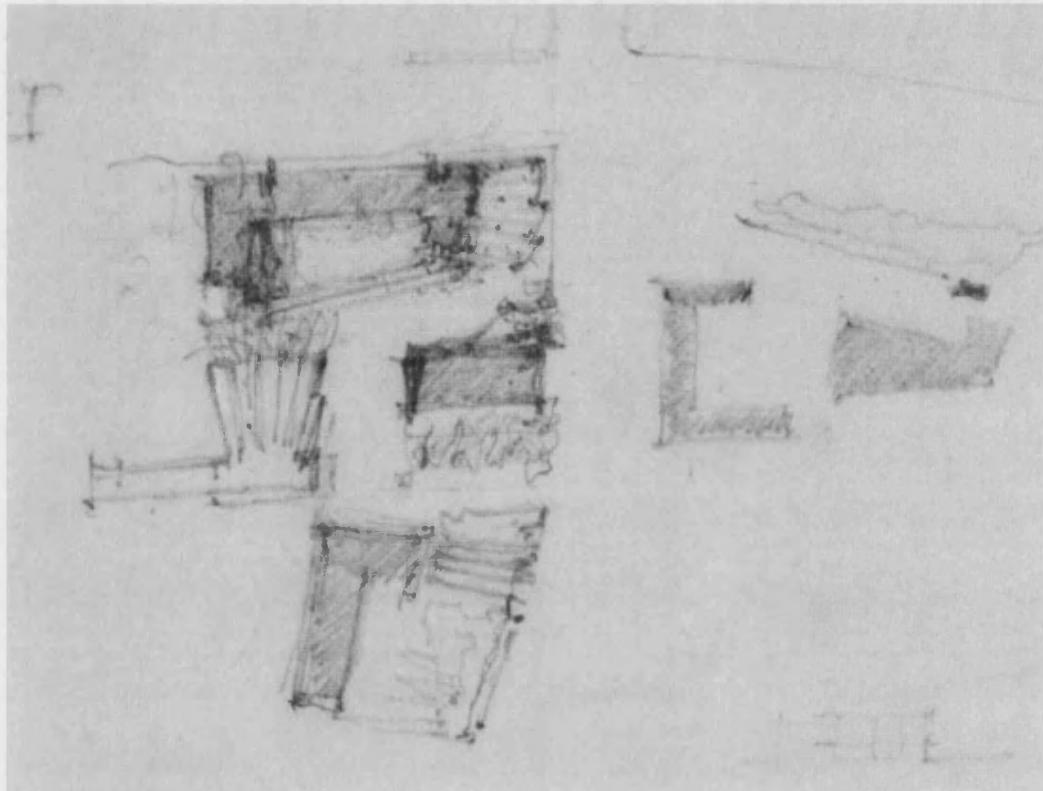
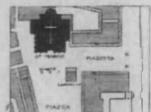


fig 5.9b Page from Gustaf Strengell
(1922)



136. Piazzetta, Venedig. Blick mot molon; i fonden kyrkan della Salute. Medeltiden saknade sione för vattnets, eller allmänna uttryckt: naturens skönhet denna underbara vy var ända till uppförandet, år 1536, av biblioteksbyggnaden (Bingat till höger på bilden) slutet av förbyggnader — handelsbodar. I förändringen tager sig den gryende barockens intresse för utnyttjandet av naturens medverkan i en arkitektonisk totalkomposition ett tidigt uttryck.

kommo i den fönsterlösa murmassan, var enhetligheten hos denna bruten. Det kan då ej förvåna, om en önskan att gestalta dessa huvudgator i sin helhet monumental, likformigt, med tiden gjorde sig gällande. Medlet härtill hade man färdigt utbildat till hands i de kolonnhallar eller portiker, som omslöt de antika



137. Platsgrupp (dubbelplats); Piazza di S. Marco — Markusplatsen — med Piazzetta, Venedig. Katedralens fri-

The Piazzetta, Venice. View towards the quay.
Chiesa della Salute in the background. The Middle
Ages lacked a sense for water's — or space generally

fig 5.10 J.F. Blondel: 'Correction plan' for Strasbourg; Brinckmann (1920)



67. Straßburg, Korrektionsplan von J. F. Blondel 1768.

fig 5.11 Aalto: Three Squares plan for Jyväskylä 1926; AAF

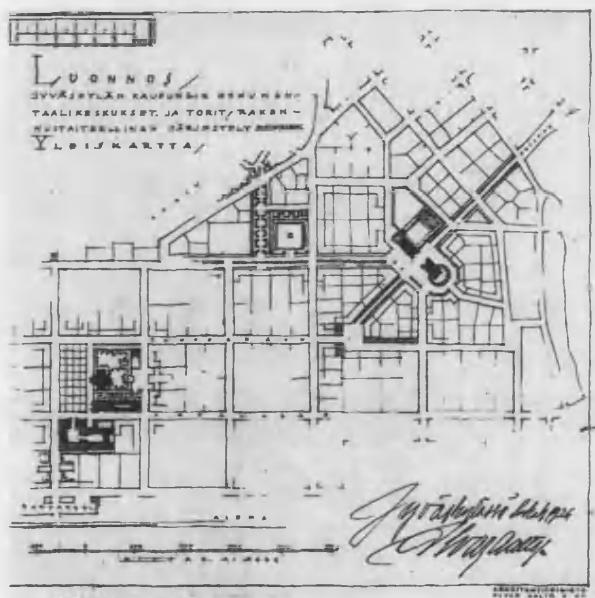


fig 5.12 Aalto: *Forum Redivivum* Helsinki site plan 1947; AAF

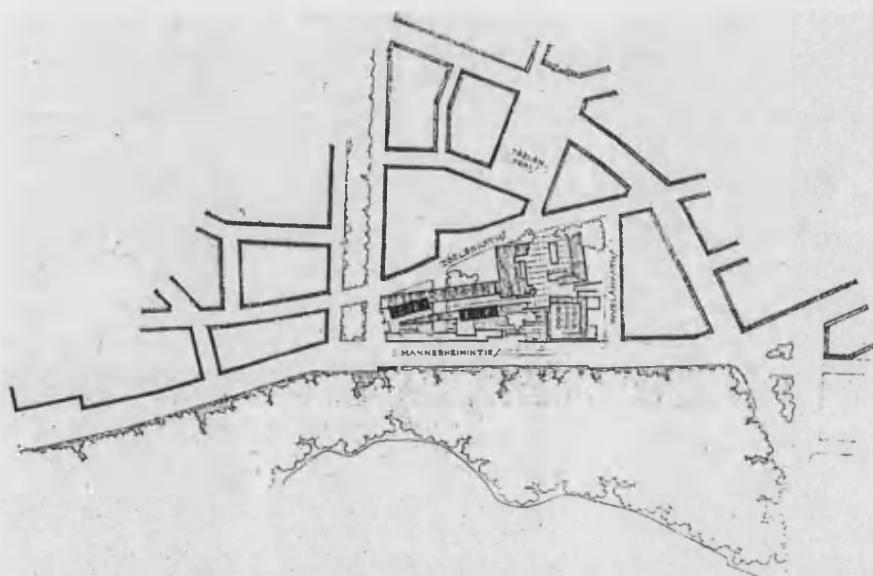


fig 5.13a,b Johannes Granö photographs in the Altai mountains 1916;
Helsinki City Museum of Art



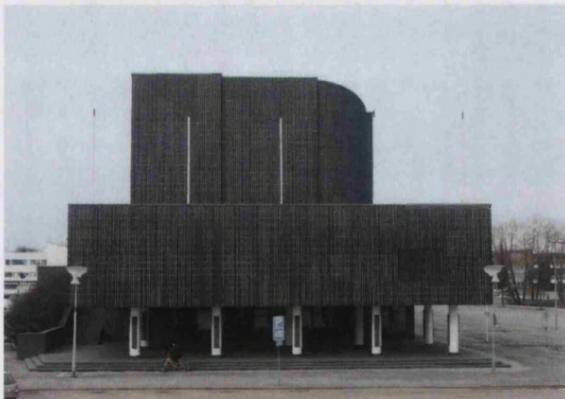
5.13a



5.13b



5.14a



5.14b



fig 5.15a Kinetisches konstruktives system;
Moholy-Nagy (1930)
5.15a Frederick Kiesler City in Space 1925;
www.arch.mcgill.ca

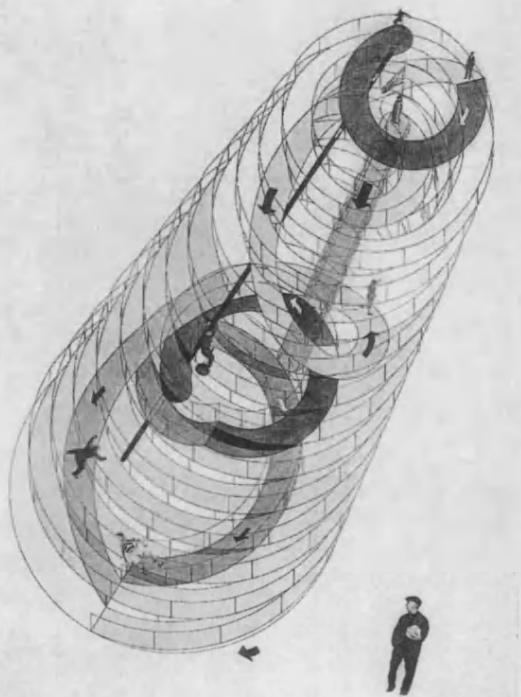
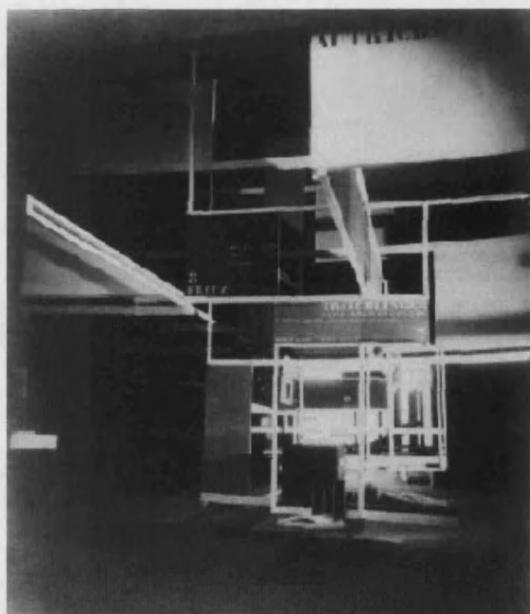


abb. 178 moholy-nagy 1922
kinetisches konstruktives system, bau mit bewegungsbahnen für spel
und beförderung (durchkonstruiert von dipl.-ing. stefan sebök 1928)

204

5.15 a



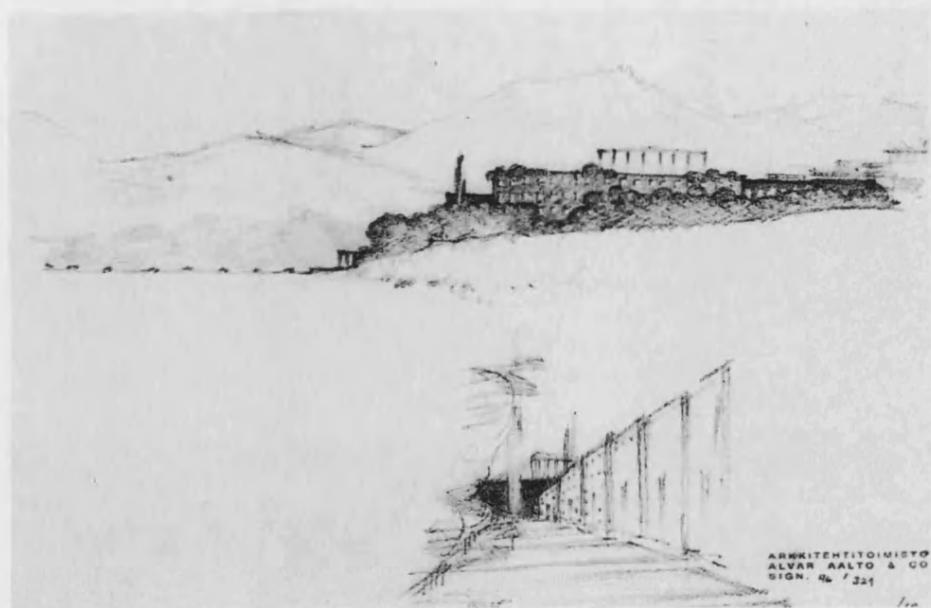
5.15b

fig 5.16 Alvar Aalto sketch
Calascibetta 1952;
Schildt (1998)

Calascibetta. '52



fig 5.17 Aalto: Unsubmitted entry,
League of Nations
Geneva 1926;
AAF



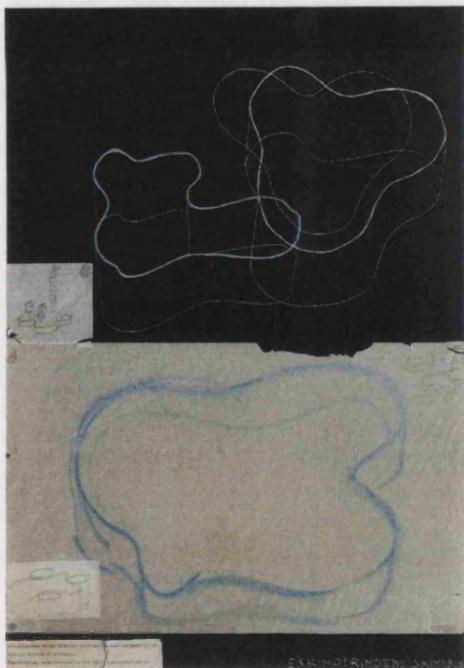
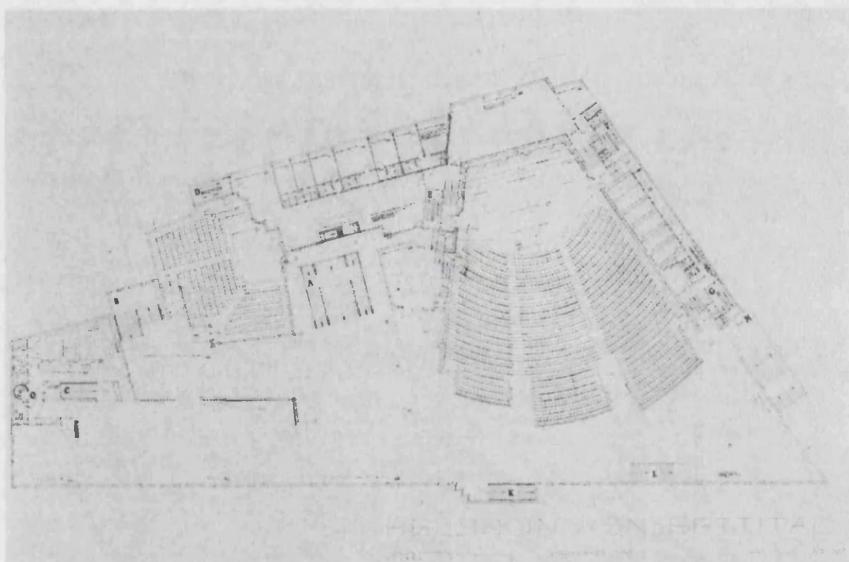


fig 5.18 Alvar Aalto: Entry for Iitala
glassware competition 1936;
Reed (1998)



fig 5.19 Baker house dormitory, MIT
1946-9 perspective and plan;
Reed (1998)

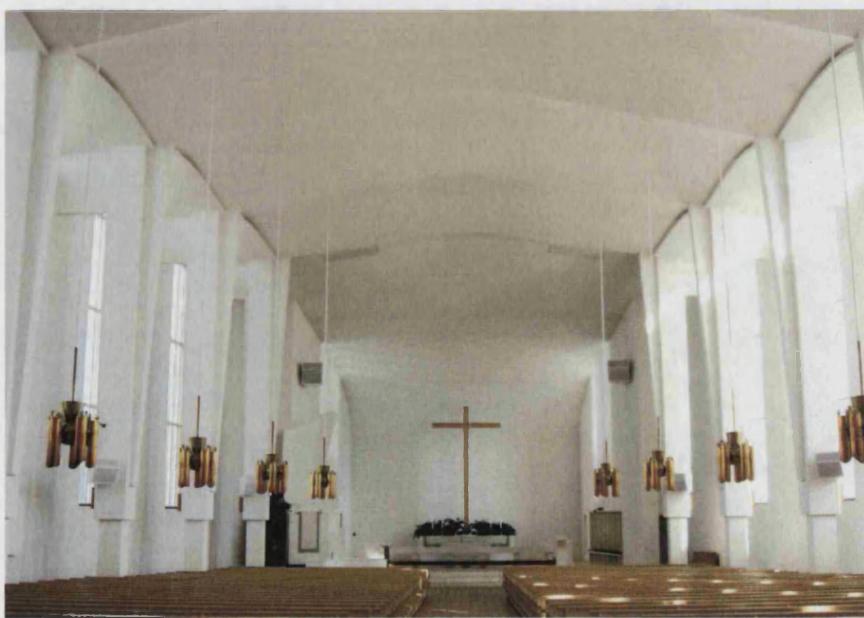
fig 5.20 Finlandia Hall
(1962-75) plan;
Fleig (1970)



5.21 Theatre restaurant
looking into Inner square;
Reed (1998)



fig 5.22 Seinäjoki Curch



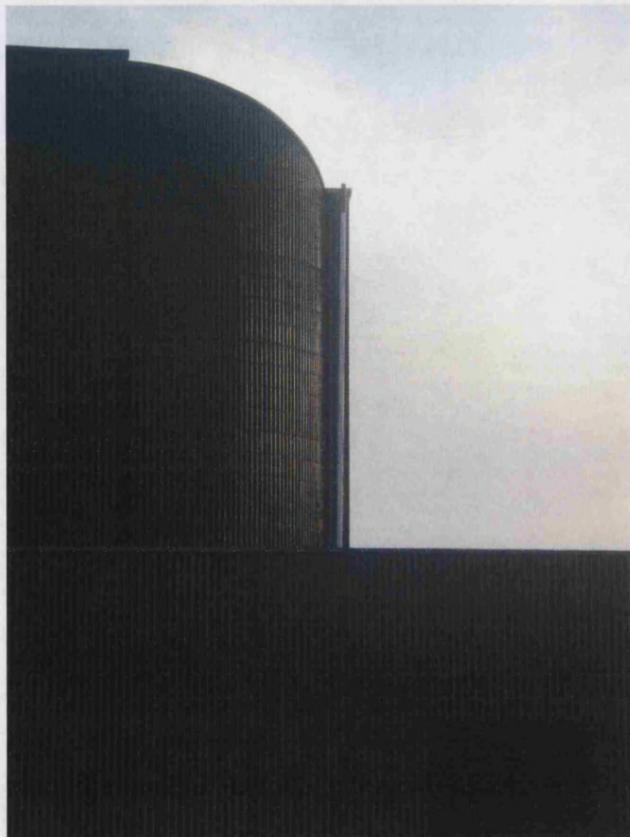


fig 5.23a Town Hall ceramic sticks at approximately 11pm, July 2007

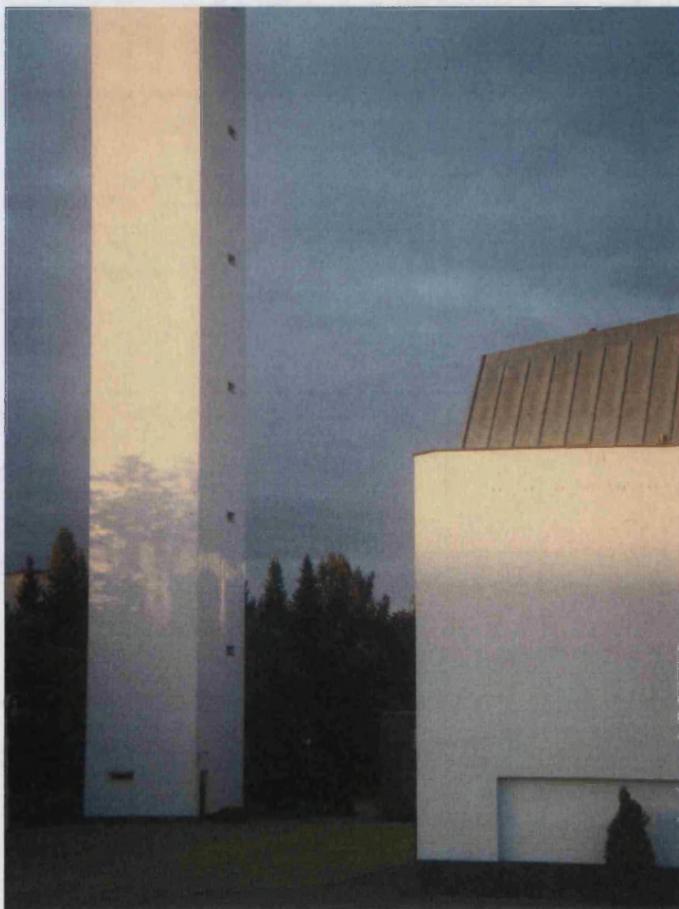


fig 5.23b Town Hall ceramic sticks at approximately 3pm, January 1986

fig 5.23c Church thin-wash plastered
brickwork, midday April 2005



fig 5.23d Church thin-wash plastered
brickwork, approximately
11pm July 2007



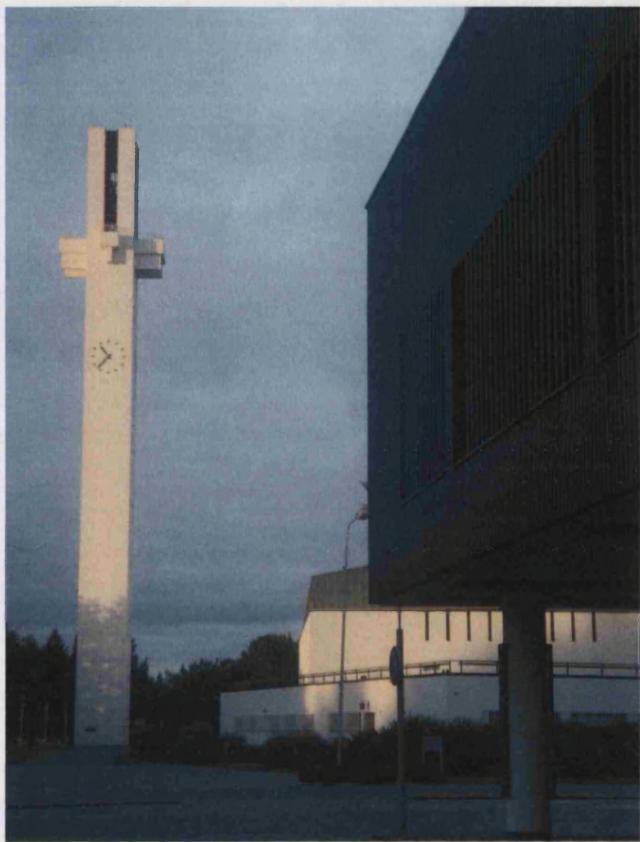


fig 5.23e Town Hall and Church
July 2007

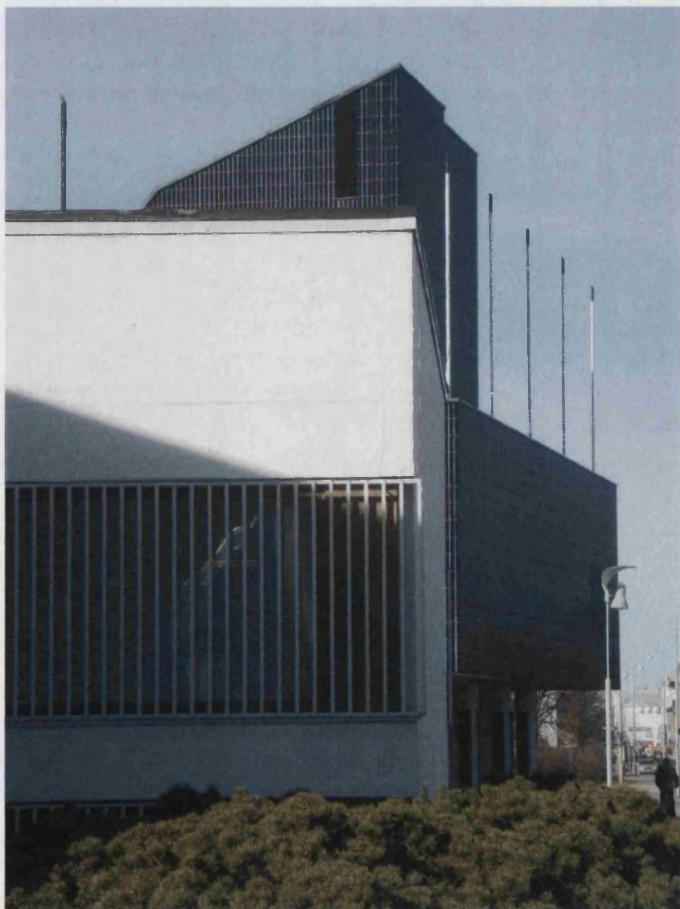
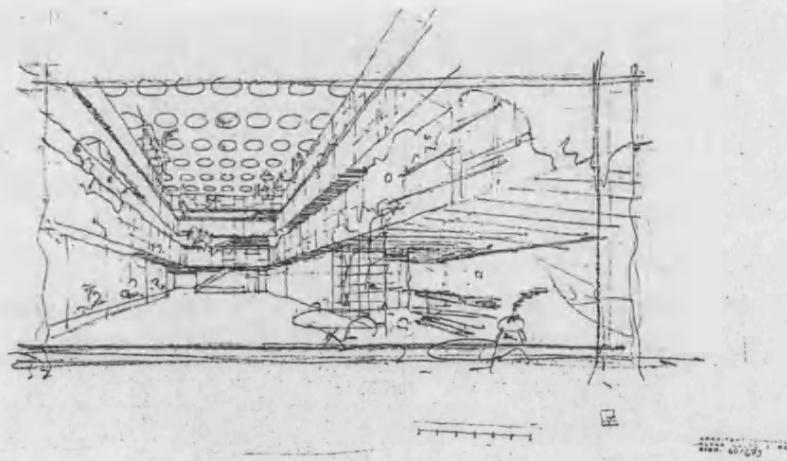


fig 5.23f Library and Town Hall,
approximately 3pm, April 2005



5.24a

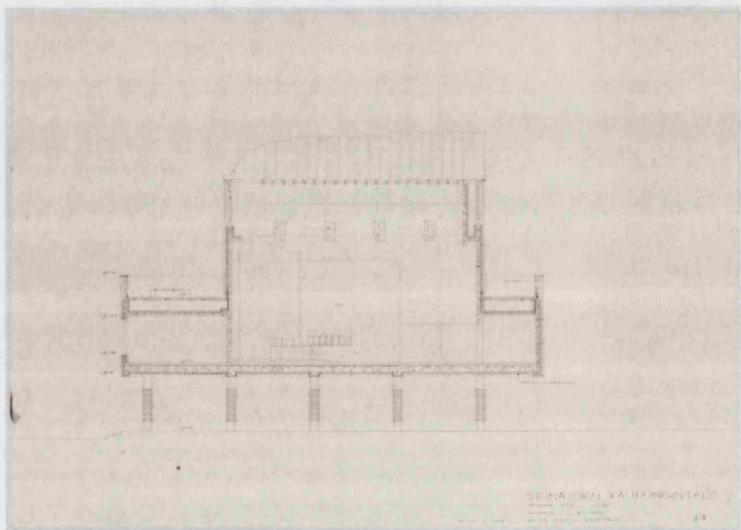
fig 5.24a Rautatalo, Helsinki 1951-5;
Nikula (1998)
5.24b Sketch of Rautatalo piazza;
AAF



5.24b

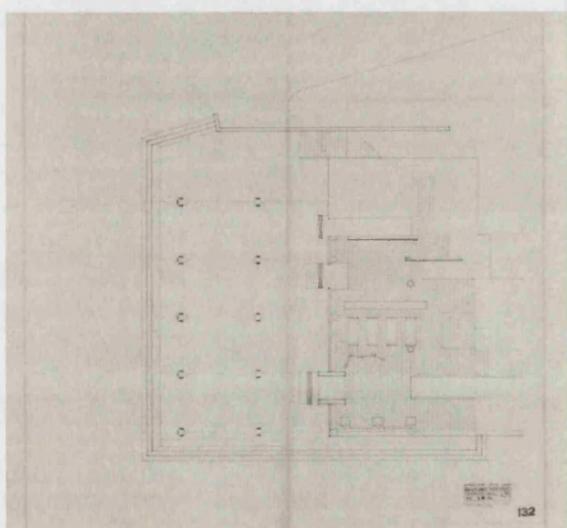
fig 5.25 National Pensions Institute,
Helsinki 1953-8 garden level plan;
AAF



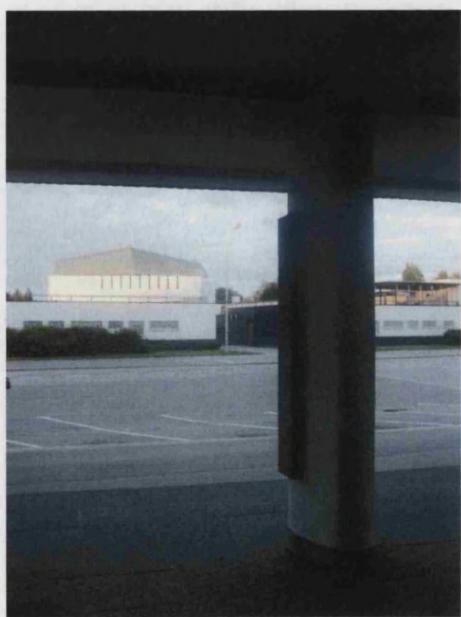


5.26a

fig 5.26a Town Hall loggia and council chamber section
5.26b Town Hall loggia plan; AAF
fig 5.26c Town Hall loggia and column



5.26b

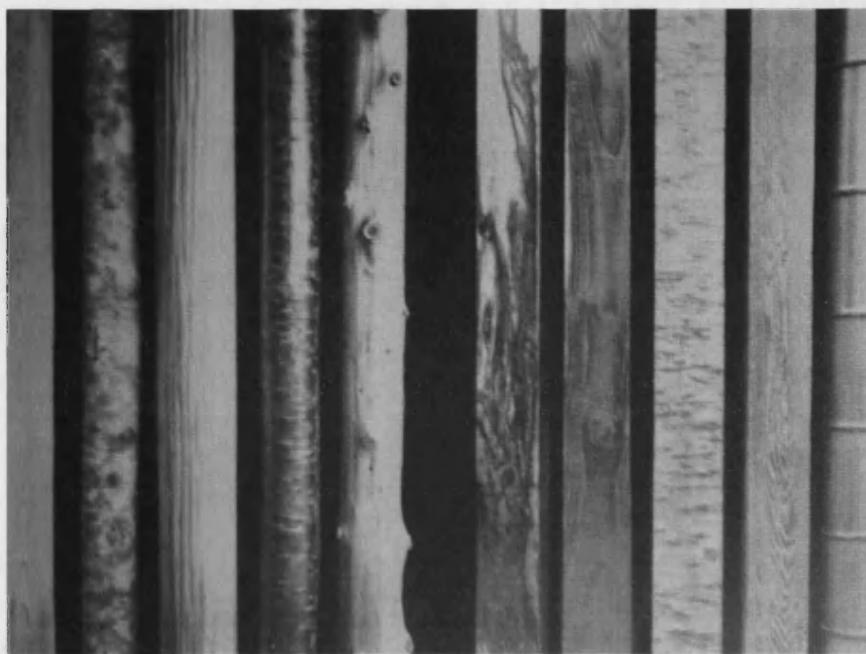


5.26c

fig 5.27a Examples of timber columns
from Yoshida (1935)

5.27b Town Hall lobby;
Fleig (1963)

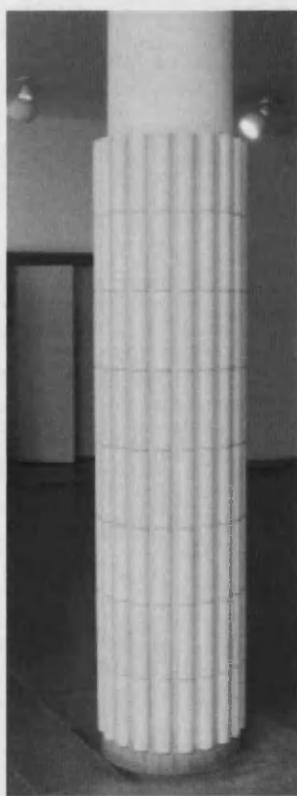
5.27c Column in Helsinki
Technical University



5.27a

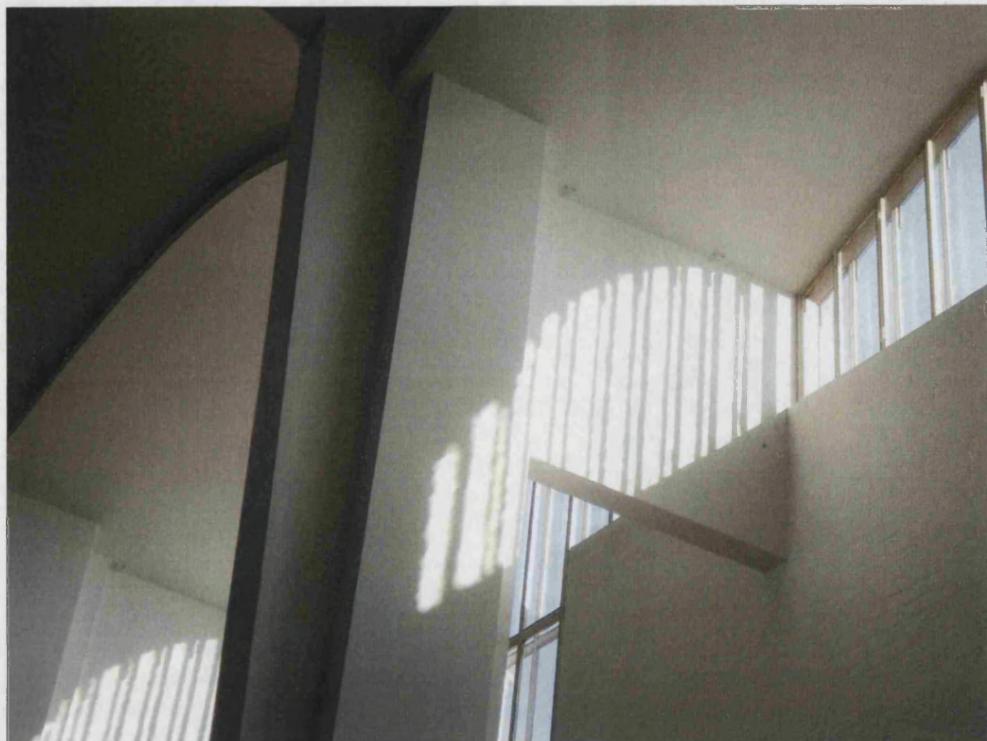


5.27b



5.27c

fig 5.28a,b Church pillars and vault



5.28a





fig 5.29 Poché between the aurora borealis wall and exterior wall in the Finnish Pavilion at the New York World's Fair 1939;
Model AAF



5.30a

fig 5.30a Town Hall council chamber section;
5.30b Council chamber 2007
AAF

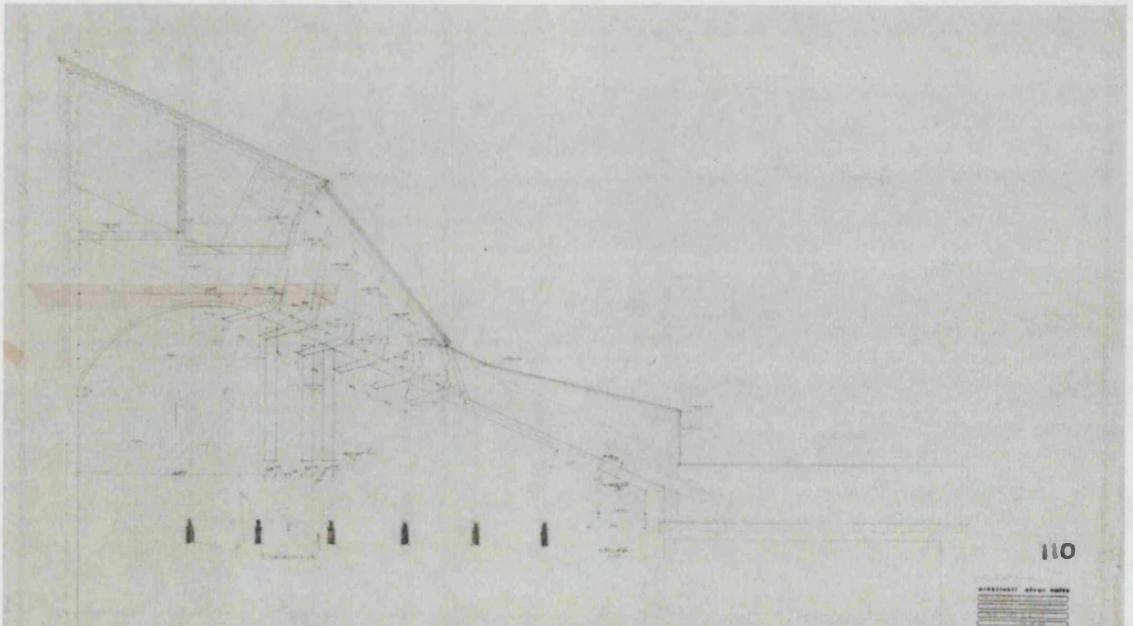


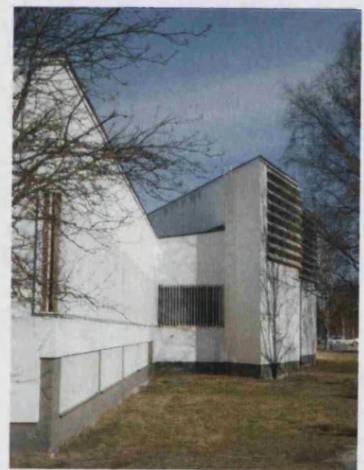
fig 5.31a,b,c Library louvres



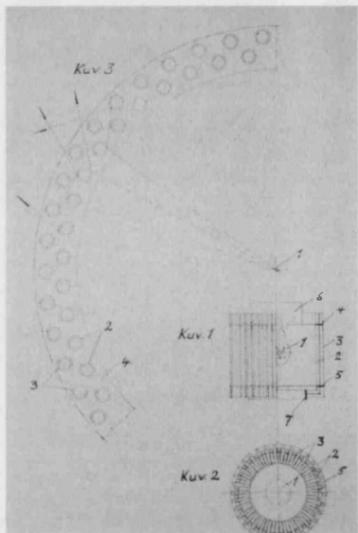
5.31a



5.31b



5.31c



5.32a



5.32b

fig 5.32a 'Brass rod' lamp patent drawing

AAF

5.32b Library control desk pendant lamp

5.33 Church pendant lamp drawing
AAF

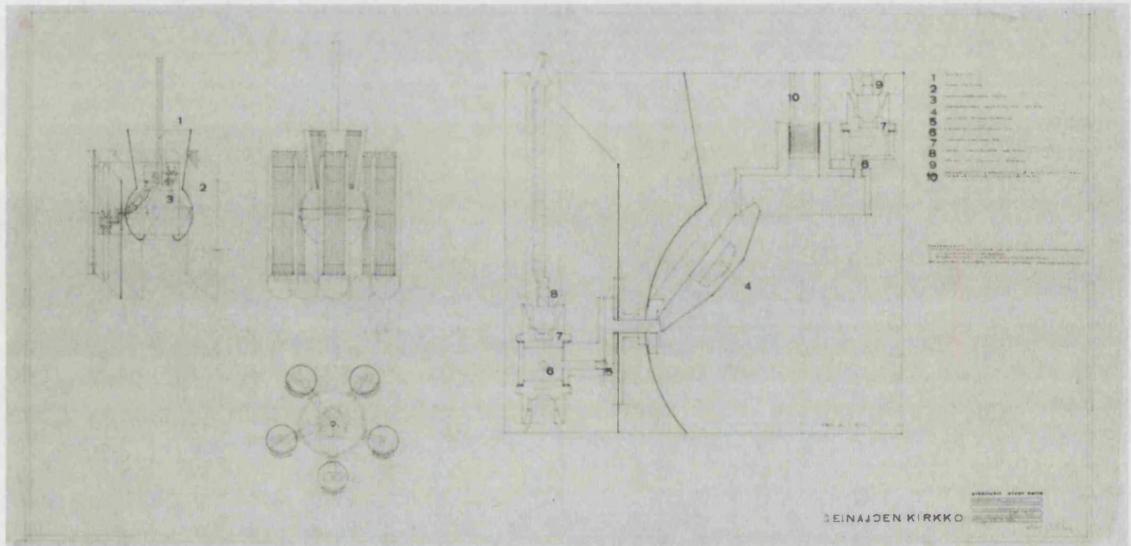
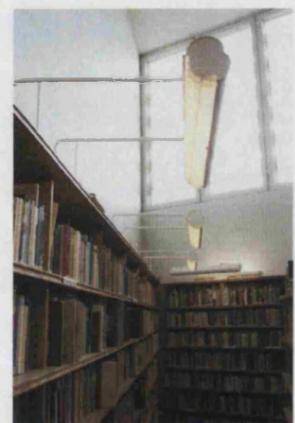


fig 5.34a,b,c Library reading room



5.34a



5.34b



5.34c

fig 5.35 Chapel



fig 5.36 Alvar and Elissa Aalto textiles;
Schildt (1993)





5.37a

fig 5.37a Town Hall civic garden terrace
5.37b Town Hall loggia staircase
5.37c Church basilica floor
5.37d Theatre floor



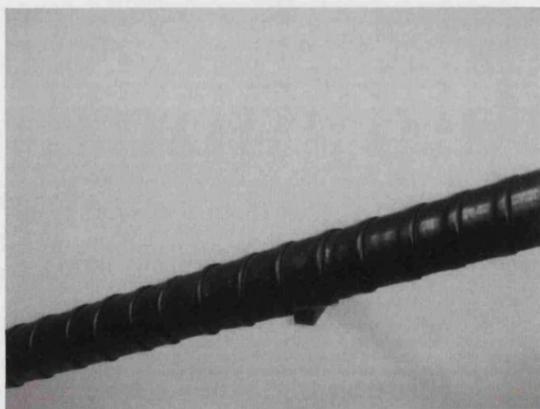
5.37b



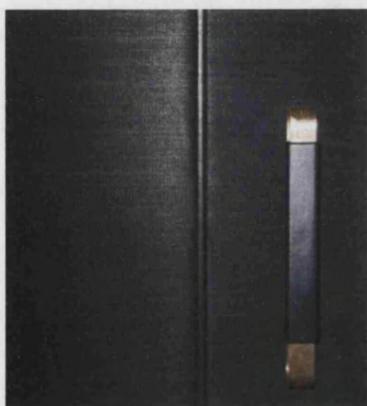
5.37c



5.37d



5.38a



5.38b

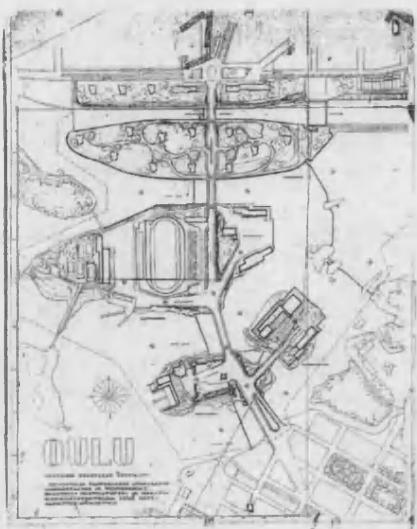
fig 5.38a Theatre staircase handrail
5.38b Theatre auditorium door



5.39a

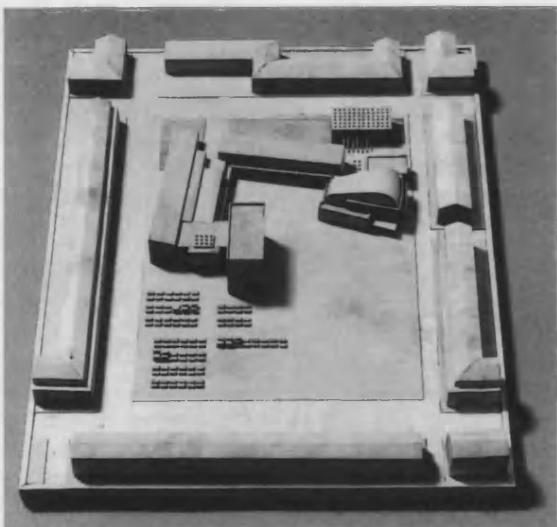


fig 5.39a Parish Centre entrance
5.39b Town Hall civic
garden doorhandles

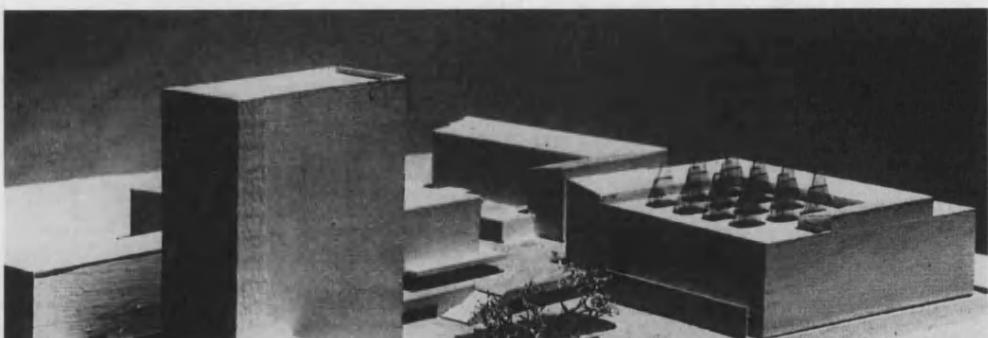


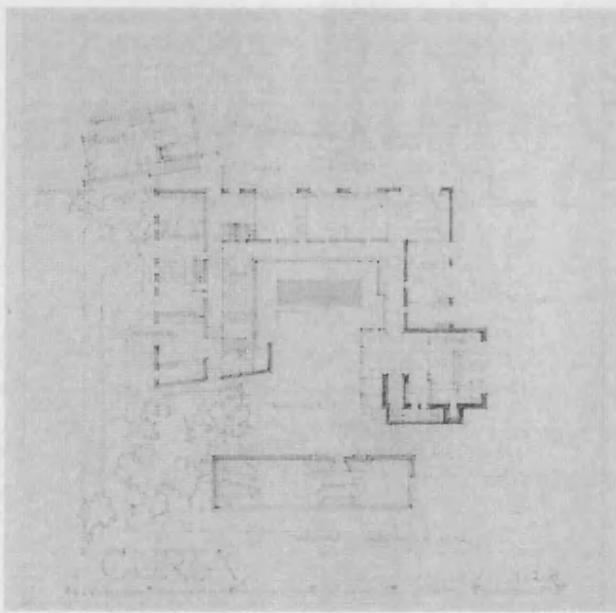
6.1a

fig 6.1a Oulu Rapids Centre 1943;
AAF
6.1b Avesta Town Centre 1944;
Reed (1998)
6.1c Forum Redivivum, Helsinki 1947;
Fleig (1963)

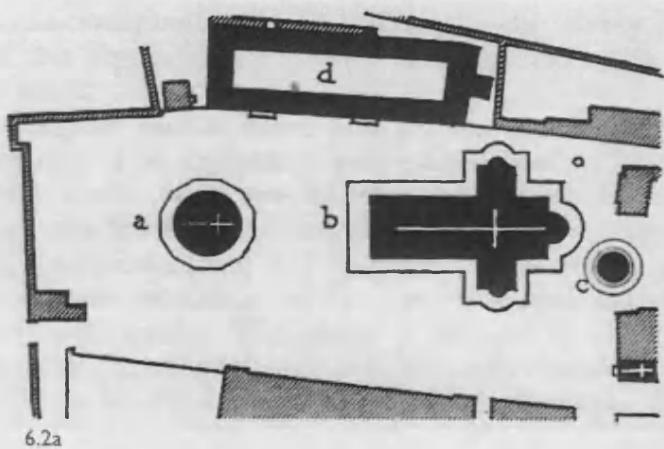


6.1b

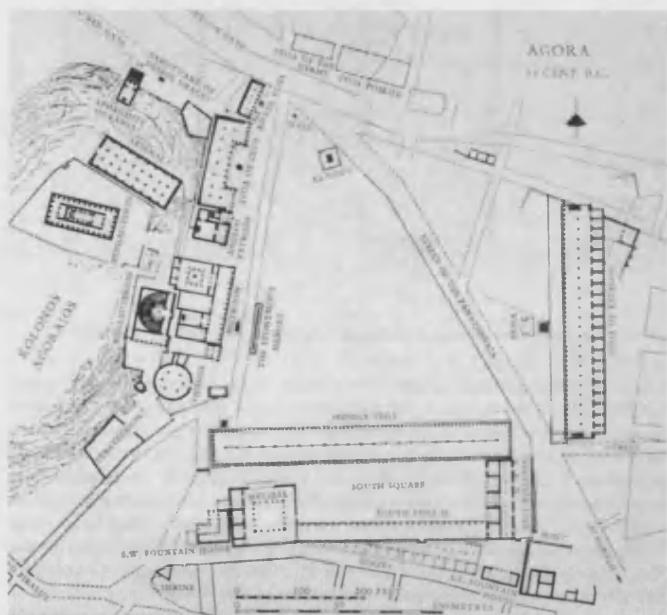




6.1d



6.2a



6.2b

fig 6.1d Curia 1st prize in Säynätsalo Town Hall competition 1949 plan; Reed (1998)

fig 6.2a Piazza del Duomo, Pisa;

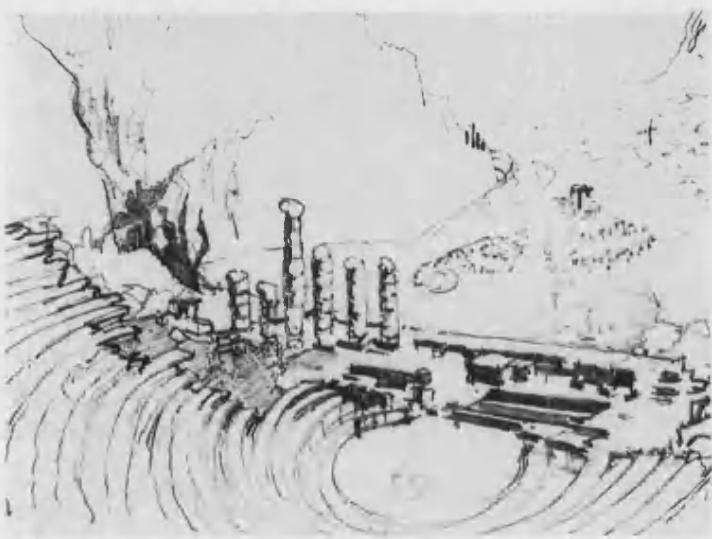
Sitte (1889)

6.2b Agora, Athens; unknown

fig 6.3a,b,c Alvar Aalto sketches
of Delphi 1953:
Schildt (1973)



6.3a



6.3b



6.3c



6.4a

fig 6.4a Theatre offices
6.4b State Offices west elevation
6.4c Town Hall office wing corridor



6.4b

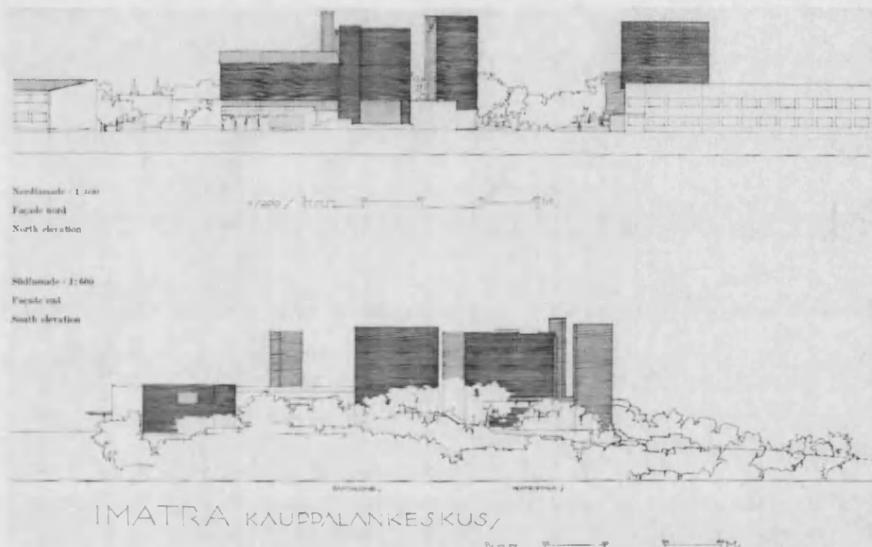


6.4c



6.5a

fig 6.5a Curia Model for Säynätsalo
Town Hall competition 1949;
Reed (1998)
6.5bc Imatra Town Hall elevations 1952
6.5bc Imatra Town Hall site plan 1952;
Neuenschwander (1954)



6.5b

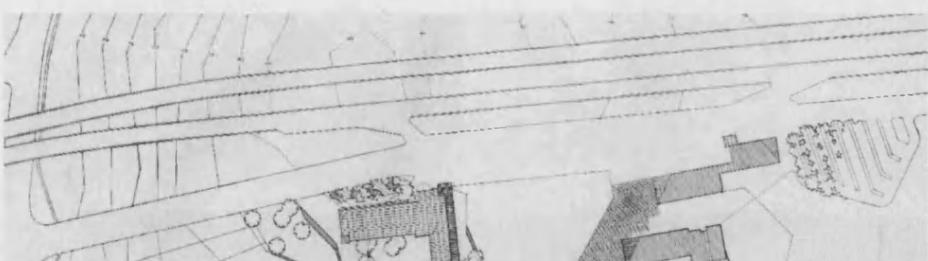


fig 6.6 Aerial view of Viipuri
Library and cathedral 1935;
MOMA (1938)

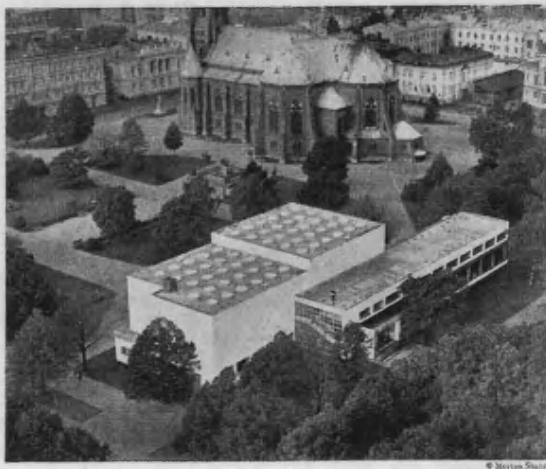
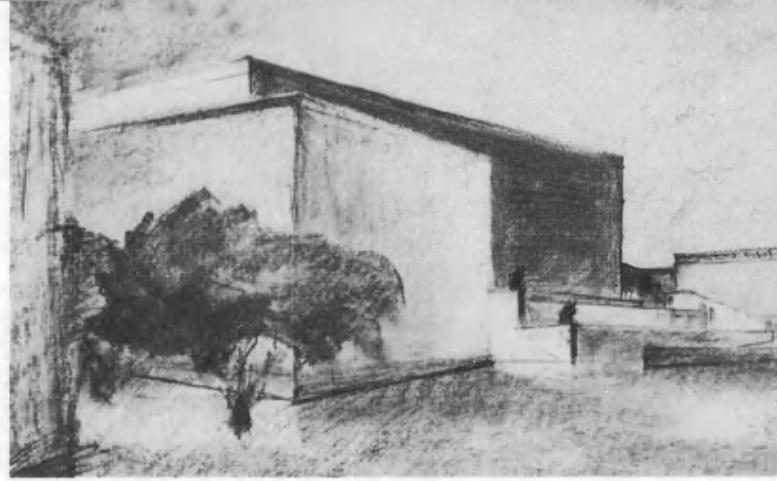


fig 6.7 Entry to Finnish Parliament
competition 1924;
Schildt (1984a)





6.8a

fig 6.8a Court entrance
6.8b Courtroom



6.8b



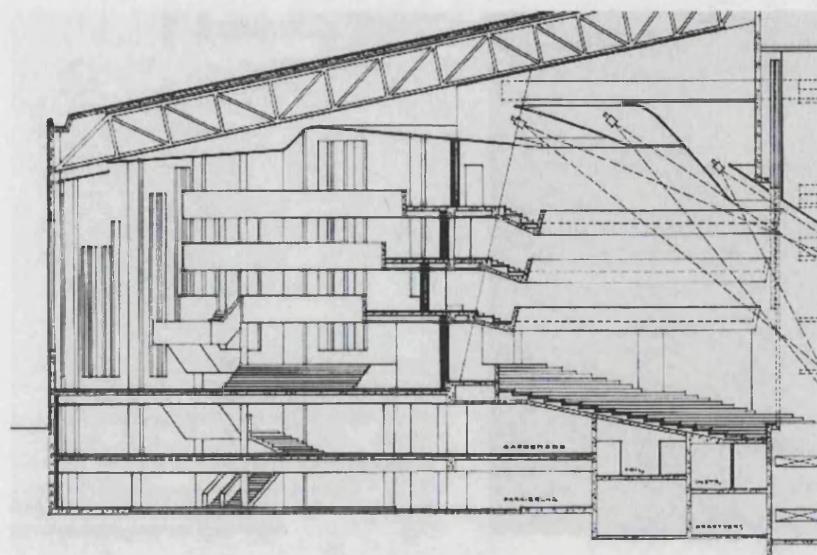
6.9a

fig 6.9a Seinäjoki Theatre garderobe
6.9b Finlandia Hall (1962-75) lobby



6.9b

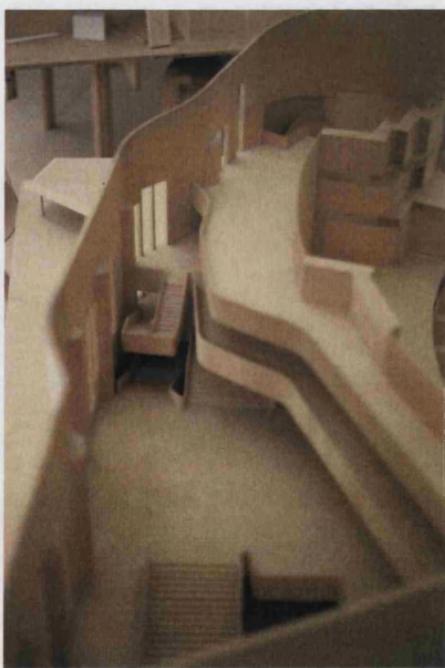
fig 6.10a Essen Opera House
section 1959-88;
Fleig (1963)
6.10b,c Essen Opera House
model;
AAF



6.10a



6.10b



6.10c

fig 6.11a,b Seinäjoki Church
west front and narthex
6.11c Petäjävesi Church
narthex 1763-5



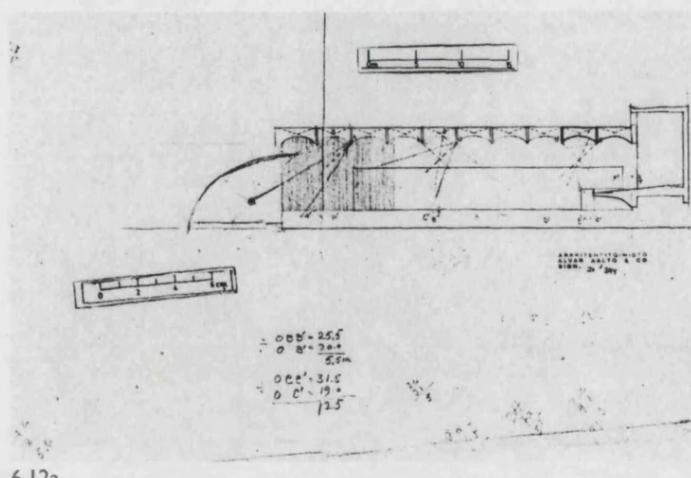
6.11a



6.11b



6.11c



6.12a

fig 6.12a Acoustic study for
Tehtaanpuisto church
competition 1929
6.12b Acoustic study for
Lahti church
competition 950
AAF



6.12b

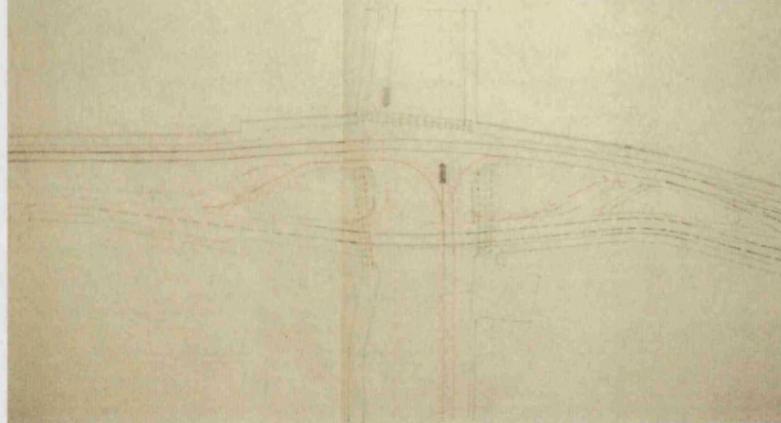
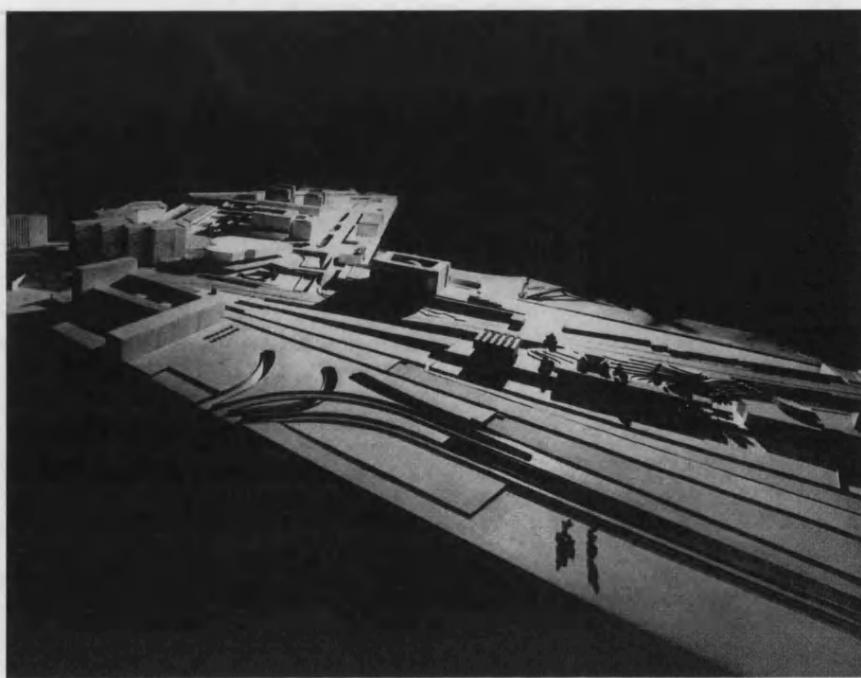


fig 6.13 Study for Koulukatu /
Kirkkokatu traffic junction in Seinäjoki
AAF

fig 6.14a,b Helsinki City Centre Plan
1959-81 Model;
Fleig (1971)



6.14a



6.14b

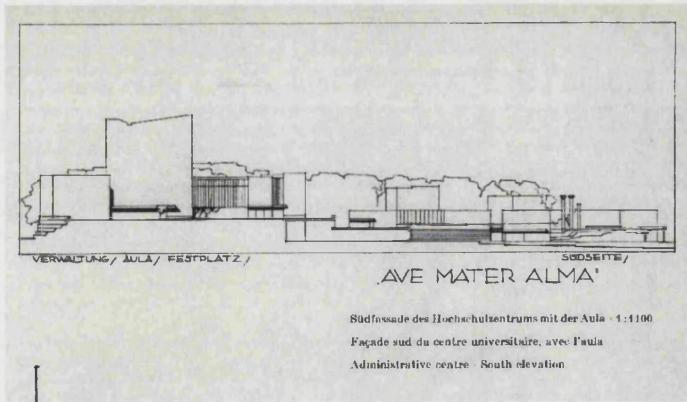


fig 6.15a *Ave Mater Alma, morituri te salutant*
1st prize in Helsinki Polytechnic
competition 1949;
Neuenschwander (1954)
6.15b,c,d Helsinki Polytechnic
auditorium completed 1964

6.15a

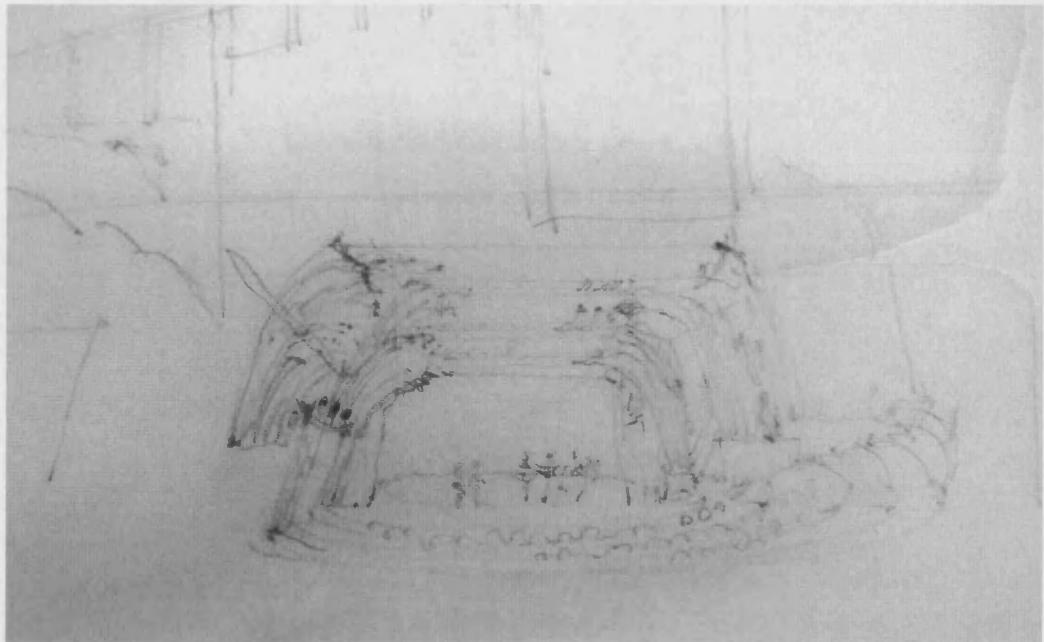


6.15b

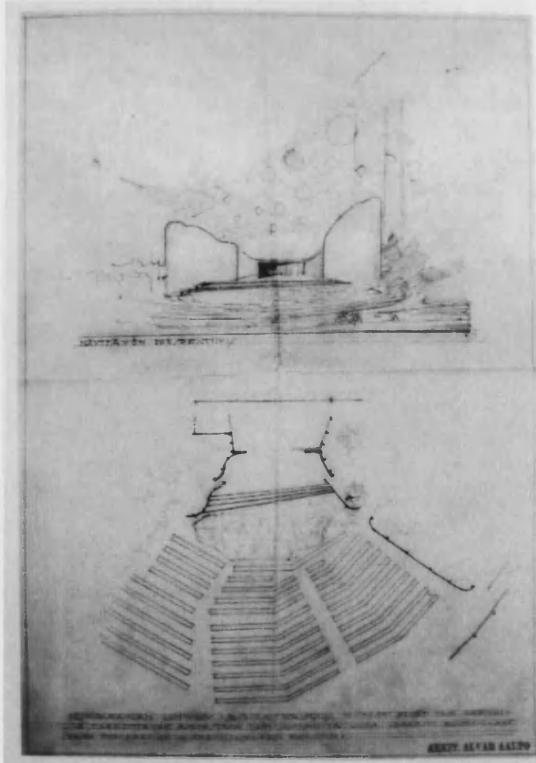


fig 6.16a Seinäjoki Theatre
auditorium sketch;
AAF

6.16b Open-Air theatre Alppila 1935;
Renja Suominen-Kokkonen (2006)



6.16a



6.16b



fig 6.17 Muurame Church
south transept 1926-9

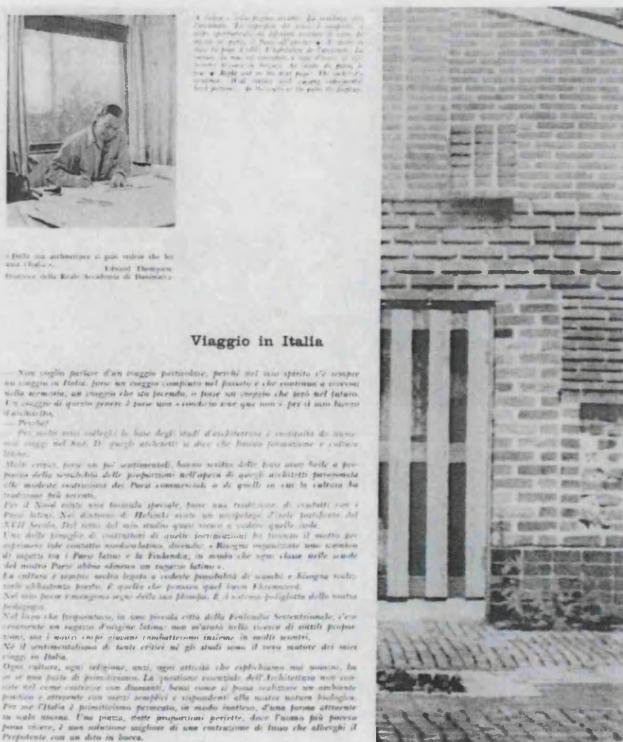
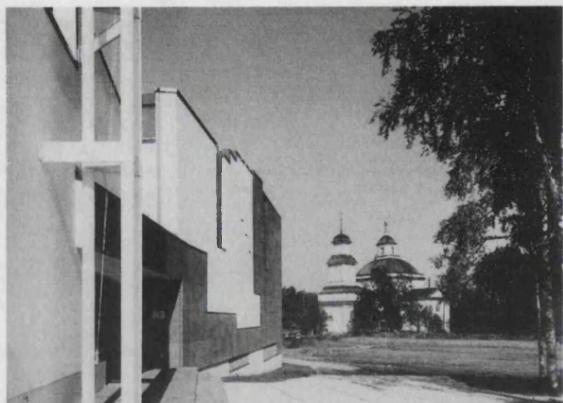


fig 6.18 Alvar Aalto Viaggio in Italia;
Casabella-continuata 200 1954

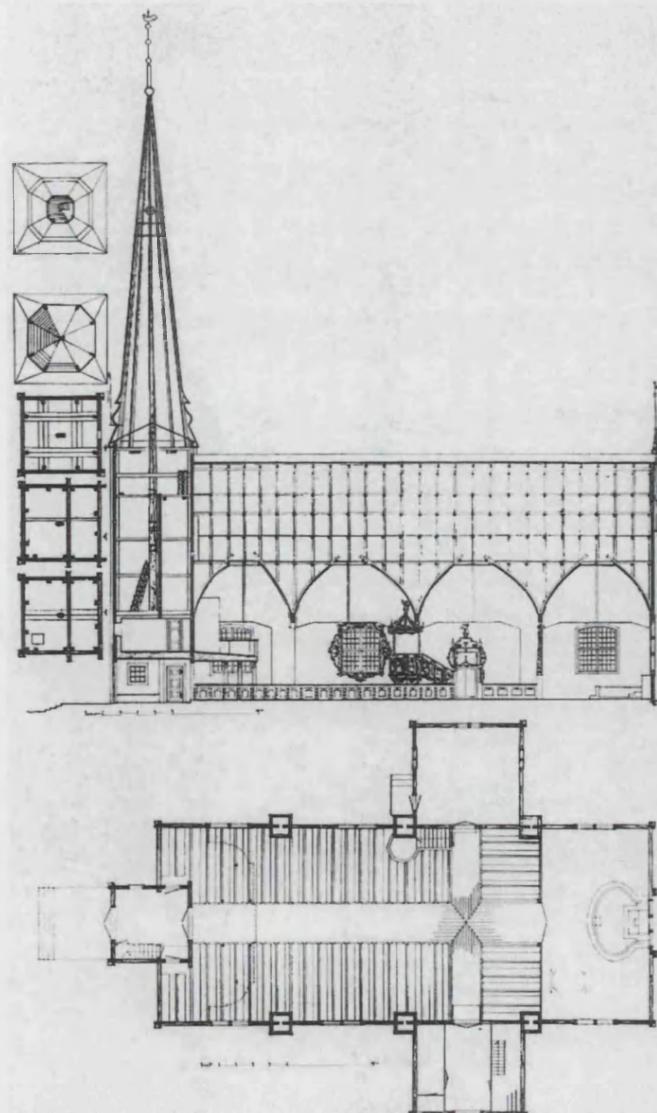


6.19a

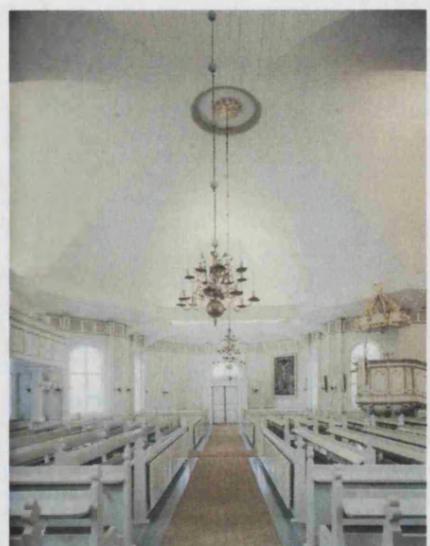


6.19b

fig 6.19a Alvar Aalto painting of Alajärvi Church 1919;
Schildt (1984a)
6.19b Alajärvi Town Hall 1965-9;
Schildt (1989a)



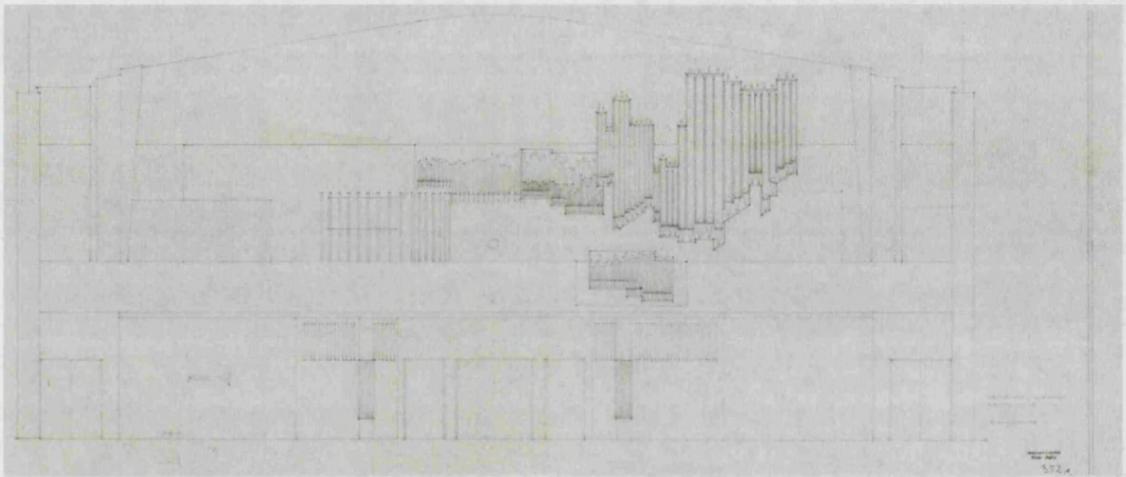
6.20a



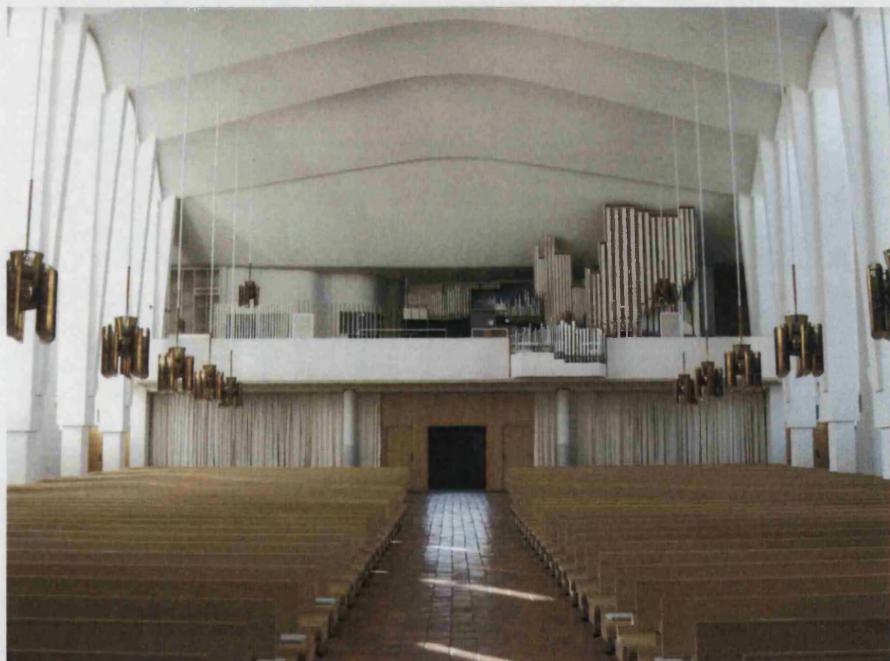
6.20b

fig 6.20a Tornio Church 1684-6
6.20b Vörå Church 1626 onwards;
Pettersson (1989)

fig 6.21a Study of Seinäjoki Church
organ loft;
AAF
6.21b Seinäjoki Church organ loft



6.21a

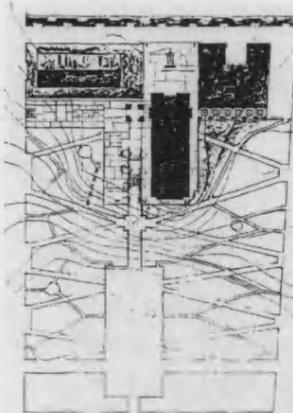


6.21b



6.22a

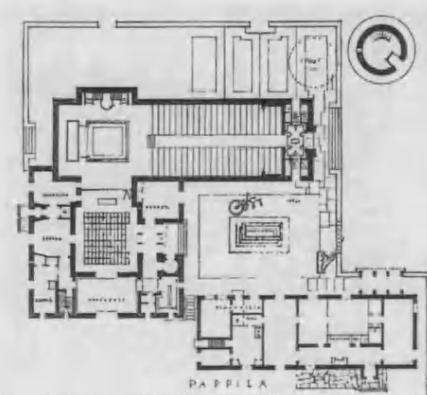
fig 6.22a Competition entry for
Jämsä Church 1925
6.22b Competition entry for
Töölö Church, Helsinki 1927
6.22c Study for Viinikka Church,
Tampere 1927
6.22d Competition entry for
Viinikka Church 1927;
AAF



6.22b



6.22c



6.22d

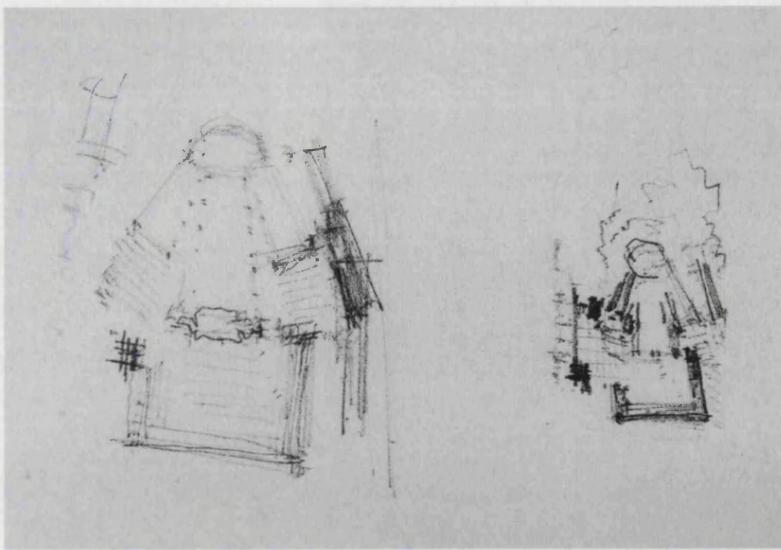
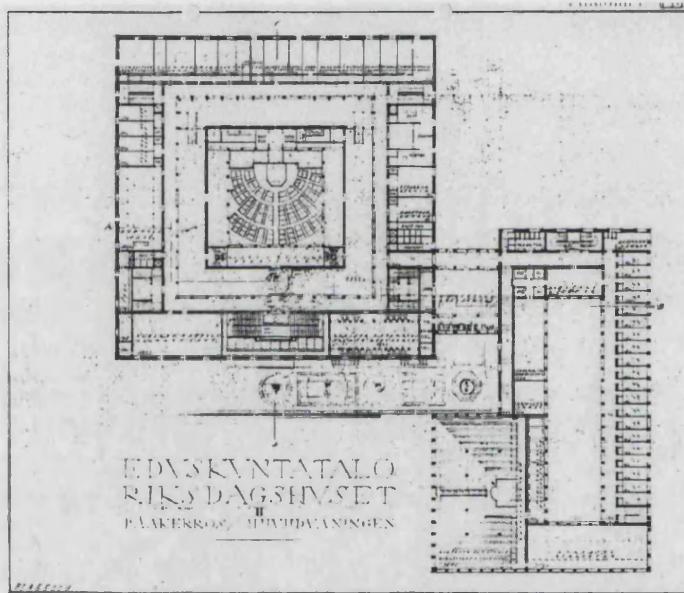


fig 6.23 Sketch tripartite 'fan'
plan for Seinäjoki Church;
AAF



6.24a

fig 6.24a Entry for the Finnish
Parliament competition 1924;
AAF

6.24b Jyväskylä Institute of
Pedagogics,
model classroom 1951



6.24b

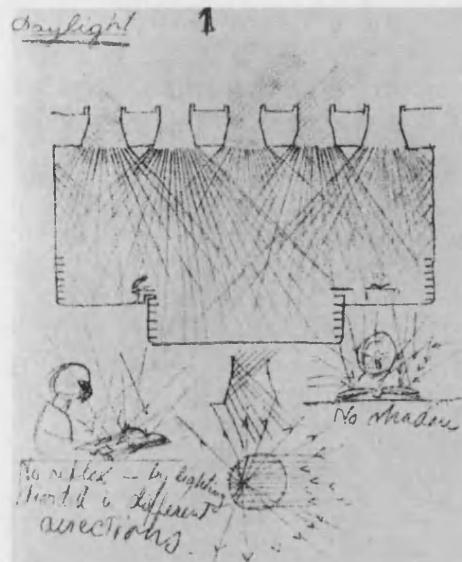
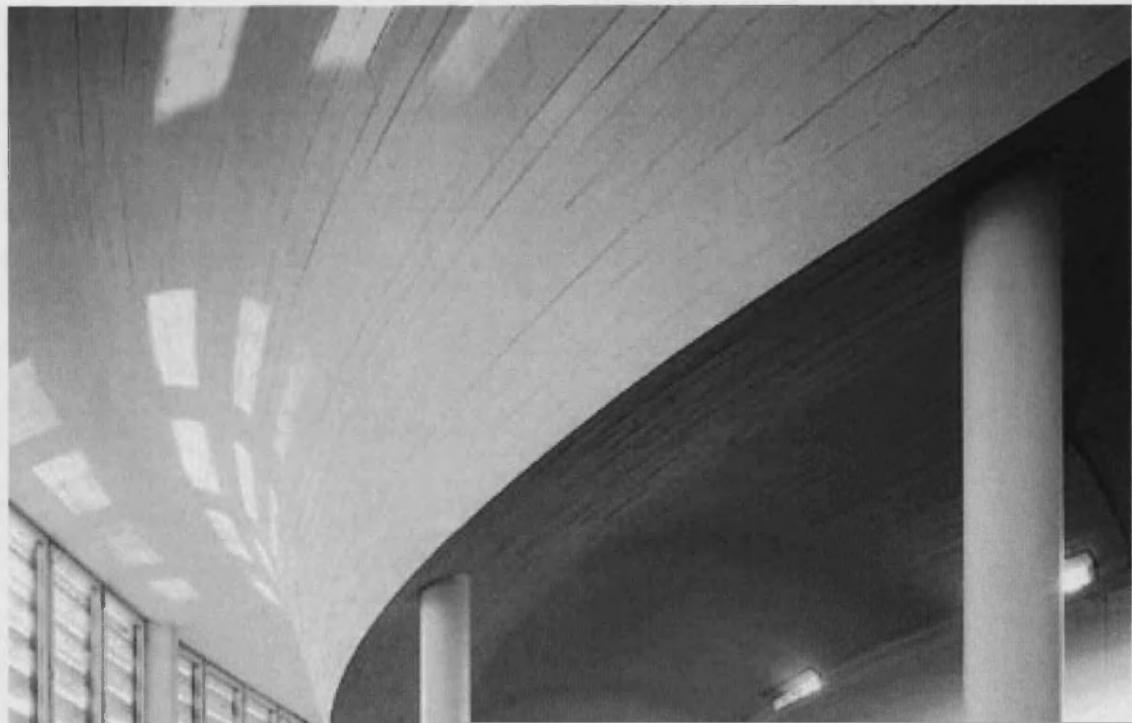
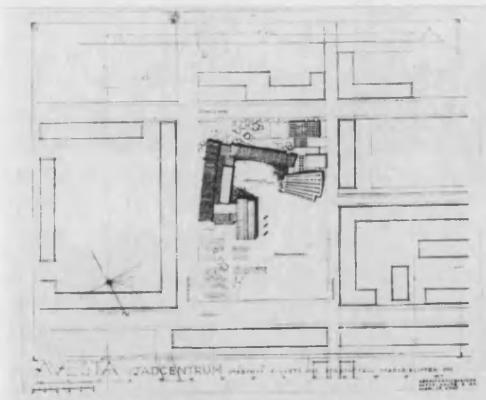


fig 6.25 Alvar Aalto concept sketch of Viipuri Library 1927-35- note English text indicating it was done after the event, not before; Fleig (1963)

fig 6.26 Seinäjoki Library reading room vault





7.1a



7.1b



7.1c

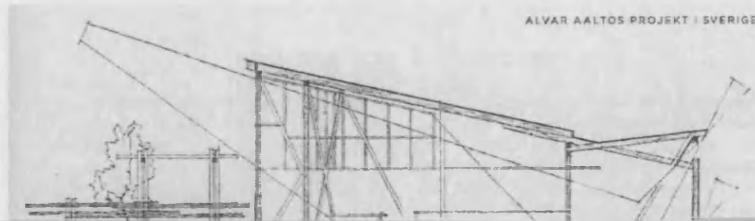
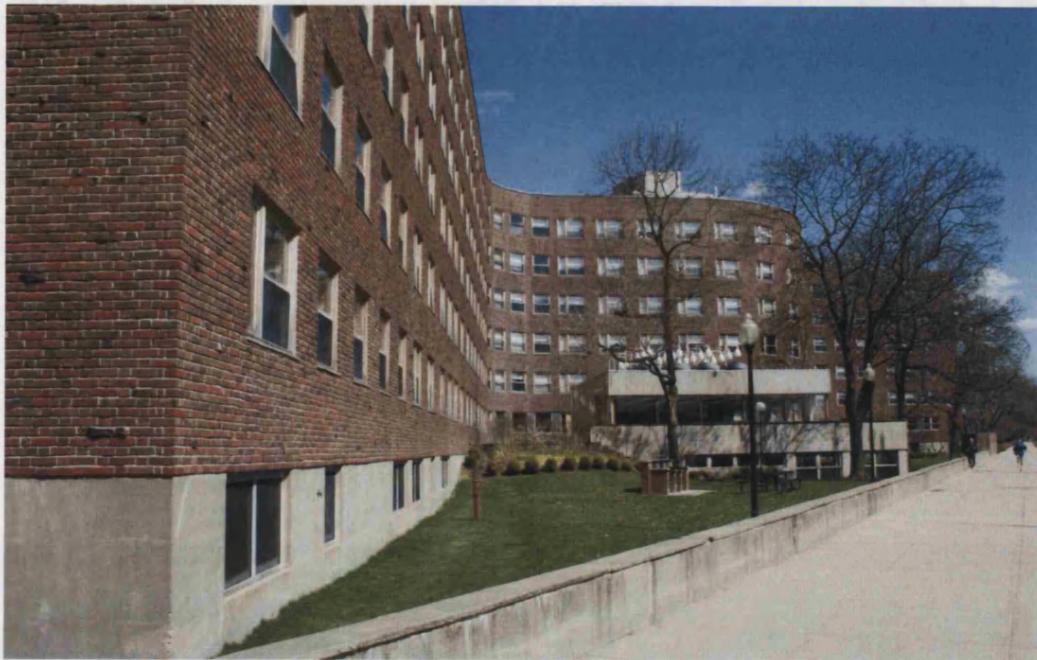


fig 7.1a Avesta Town Centre 1943-4;
AAF
7.1b Johnson Institute, Avesta 1944;
7.1c Nymnäshamn Housing 1946
7.2a Hedemora 500 Pavilion 1947
Rudberg (2005)

fig 7.2a Baker House Dormitory,
MIT 1946-9
7.2b Hedemora 500 Pavilion 1947;
Schildt (1989a)



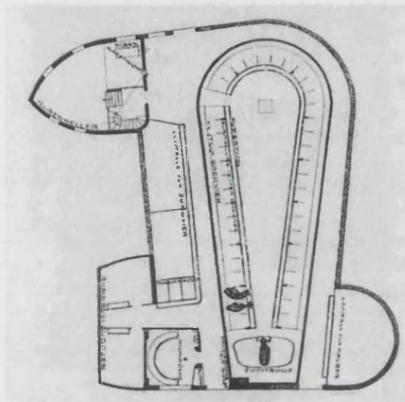
7.2a





7.3a

fig 7.3a,b Hugo Häring:
Gut Garkau farm 1924-5;
unknown

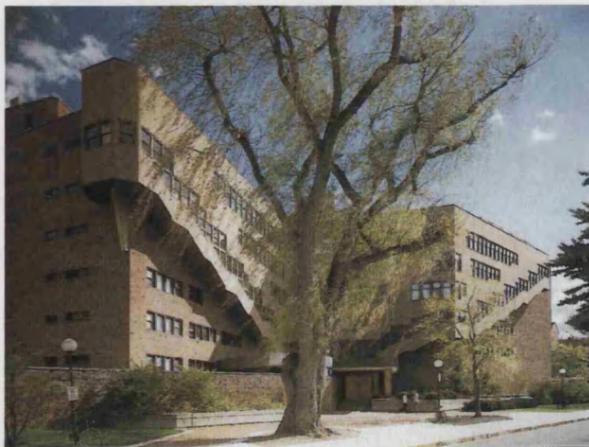


7.3b

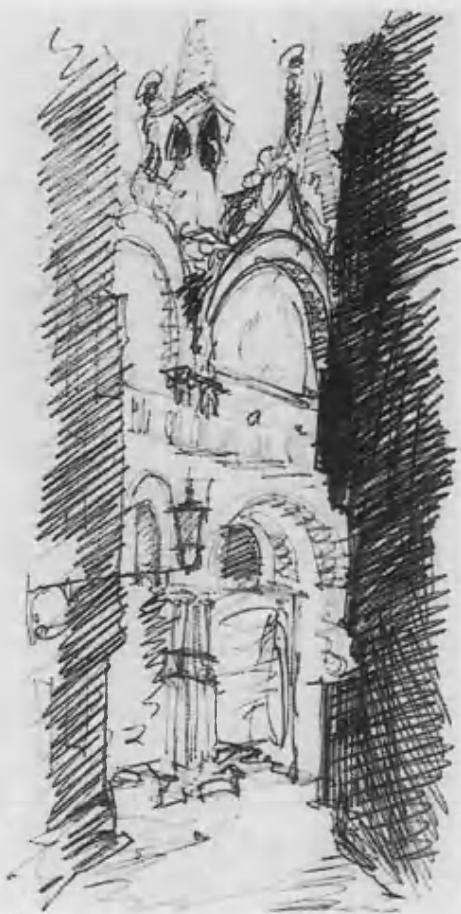


7.4a

fig 7.4a Aino Marsio-Aalto photograph
of Piazza Vecchia, Bergamo 1947;
Schildt (1989a)
7.4b Baker House Dormitory,
MIT 1946-9;
Reed (1998)



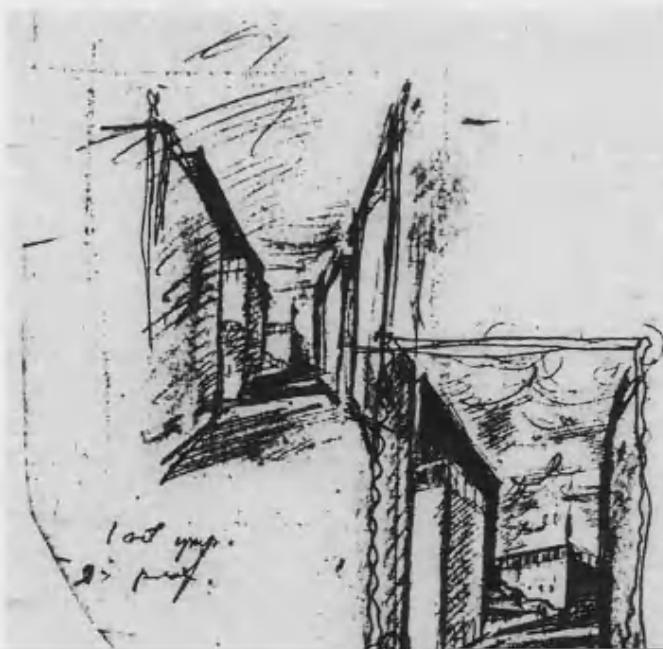
7.4b



7.5a

fig 7.5a Alvar Aalto sketch of St. Mark's
Venice from the Mercerie 1924;
Schildt (1998)

7.5b Sketch view of approach to the
Finnish Parliament entry 1924.
This view would not have been possible





7.6a

fig 7.6a Villa Mairea (1936-9)
7.6b,c Säynätsalo Town Hall
unknown



fig 7.7 László Moholy-Nagy
Licht-Raum-Modulator 1922-30;
Van Abbe Museum, Eindhoven

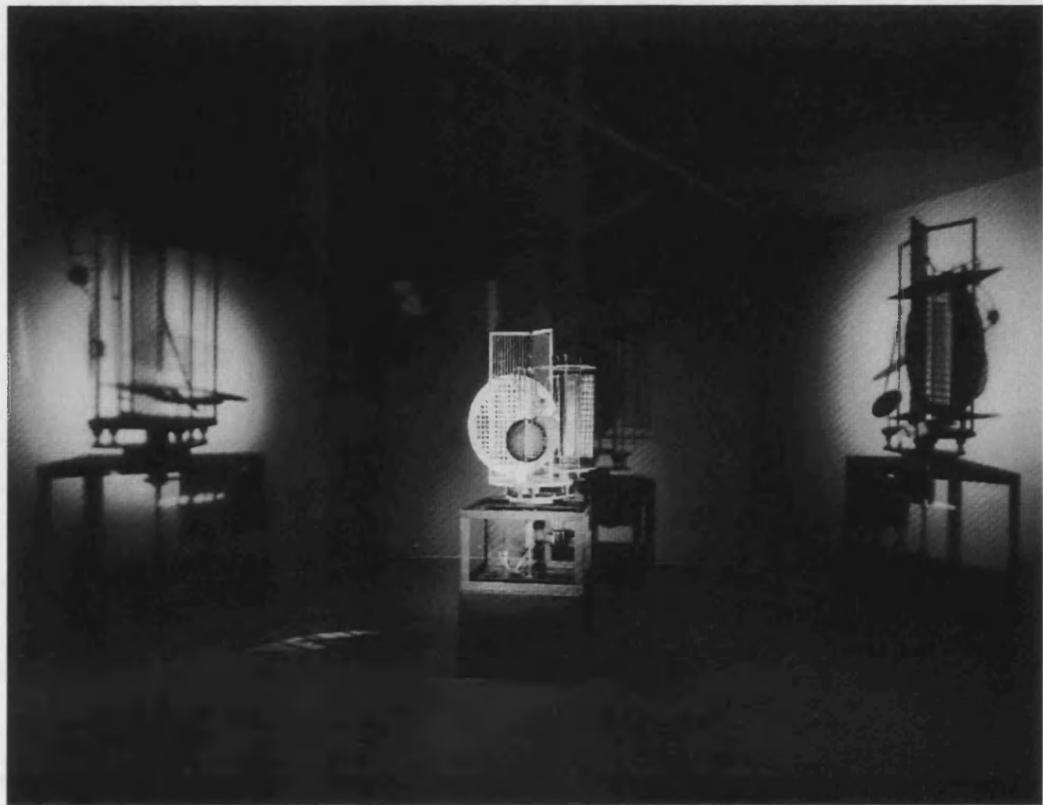


fig 7.8 Hugo Hamilkar Hackstedt:
Repeater rifle 1867;
Schildt (1984a)





fig 7.9 Herbert Read
Art and Industry 1934;
Kinross (1988)

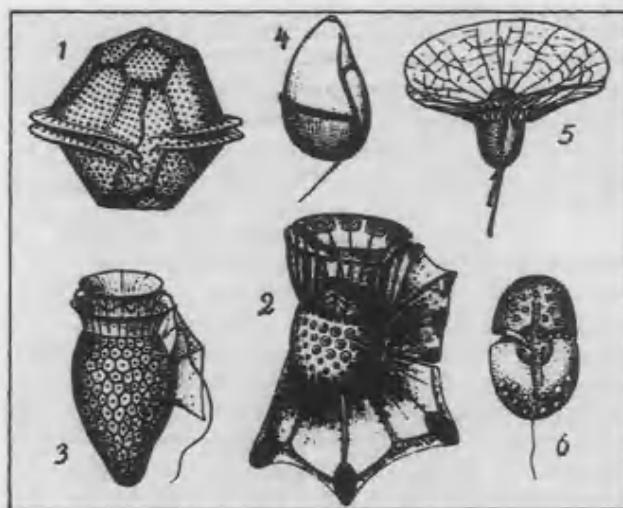


fig 7.10 Raoul Francé
The Plants as Inventors 1920;
Findeli (1990)

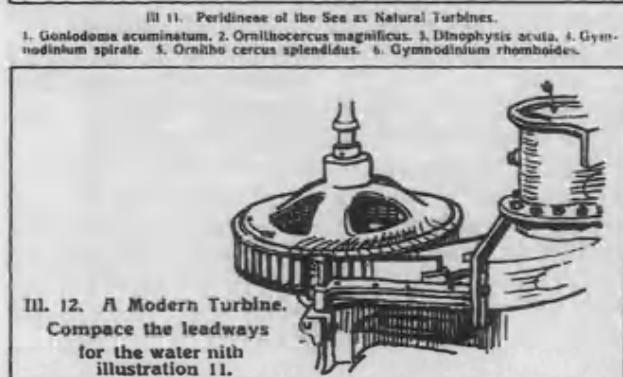


fig 7.11 'Alternative' designs for Baker House Dormitory, MIT 1946-9;
Reed (1998)

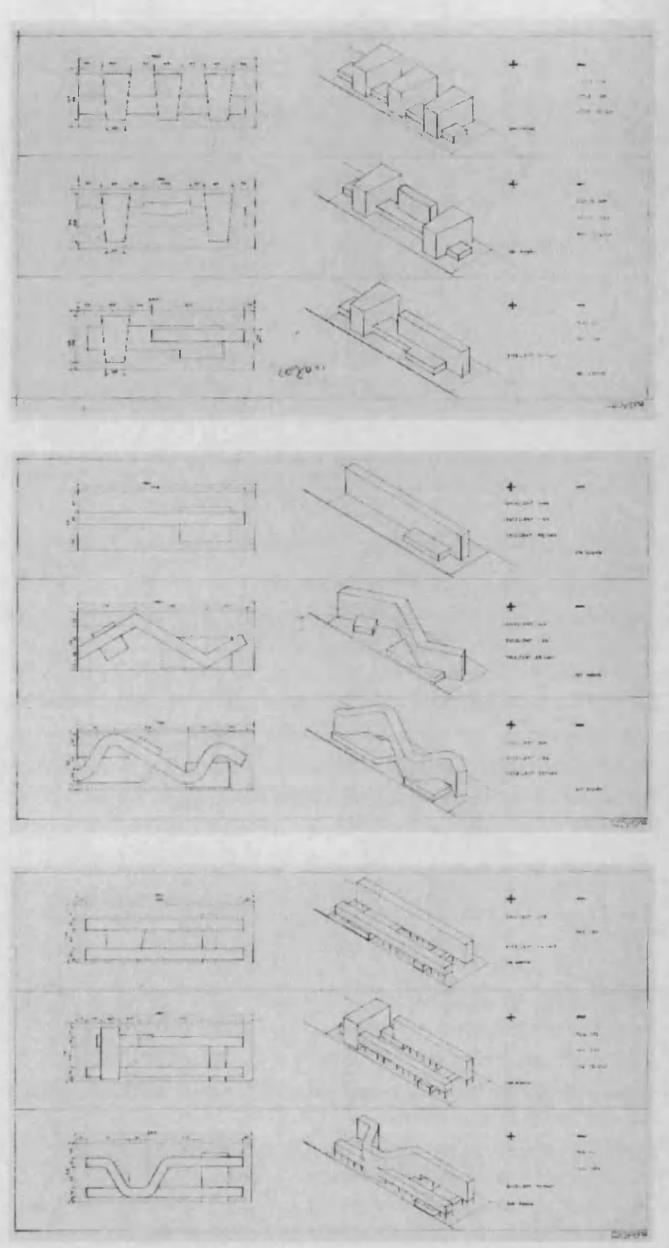


fig 7.12a Alvar Aalto sketches for
House of Culture, Helsinki 1955-8;
AAF

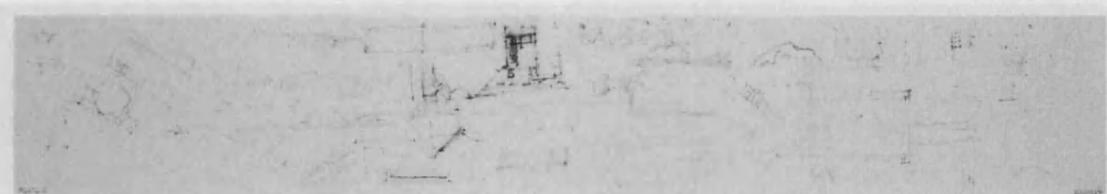


fig 7.12b Alvar Aalto sketches for
Seinäjoki Church, probably 1951;
AAF

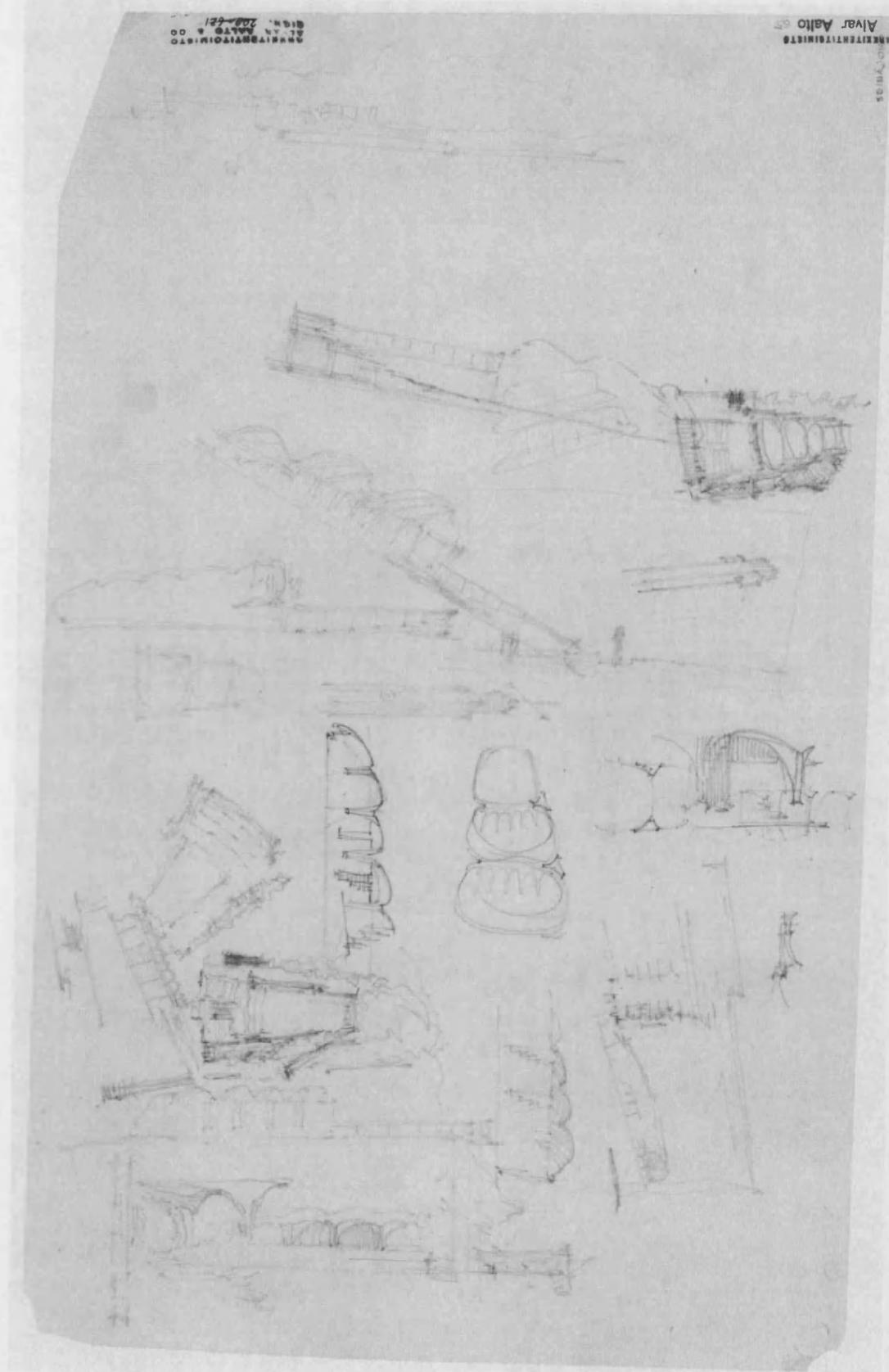


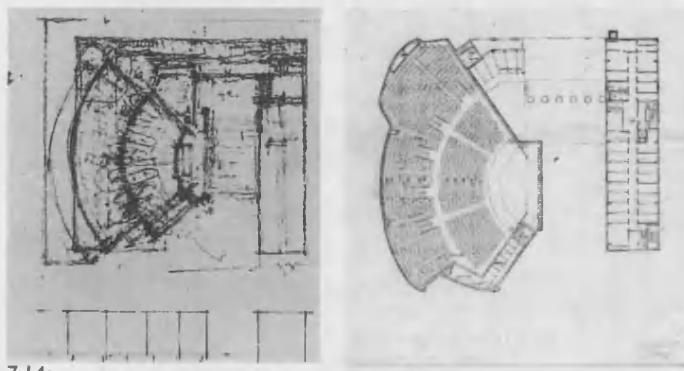
fig 7.13a,b House of Culture, Helsinki 1955-8;
Charrington (1998)



7.13a



7.13b



7.14a

7.14b

fig 7.14a House of Culture sketch plan
Helsinki 1952;
AAF

7.14b House of Culture plan
as built 1958;
AAF

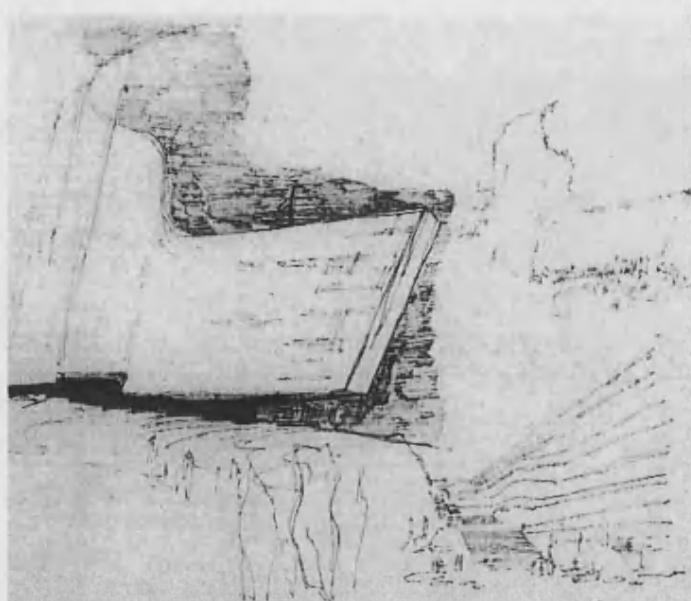
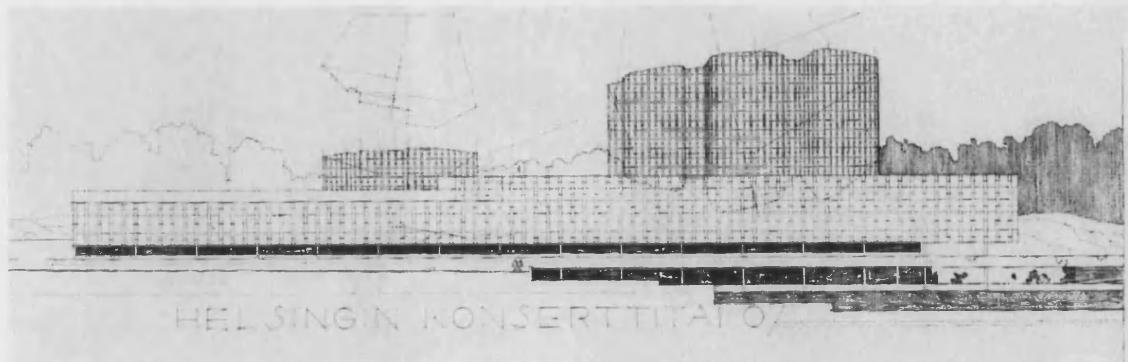
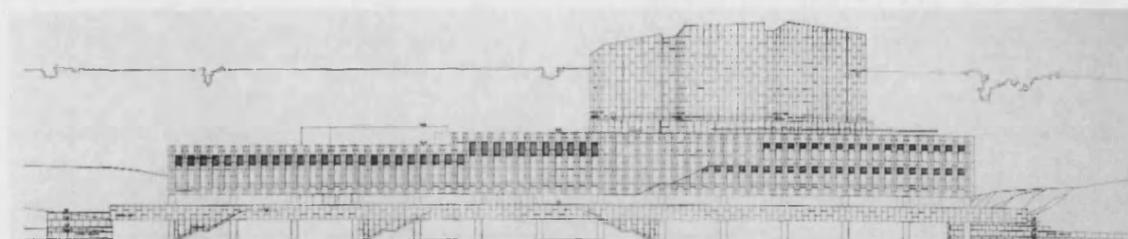


fig 7.15 Alvar Aalto with Wallace
Harrison: Lincoln Center,
New York 1956;
AAF

fig 7.16a Finlandia Hall, Helsinki 1962-75;
Fleig (1963)
7.16b Finlandia Hall;
Fleig (1971)
7.16c Finlandia Hall elevation;
Fleig (1978)

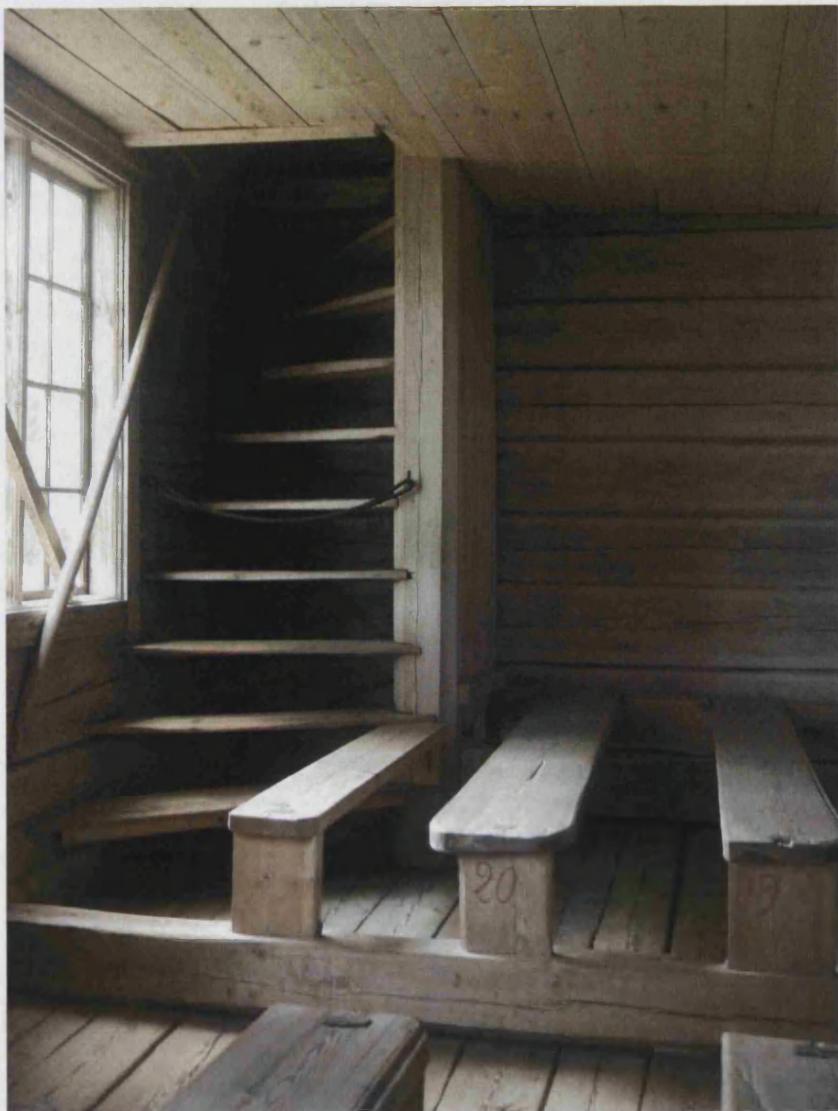


7.16a



7.16b





7.17a

fig 7.17a Petäjävesi Church
1765
7.17b,c Niemilä farmstead



7.17b

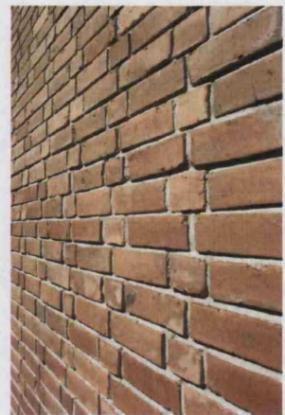


7.17c

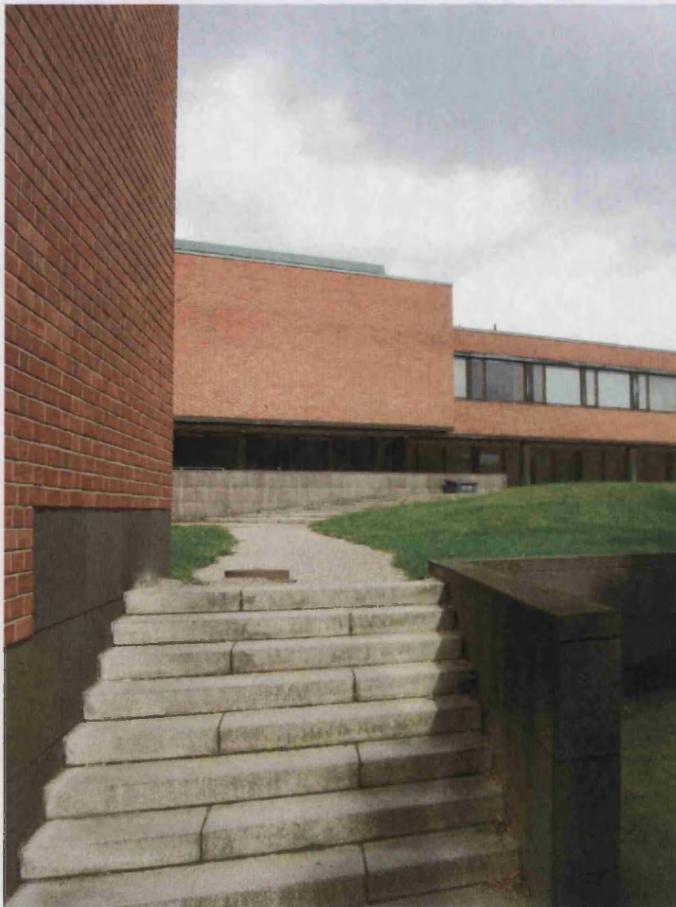


7.18a

fig 7.18a,b Säynätsalo Town Hall 1949-52
7.18c Helsinki Polytechnic 1947-64



7.18b



7.18c

fig 7.19 Pages from László Moholy-Nagy
Von Material zu Architektur 1930

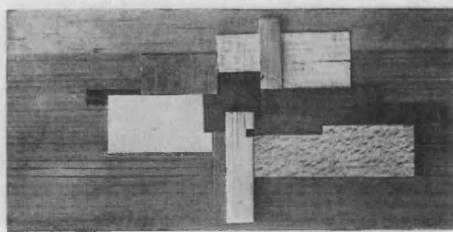


abb. 43 klawun (bauhaus, 1. semester 1924):
 studie verschiedenes holzarten.
 hier versuchen die drei begriffe: struktur, textur, saktion.

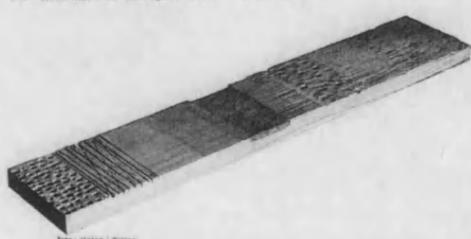
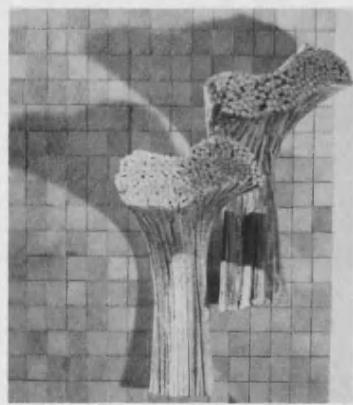


abb. 44 vere myers-waldeck (bauhaus, 1. semester 1929):
 fakturholz. holz mit verschiedenen werkzeugen bearbeitet.
 (diese aufgabe ist ähnlich groß wie bei abb. 43.)

61

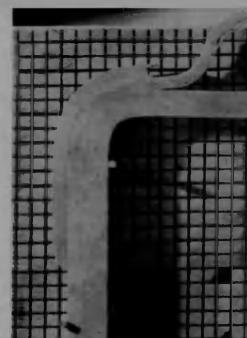
fig 7.20a,b,c Aalto:Wood reliefs 1930s
 Fleig (1970)



7.20b



7.20a



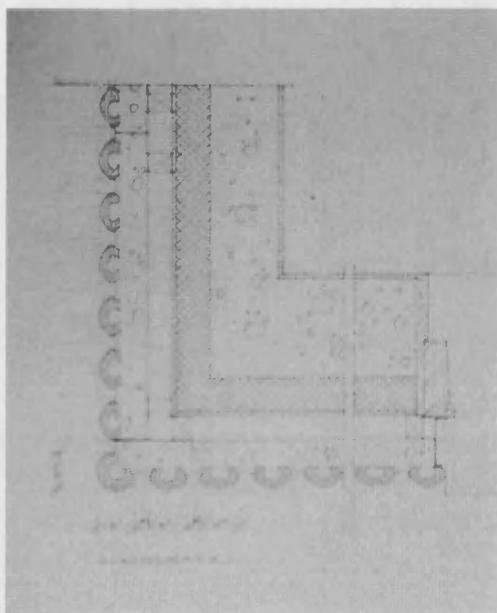


7.21a

fig 7.21a Otto Korhonen's factory and employees in Turku, early 1930s;
Simpanen (1998)
7.21b Jig for 'bent knee' joint



7.21b



7.22a

fig 7.22a Production drawing of
Seinäjoki Town Hall ceramic sticks;
AAF
7.22b Detail of Town Hall



7.22b

fig 7.23a House of Culture bricks;
7.23b House of Culture
cinema foyer;
Charrington (1998)

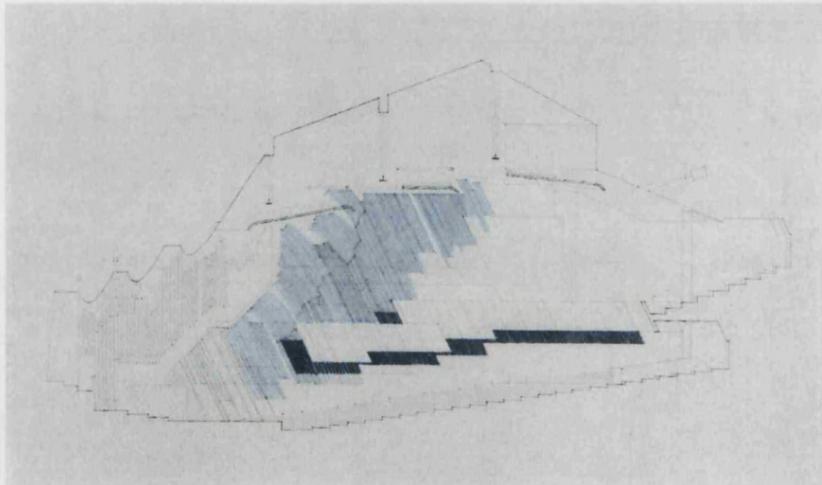


7.23a

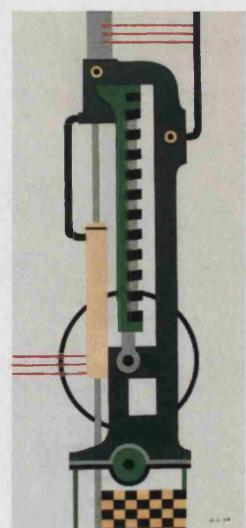


7.23b

fig 7.24a Otto Carlsund Grön maskinist 1926;
Norrköpings Konstmuseum
7.24b Finlandia Hall 1962-75
auditorium section;
Fleig (1970)



7.24b



7.24a



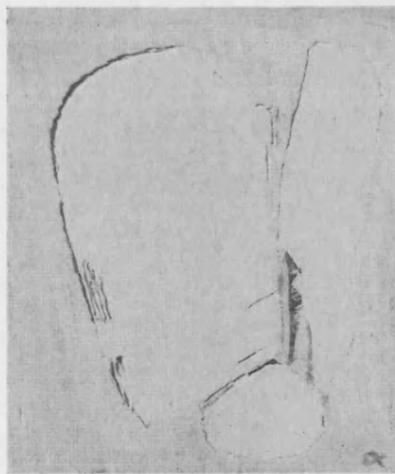
7.25a

fig 7.25a Tyko Sallinen
Summer Night 1918;
Pohjanmaa Museo
7.25b Alvar Aalto
untitled 1946;
Fleig (1970)
7.25c Alvar Aalto
Ploughed Black Field 1945;
Schildt (1994)



7.25b





7.26a

fig 7.26a Alvar Aalto
untitled 1949;
Fleig (1970)
7.26b Alvar Aalto
untitled 1949;
Schildt (1994)



7.26b



7.27a

fig 7.27a Alvar Aalto
untitled 1969

7.27b Alvar Aalto
untitled 1947;
Schildt (1994)

7.27c Alvar Aalto
untitled 1949;
Fleig (1970)



7.27b



7.27c

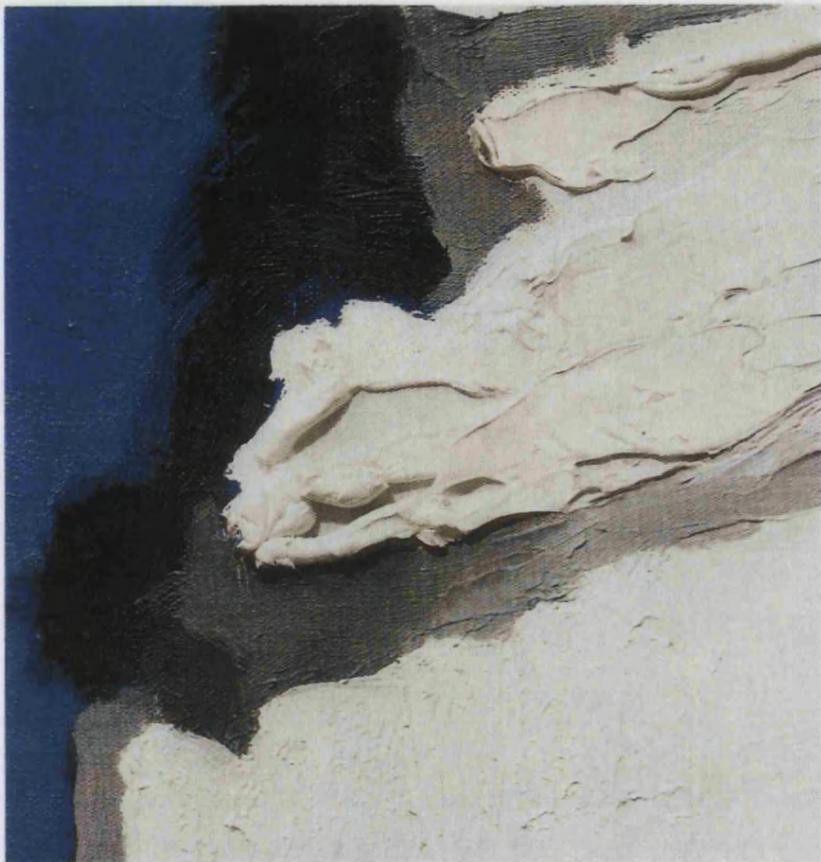
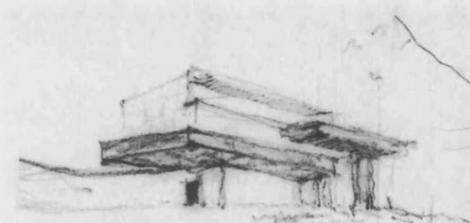
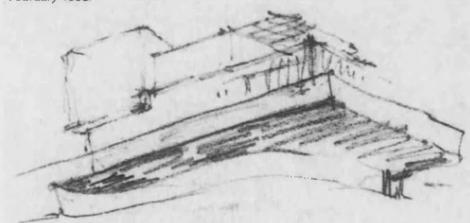


fig 7.28 Alvar Aalto
untitled 1947 - detail;
Fleig (1970)



167 and 168. Sketches for the
Villa Mairea showing suspended
balconies above a free-form
basement storey, probably from
February 1938.



169. Sketch for the Mairea hall
perspective showing free-form
studio wall.

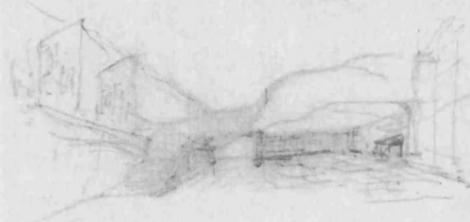
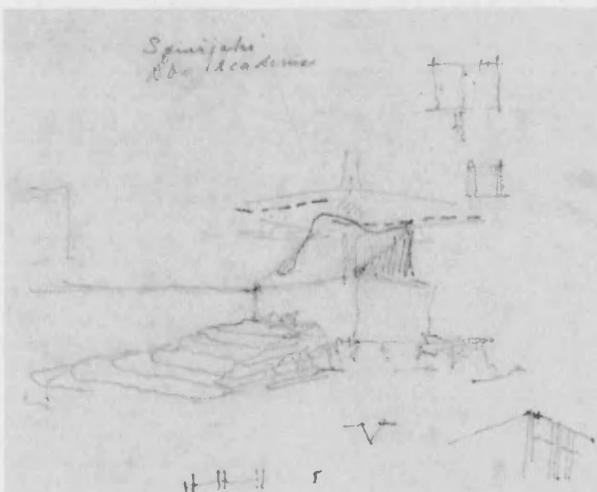
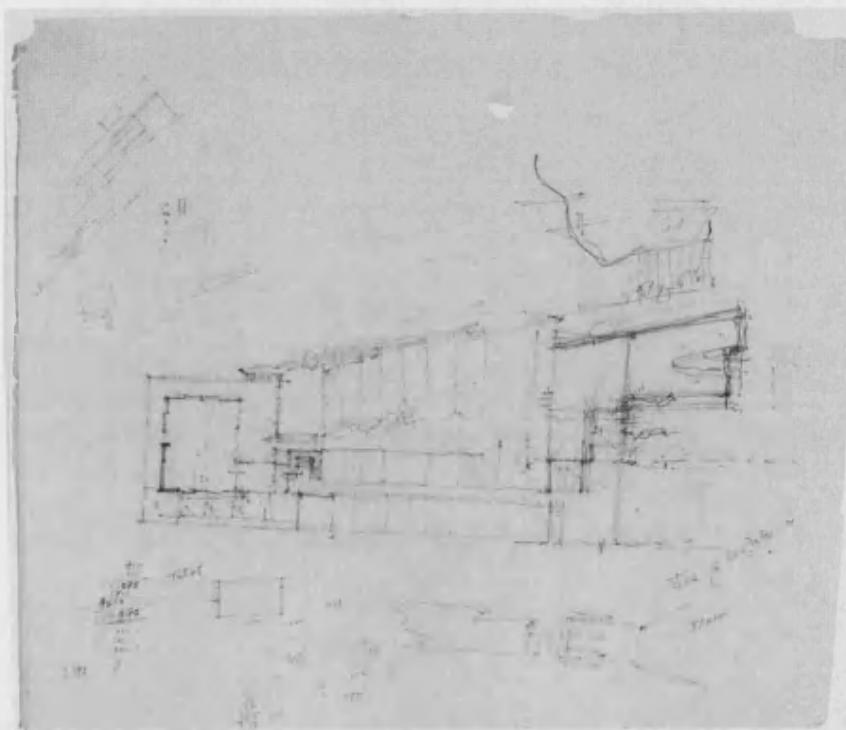


fig 7.29 Sketches for Villa Mairea 1936-9;
Schildt (1984b)

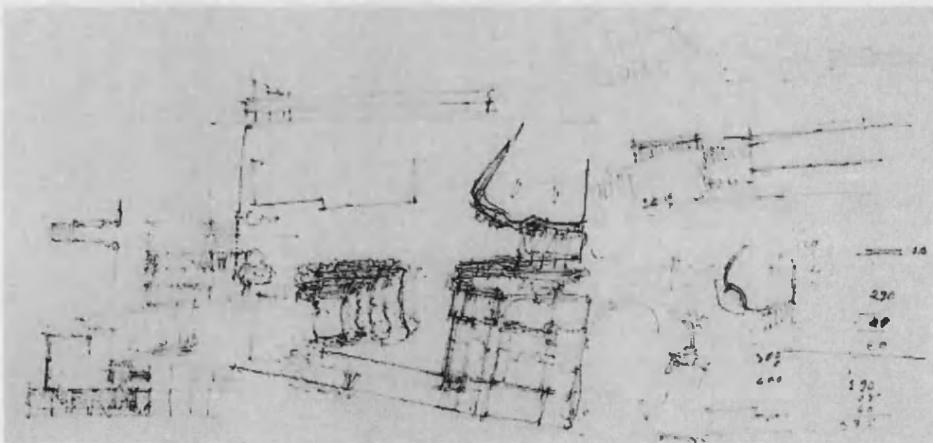
fig 7.30a,b,c Sketches of Seinäjoki Town Hall and Inner Square;
AAF



7.30a

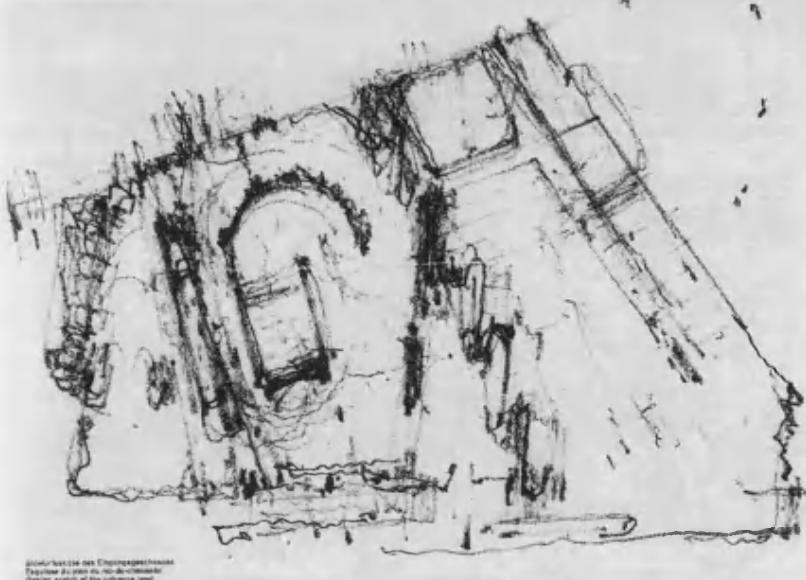


7.30b



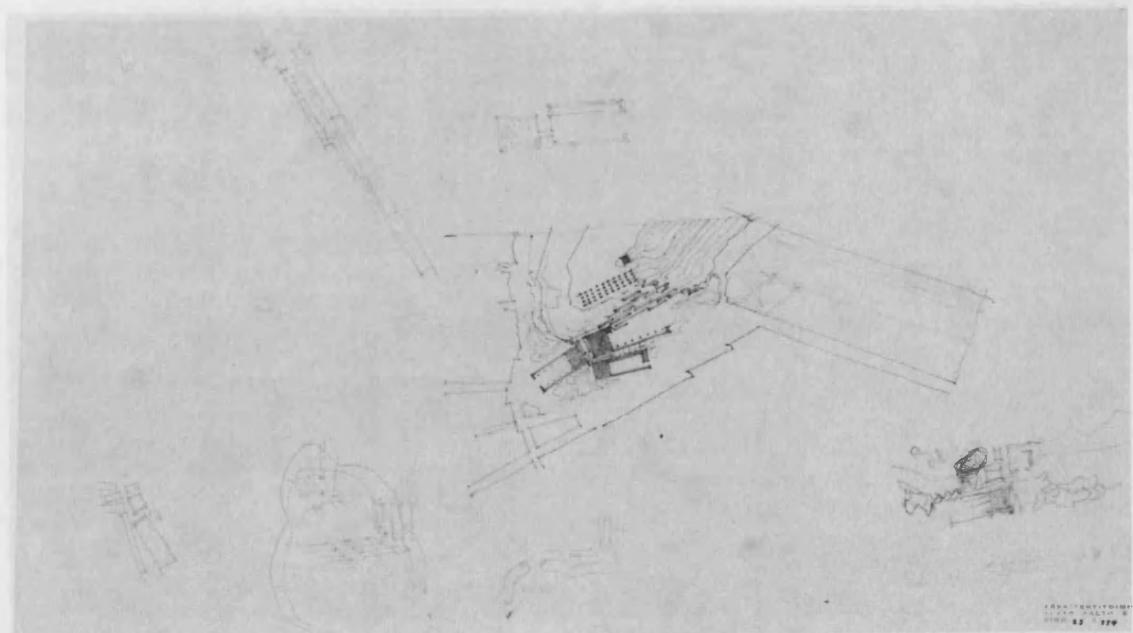
7.30c

fig 7.31 Sketch of Finlandia Hall
ground floor 1962-75;
Fleig (1971)



© 1971 Heinz Fleig. Drawing reproduced
by kind permission of the architect.
Original sketch of the interior level.

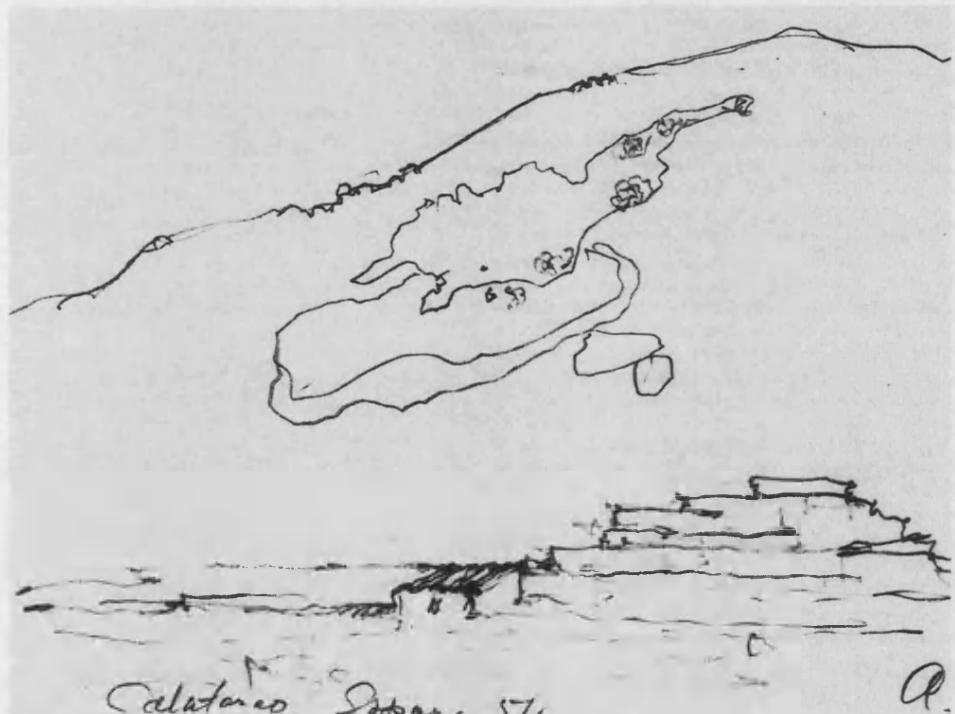
fig 7.32a Malmi Crematorium 1950
sketch site plan;
AAF



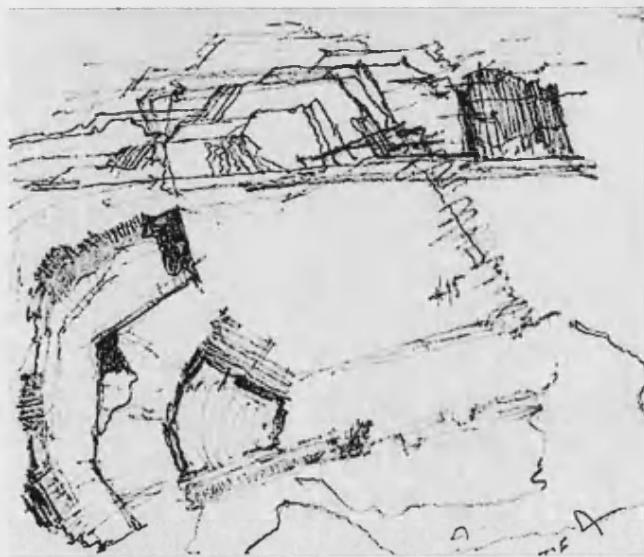
7.32a

fig 7.32b Alvar Aalto travel sketch
Calatanao 1951;
Schildt (1998)

7.32c Alvar Aalto sketch of
Kiruna Town Hall 1958;
Fleig (1971)



7.32b



7.32c

fig 8.1a Signe Brander: photograph of Helsinki Kauppatori 1912 showing Theodor Höijer's Norrmén Building 1897;
Helsinki City Museum
8.1b Enso-Gutzeit
Headquarters 1959-62



8.1a



8.1b

fig 8.2 Aalto with Jean-Jacques Baruél :
Lyngby Cemetery, Copenhagen 1952;
Fleig (1963)

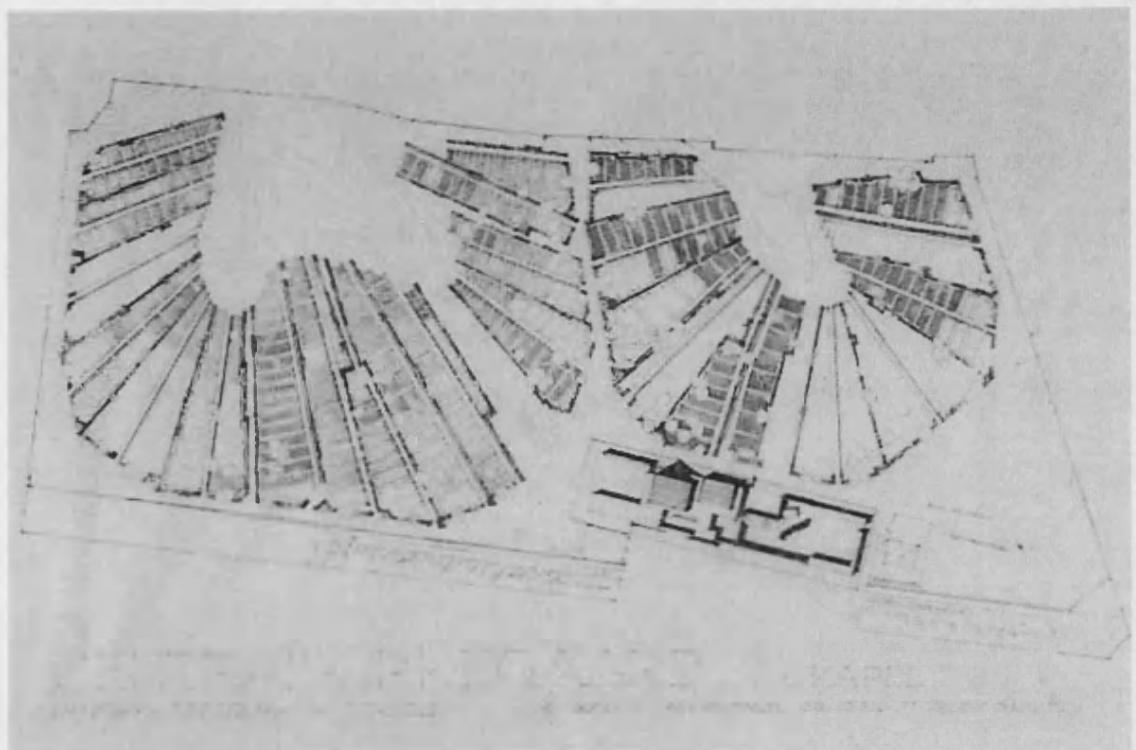


fig 8.3 Alvar Aalto and guest outside
Säynätsalo Town Hall;
Schilt (1989a)

fig 8.4 Page from Kyosti Ålander (1952)



Noormarkku terveyshalli / Hälsogården i Norrmark
Noormarkku Health Centre 1942

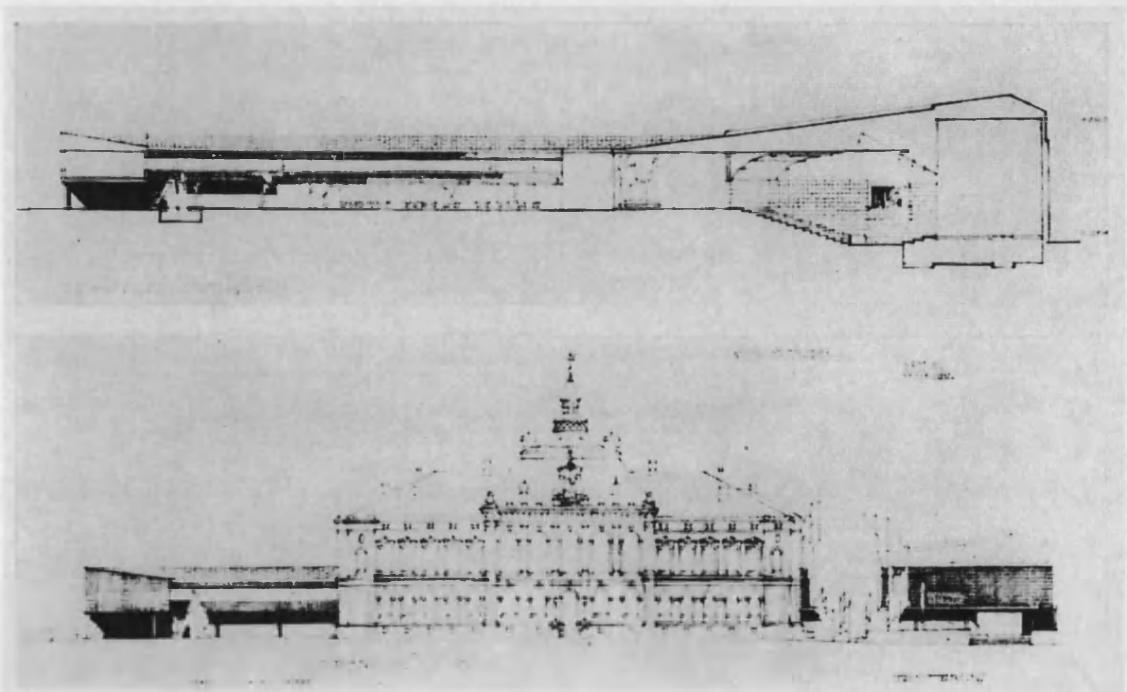
Aino Aalto arch.

"Villa Mairea": pääjohtajan asunto / generaldirektörens bostad / the General Manager's residence
1938 Aino & Alvar Aalto arch.

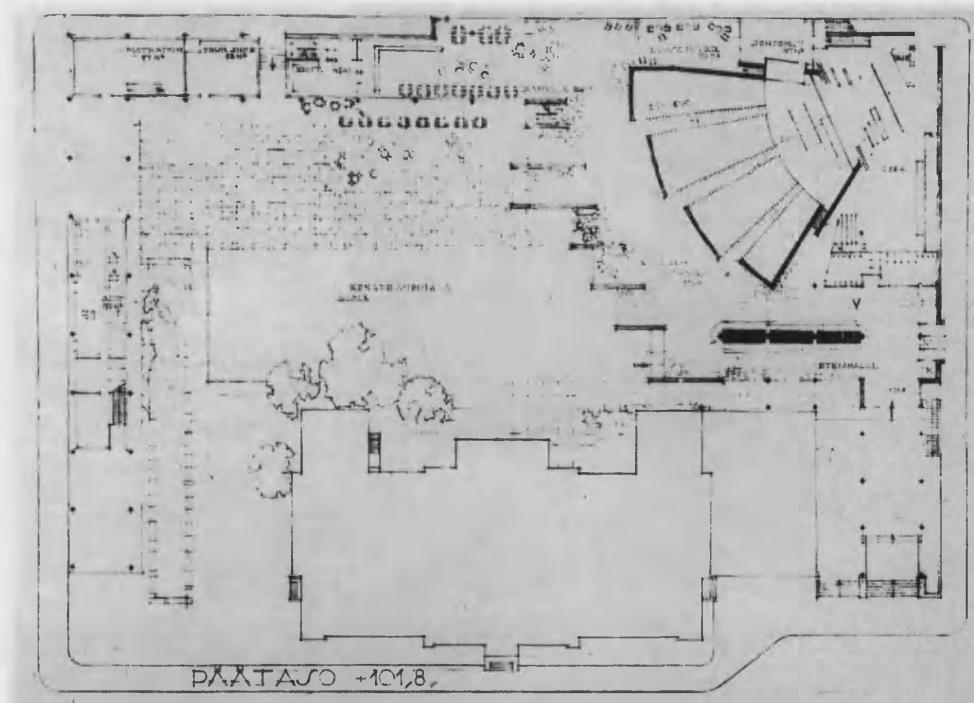
Foto G. Weller



fig 8.5a,b Kuopio Theatre 1st prize in competition (1952, unbuilt);
Fleig (1963)

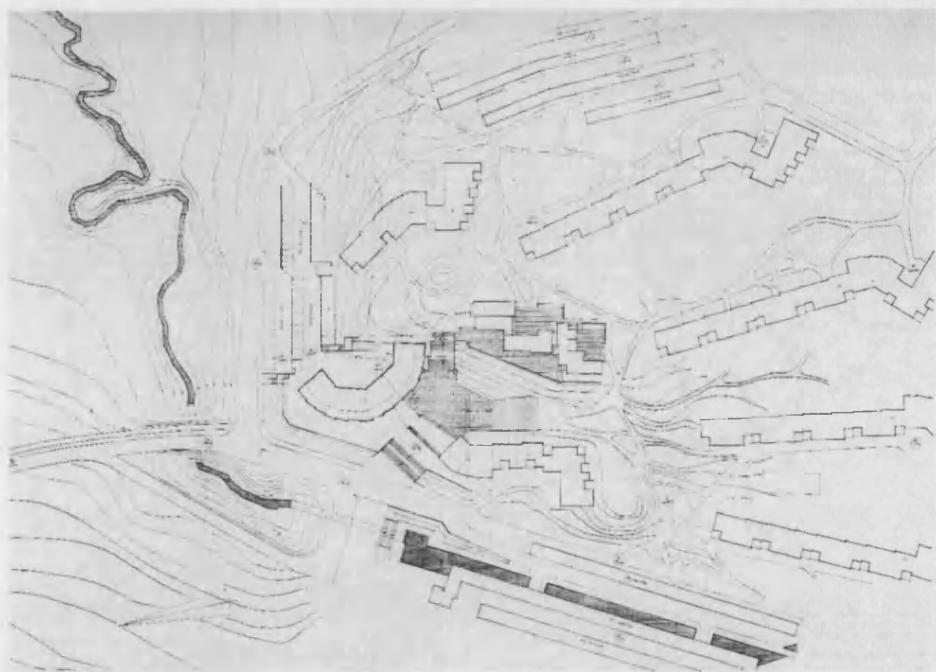


8.5a



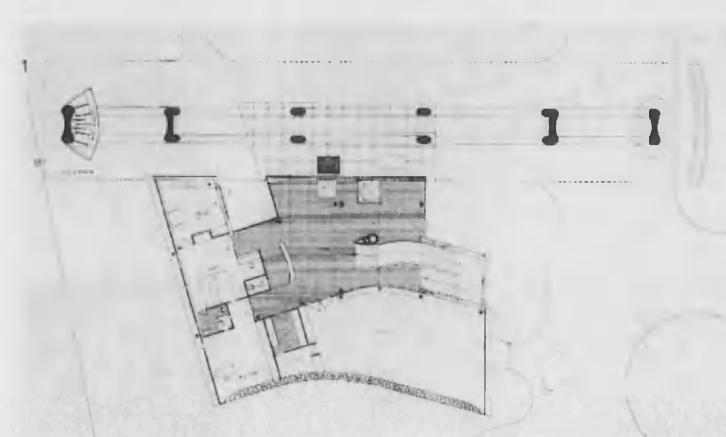
8.5b

fig 8.6 Aalto: Gammelbacka
housing, Porvoo, site plan 1966;
Fleig (1978)



8.7a

fig 8.7a Pavillon Suisse,
Paris 1930
8.7b Pavillon Suisse Plan;
Boesiger (1973)



8.7b



8.8a

fig 8.8a Gunnar Asplund: Skandia Cinema, Stockholm 1929; Paavilainen (1982)

8.8b Gunnar Asplund and Sigurd Lewerentz: Stockholm Woodland Cemetery Site Plan 1935; Wrede (1983)

8.8c Gunnar Asplund and Sigurd Lewerentz: Stockholm Woodland Cemetery Sketch 1915 Wrede (1983)

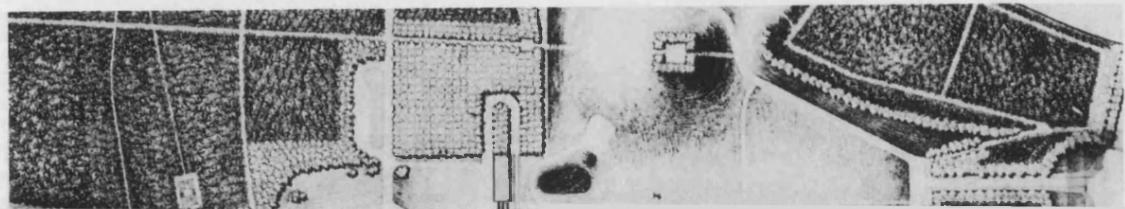
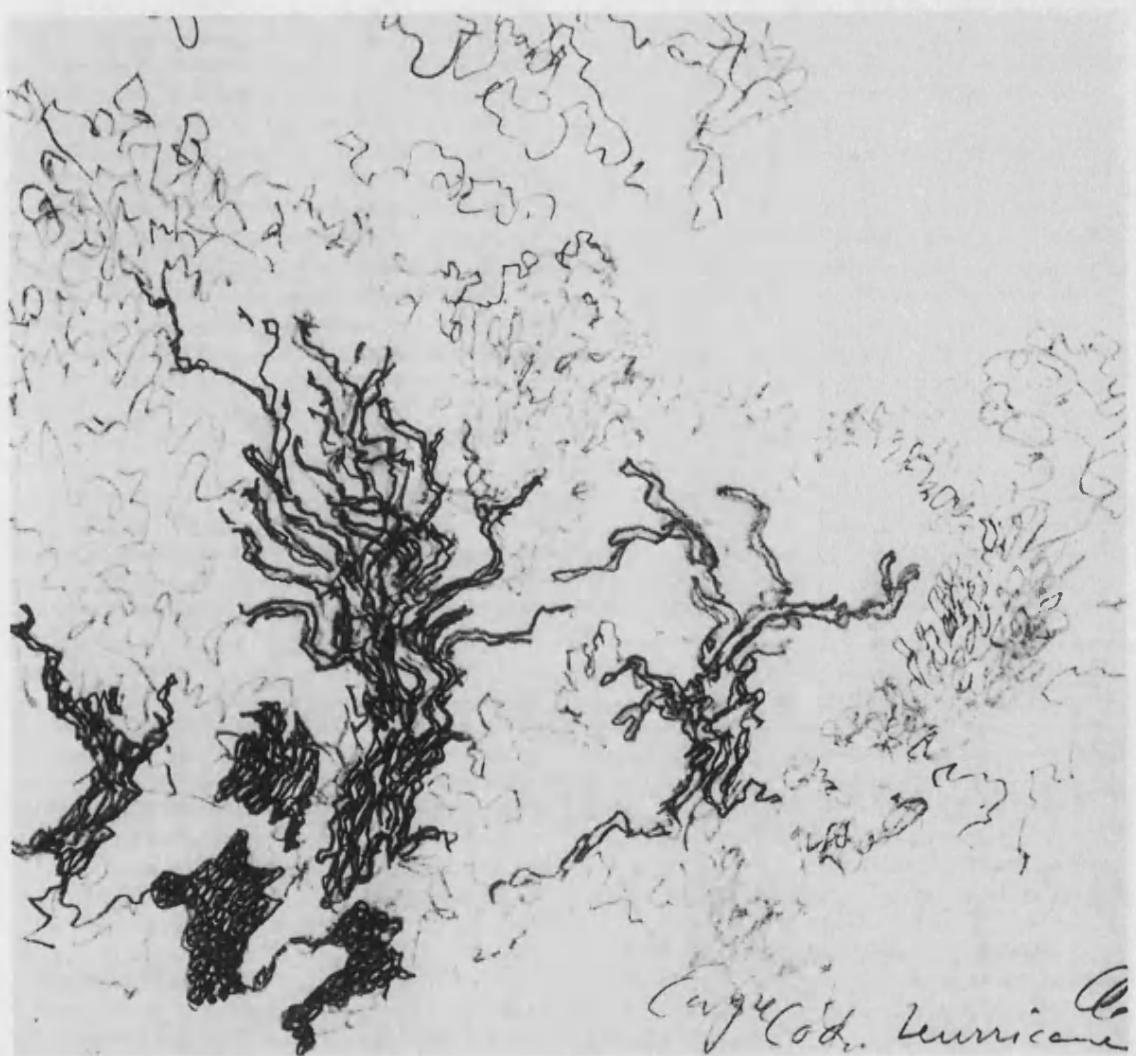


fig 8.9 Alvar Aalto: Cape Cod
hurricane 1946;
Schildt (1998)





8.10a

fig 8.10a Antti Hakola: Keuruu Old Church 1756-9
8.10a Theodor Grandstedt: Keuruu New Church 1892



8.10b

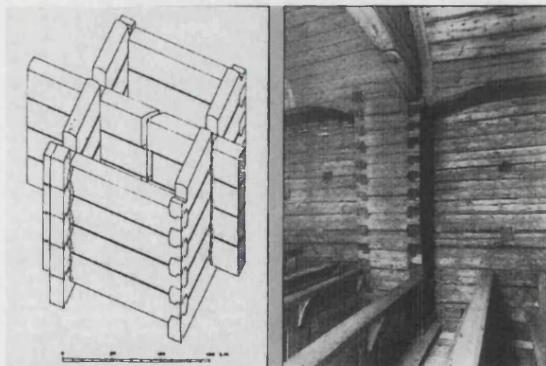
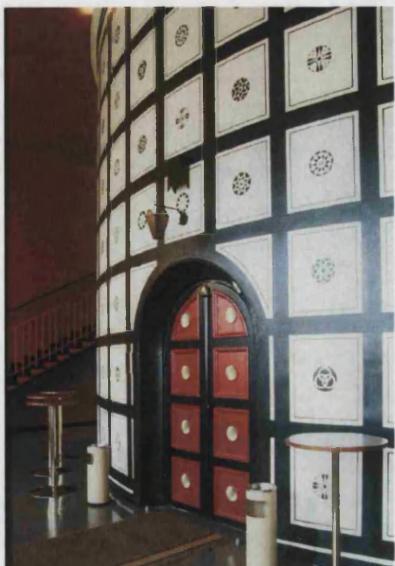


fig 8.11a Ostrobothnian 'block pillar' buttress;
8.11b Keuruu interior
Pettersson (1989)



8.12a

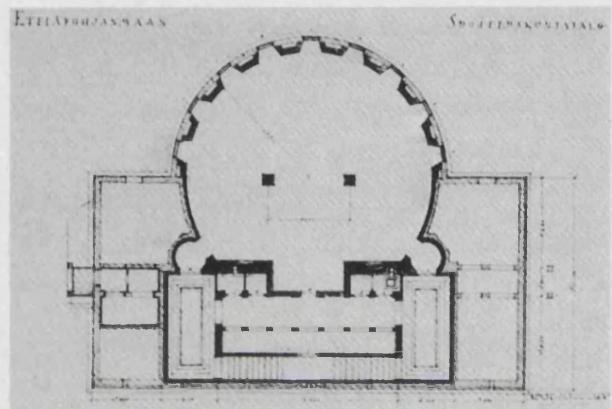


8.12b

fig 8.12a Jyväskylä Workers' Club 1924-5;
anonymous postcard

8.12b Alberti: Rucellai Sacellum,
S. Pancrazio Florence 1467;
Sailko 2006

8.12c Seinäjoki Defence Corps 1924,
Basement Plan;
Schildt (1984a)



8.12c



8.13a



8.13b

fig 8.13a National Pensions Institute, Helsinki 1953-8

8.13b Alberti: Palazzo Rucellai, Florence 1452-70



8.14a

fig 8.14a National Pensions Institute
Employees' Housing,
Munkkiniemi 1952-4, *piazza*
8.14b National Pensions Institute
Employees' Housing Site Plan;
AAF
8.14c National Pensions Institute
Employees' Housing, park,

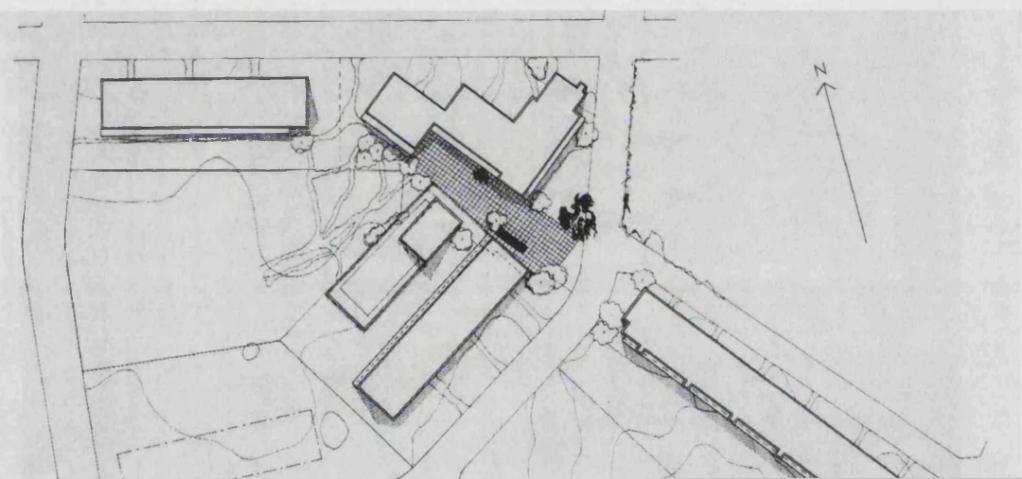


fig 8.15a National Pensions Institute
Employees' Housing attic detail
8.15b Ludovico Quarini: Housing in
Tiburtino, Rome 1950;
Tafuri (1989)



8.15a



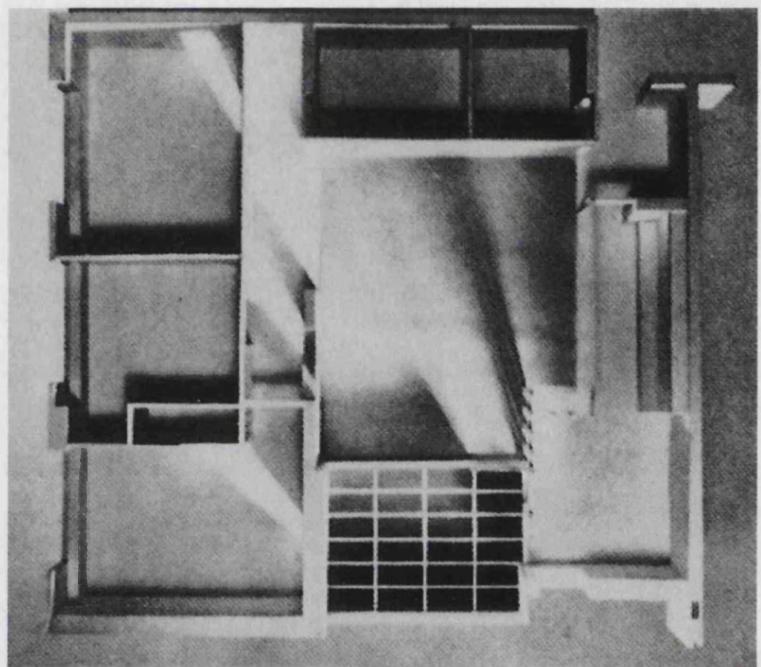
8.15b



8.16b

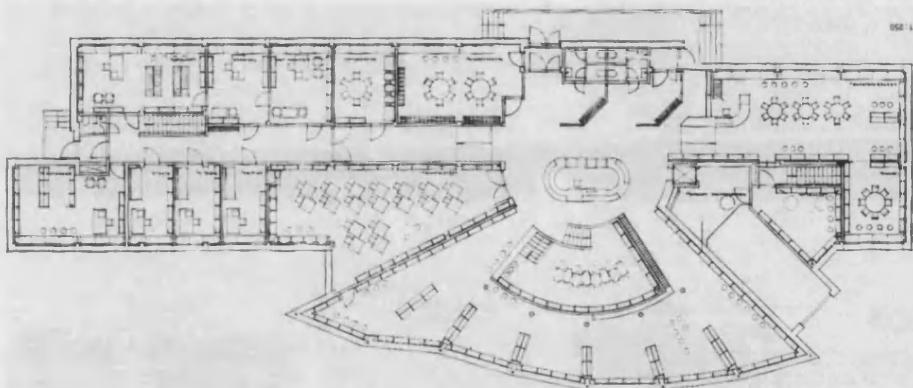
fig 8.16a Patio flat IBA housing,
Hansaviertel, Berlin 1955-7;
Fleig (1963)

8.16b Hansaviertel block
8.16c Hansaviertel block public terrace,
Alvar Aalto painted the ceiling

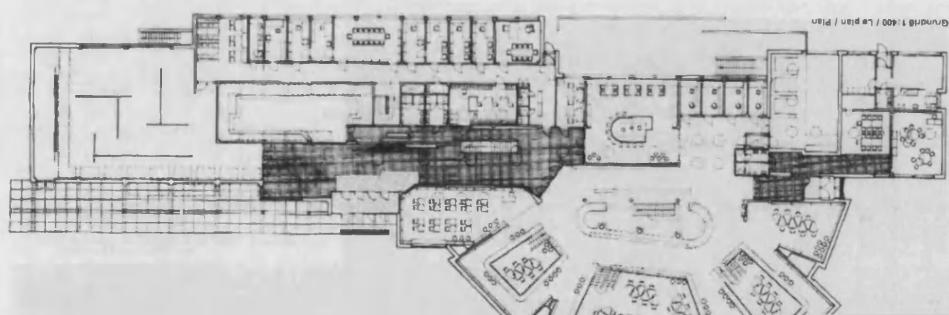


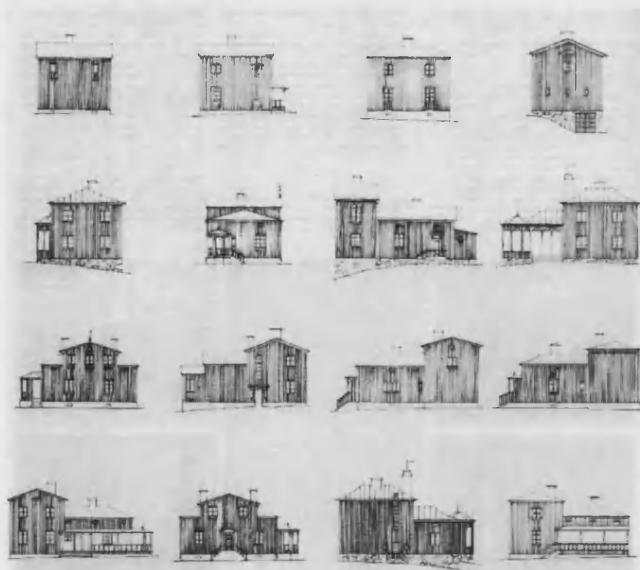
8.16a

fig 8.17a Seinäjoki Library plan 1961-5
8.17b Rovaniemi Library 1961-8
8.17c Mt. Angel Benedictine Abbey
Library, Oregon 1964-8;
Fleig (1971)

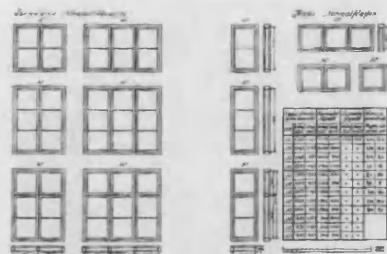


8.17a





8.18a



8.18b

UUSIA IKKUNOITTEEN JA OVIEN STADARDITYYPPEJÄ



fig 8.18a Martti Välikangas: Puu-Käpylä type housing, Helsinki 1920-5
 8.18b Standardized windows from Arkkitehti 6/1921

8.18b Standardized windows from

Arkkitehti 6/1921

8

Fig 8.

fig 8.19 Alvar Aalto sketch of Aurora borealis from aeroplane flying over north Atlantic AAF

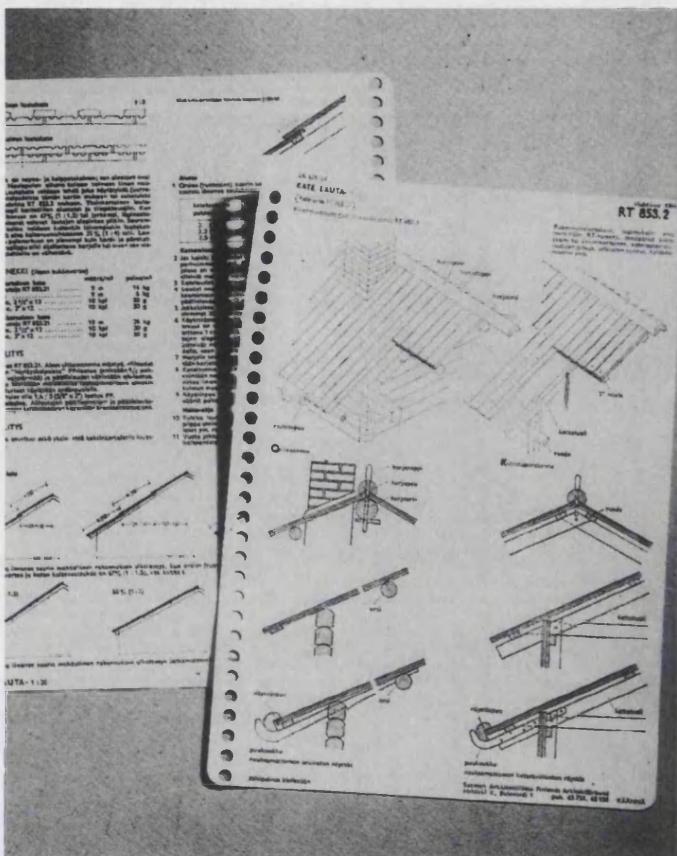


fig 8.20 Pages from *rt-kortisto* 1940s;
Korvenmaa (1992)

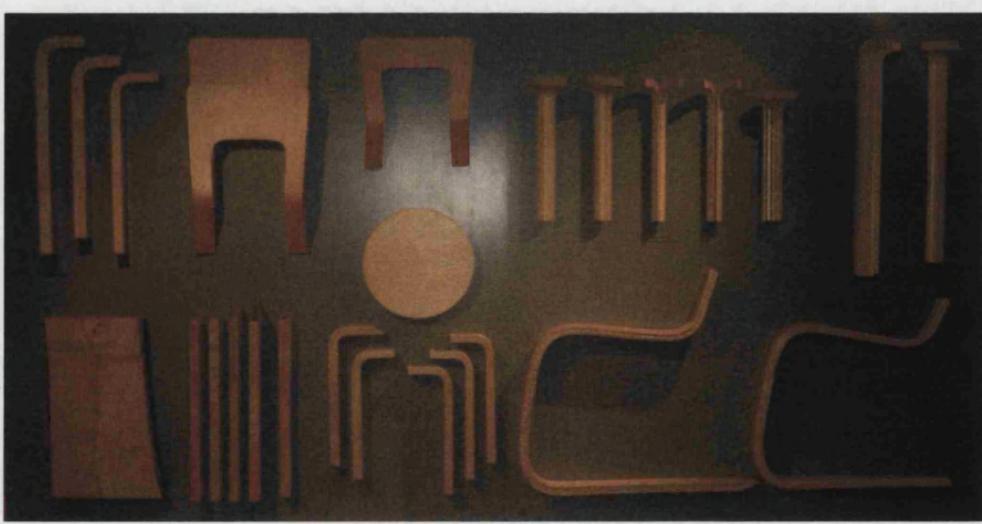


fig 8.21 Components for Artek furniture;
Alvar Aalto Museum, Jyväskylä



fig 8.22a Illustrations of Finland following the Winter War 1939-40.
From Alvar Aalto *The Reconstruction of Europe is the Key Problem of Our Time*
1941;
reproduced in *Arkkitehti* 5/1941

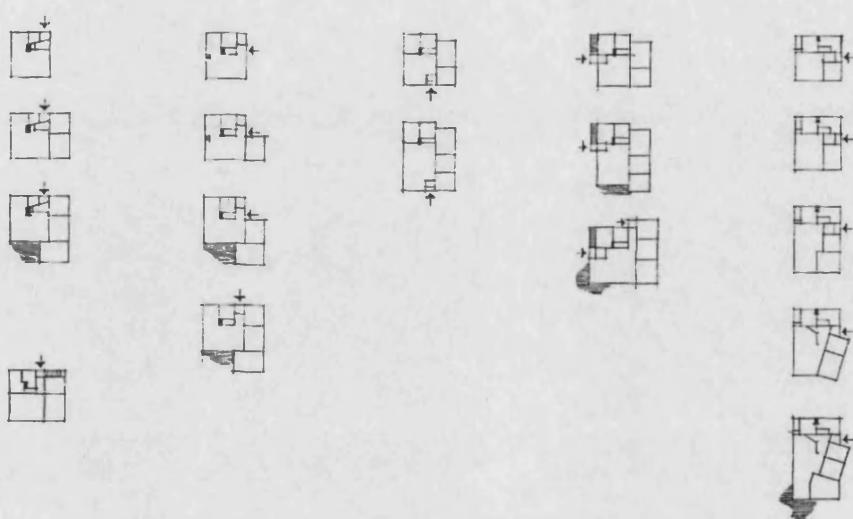


fig 8.22b Alvar Aalto illustrations of 'cellular growth' houses plans 1940s;
Schildt (1989a)

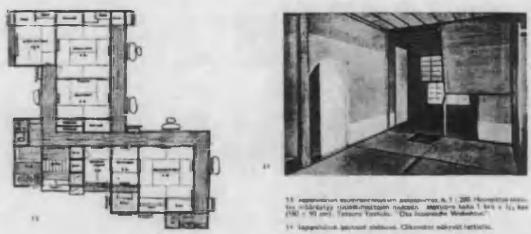
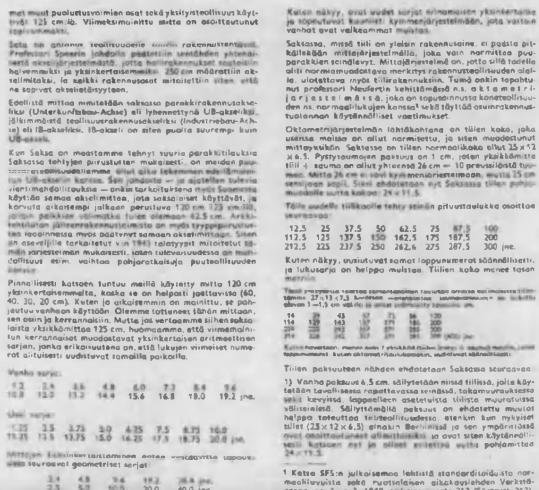
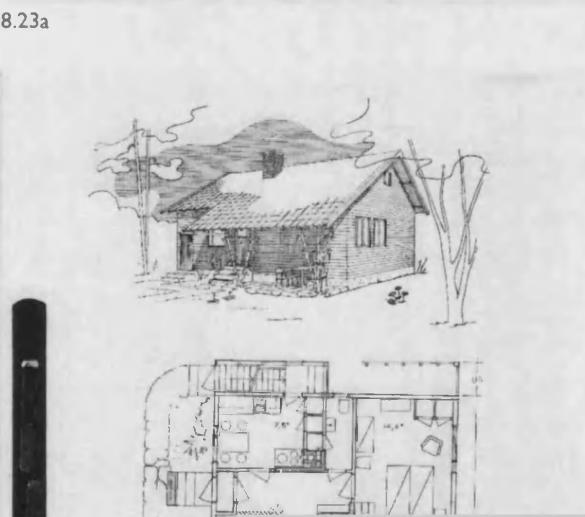


fig 8.23a Page from Suomen Arkkitehtiliiton Standardisoimistö (SAFA Standardization Project), illustrated with images from Tetsuro Yoshida's *Das Japanische Wohnhaus* (1935); Arkkitehti 7-8/1943

8.23b,c Pages from A-Talo house brochure produced by Ahlström in 1945;



8.23a



8.23c

fig 8.24 Finlandia Hall marble 2007; the marble was replaced already in 1997-8

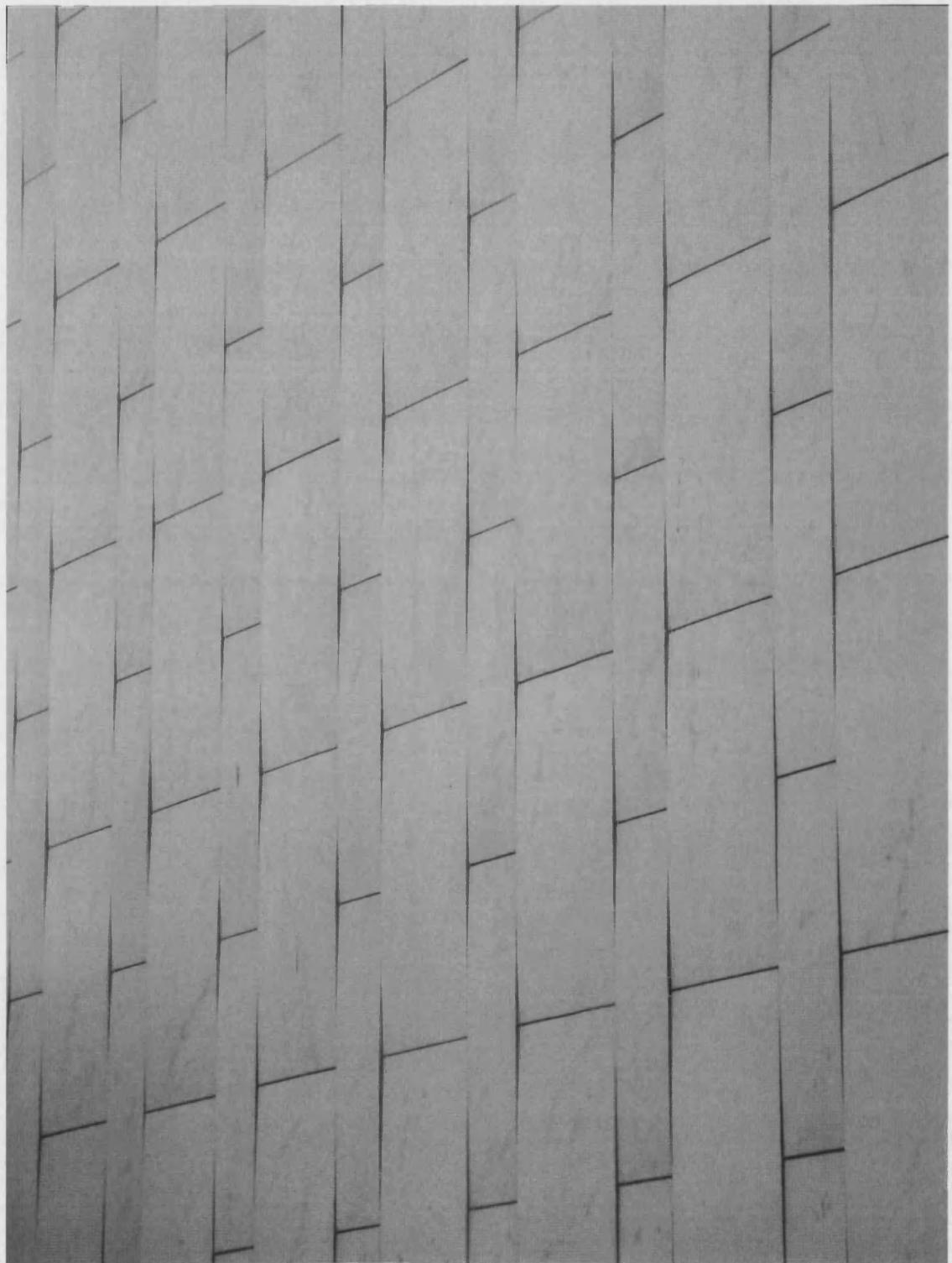


fig 9.1a Riihitie atelier, Munkkiniemi 1933-35 to garden
9.1b Riihitie house and atelier to street



9.1a



9.1b



9.2a

fig 9.2a, Tiilimäki atelier garden
9.2b drawing office
9.2c ateljé

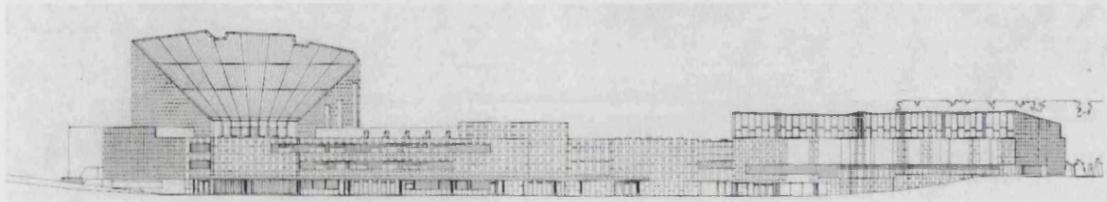


9.2b



9.2c

fig 9.3 Finlandia Hall 1962-75 elevation;
Fleig (1978)



9.4a



9.4b

fig 9.4a Pillar in the House of Culture
auditorium completed 1958;
Charrington (1998)
9.4b Pillar in the Tiilimäki atelier
completed 1955

fig 9.5 Seinäjoki
Town Hall window

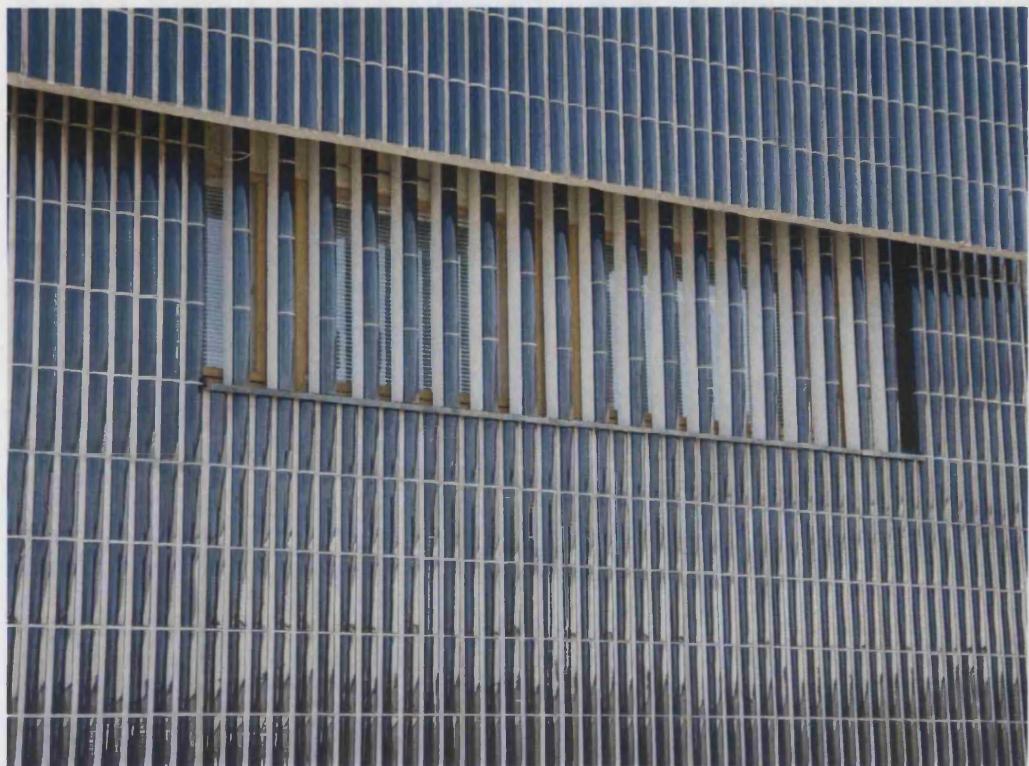


fig 9.6 House of Culture, Helsinki
reflected ceiling plan 1955;
AAF

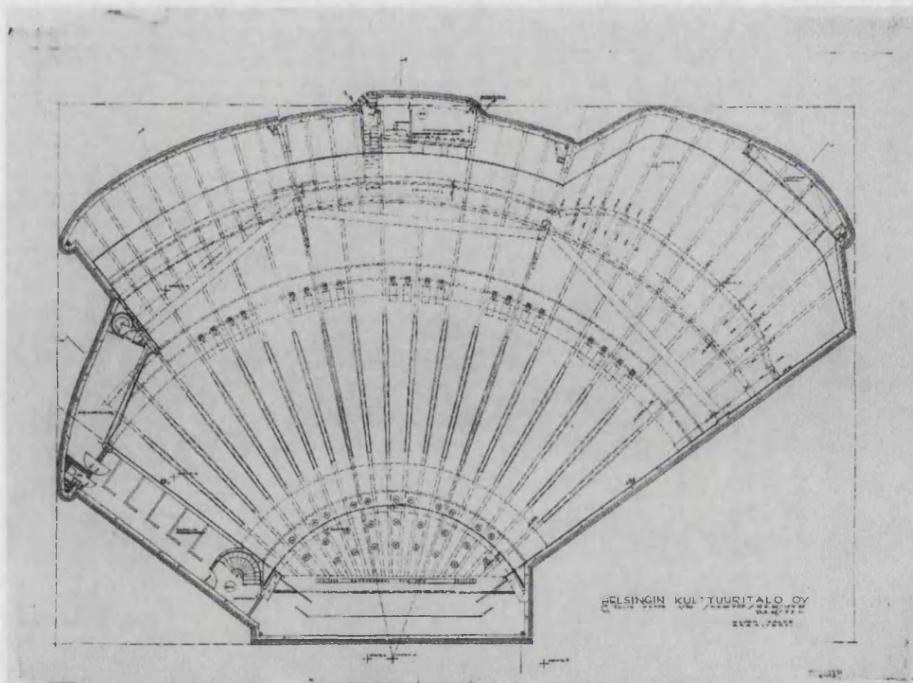
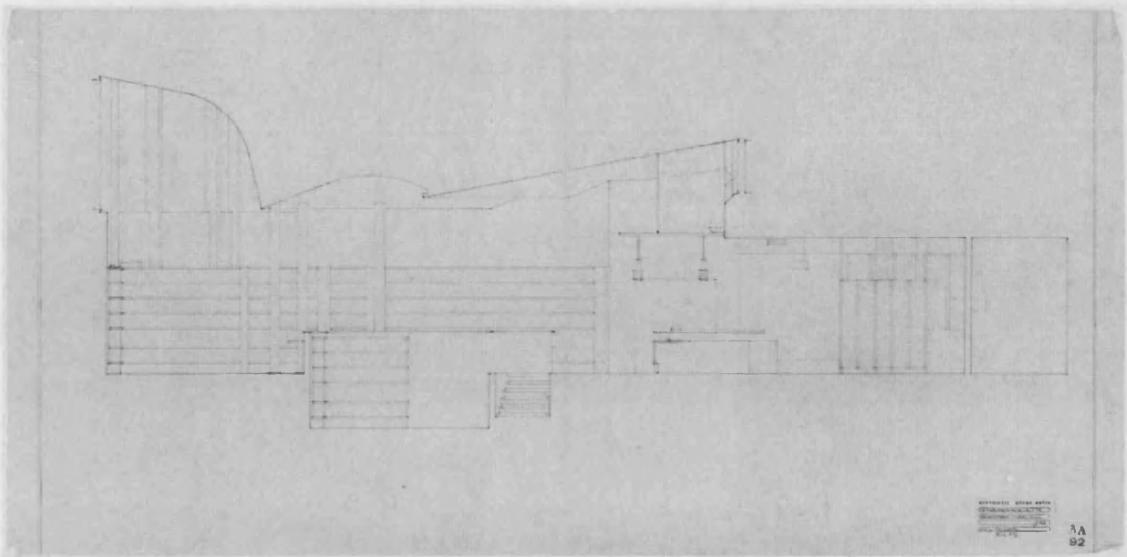
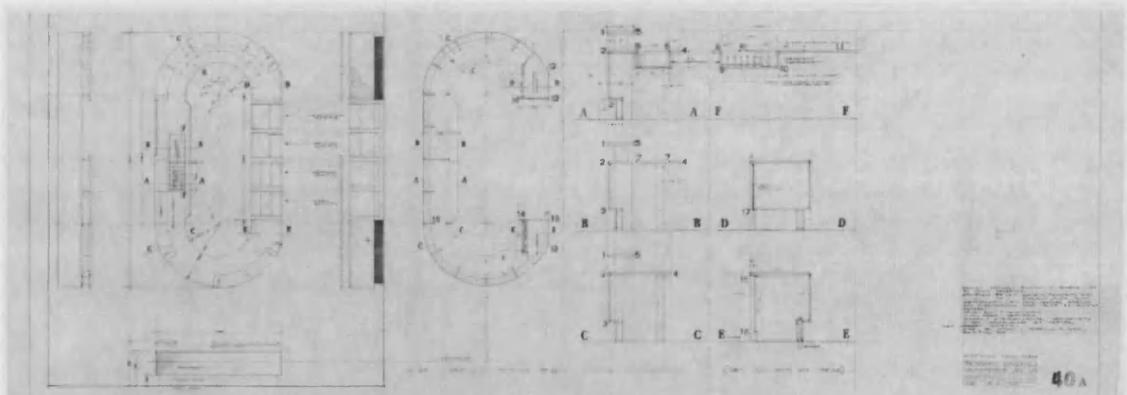


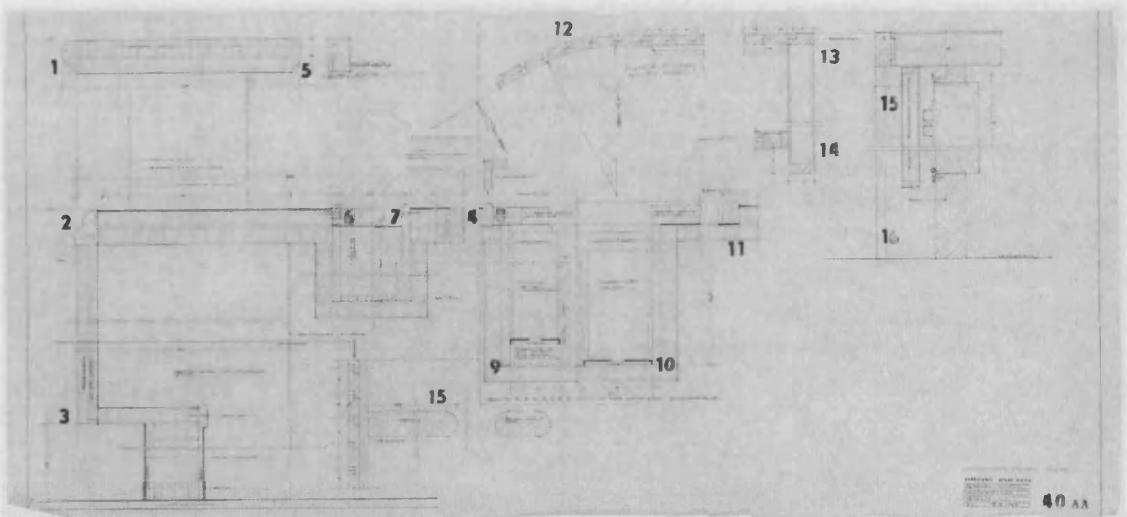
fig 9.7a 1:20 scale section of Seinäjoki
Library reading room
9.7b 1:5 scale details of control desk;
9.7c 1:1 scale details of control desk;
AAF



9.7a



9.7b



9.7c

fig 9.8 Baker House Dormitory, MIT 1946-9





9.9a

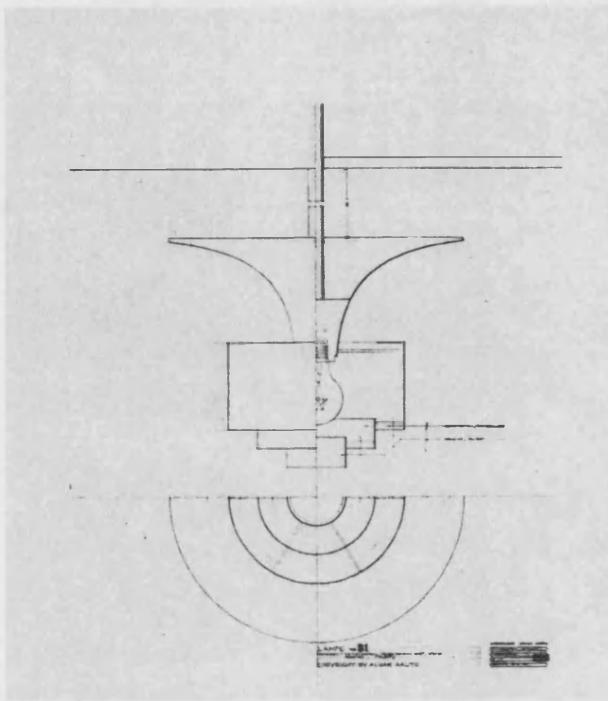
fig 9.9a Daylight testing bay for samples
in the Tiilimäki atelier 1955
9.9b Ceramic stick samples
AAF



9.9b



fig 9.10a South window
Tiilimäki atelier 1955
9.10b Junction of screen and ceiling
beam in the Tiilimäki atelier 1955

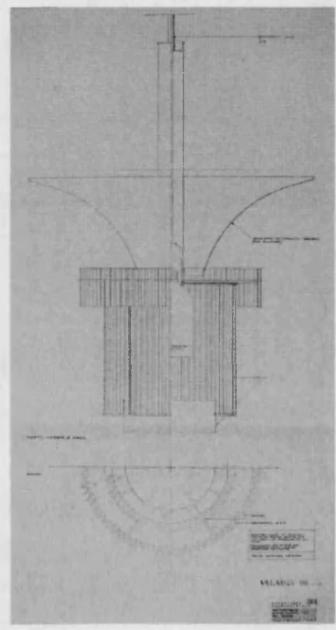


9.11a

fig 9.11a Standard drawing of pendant lamp;
AAF

9.11b Adapted lamp design for Rovaniemi
Town Hall council chamber 1987

9.11c Adapted lamp in the Rovaniemi
Town Hall council chamber 1989



9.11b



9.11c



fig 9.12 Original wooden mould for the Savoy Vase 1936; Iitala Glass Museum



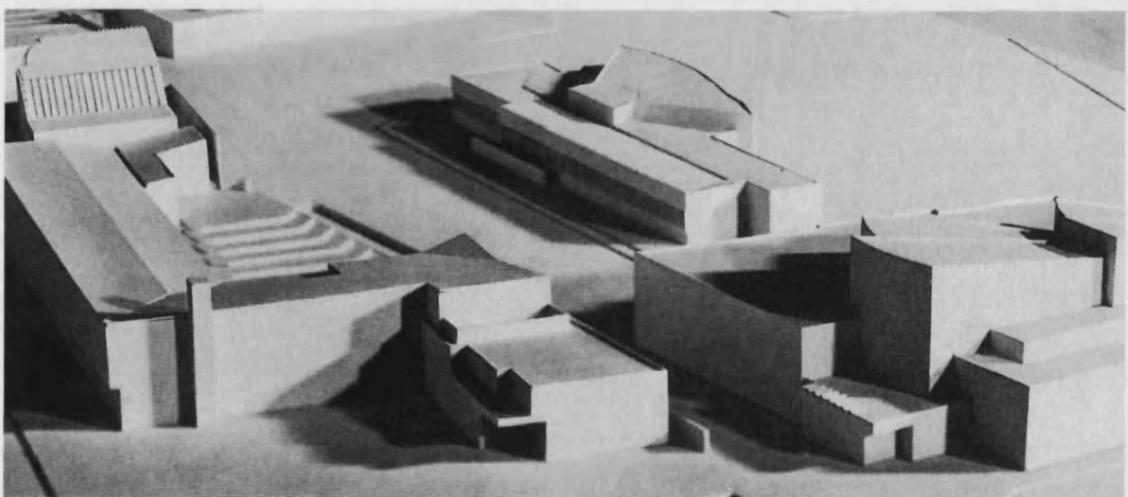
9.13a



9.13b

fig 9.13a Essen Opera House 1959-88 model
9.13b Riola Church 1966-78 model;
AAF

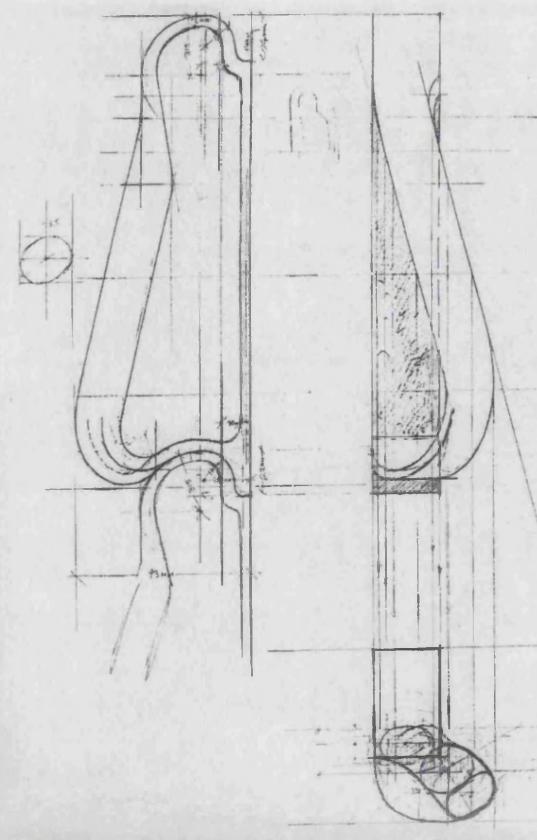
fig 9.14 Seinäjoki Centre
model;
AAF



9.14a

fig 9.15 Alvar Aalto showing the Helsinki City Centre Plan model to President Urho Kekkonen in 1961;
Schildt (1989a)





9.16a



9.16b

fig 9.16a Aalto: 'Rautatalo' type cast
bronze doorhandles 1955;
AAF

9.16b Rautatalo entrance door



fig 9.17 House of Culture,
Helsinki 1952-8 auditorium showing
adaptation of ceiling to accommodate
misplaced beam;
Charrington 1998

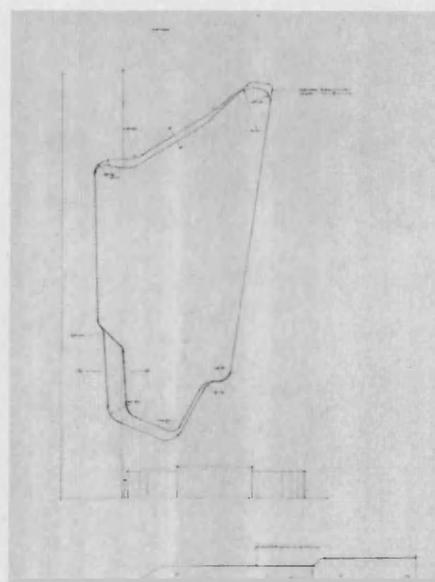
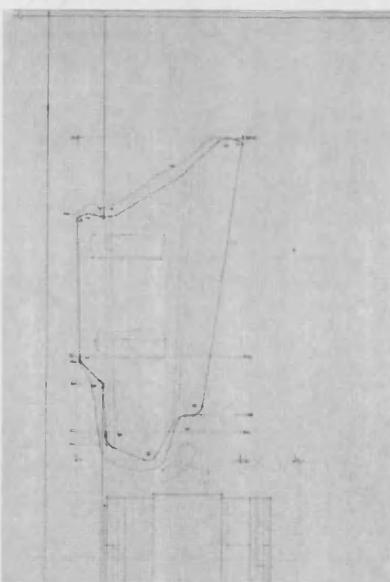
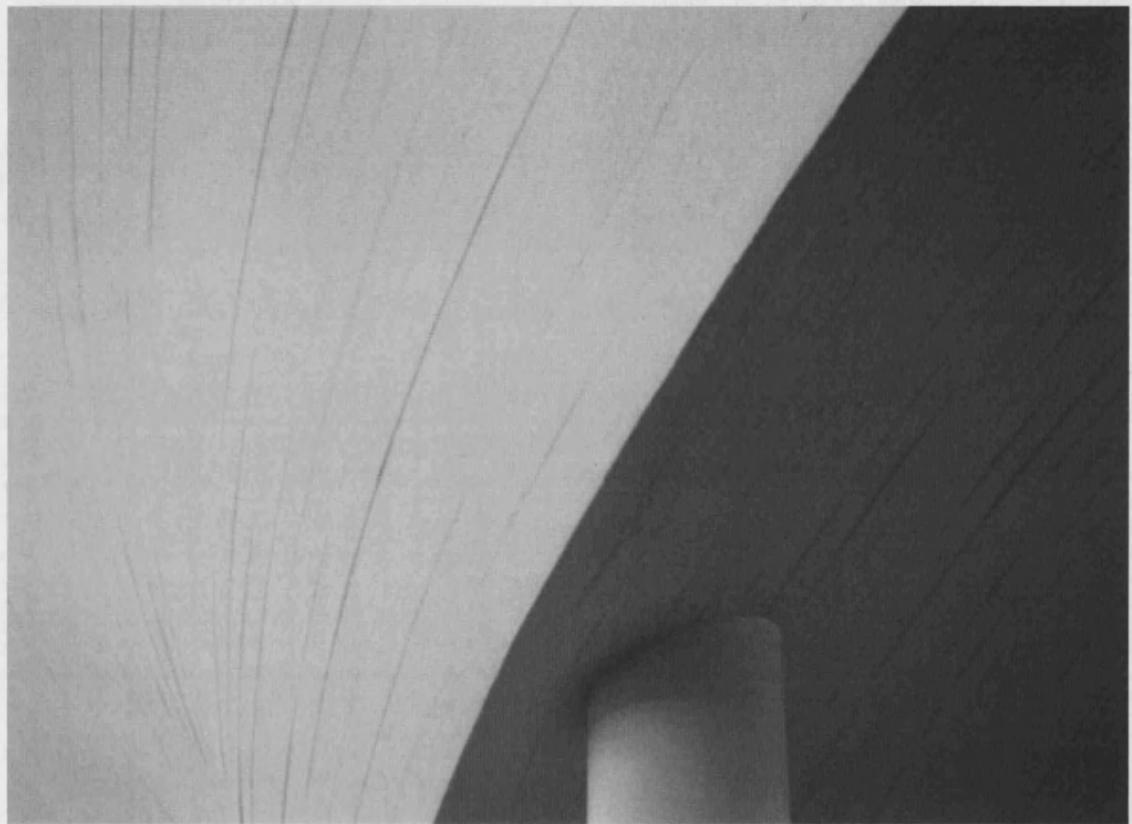


fig 9.18a Sketch over existing production
information drawing of proposed changes
changes to the, already cast, concrete
pulpit 'wing' in Seinäjoki Church
9.18b Detail drawing showing changes to be
made to the pulpit 'wing';
AAF

fig 9.19 Shuttering of Seinäjoki Library vault



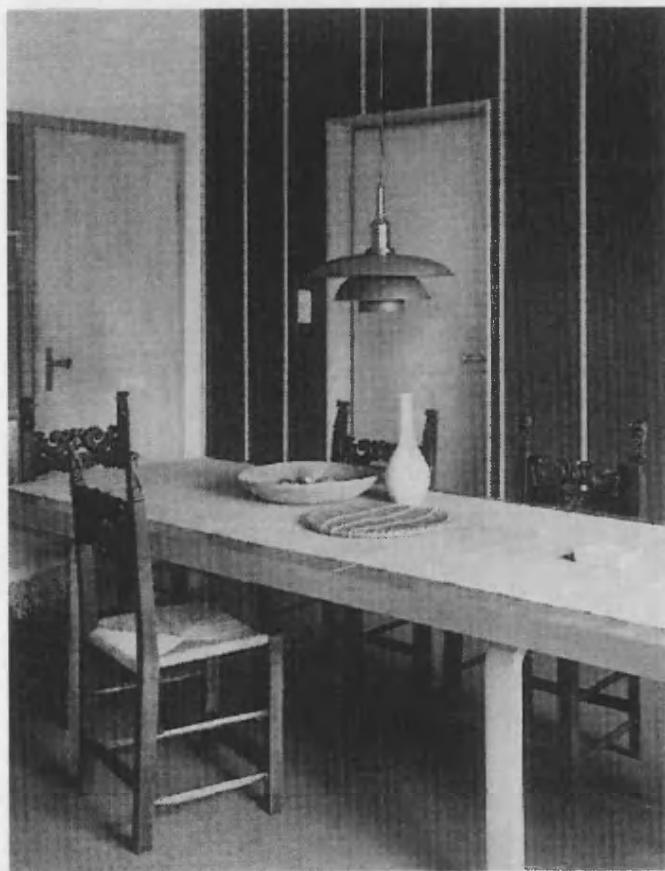


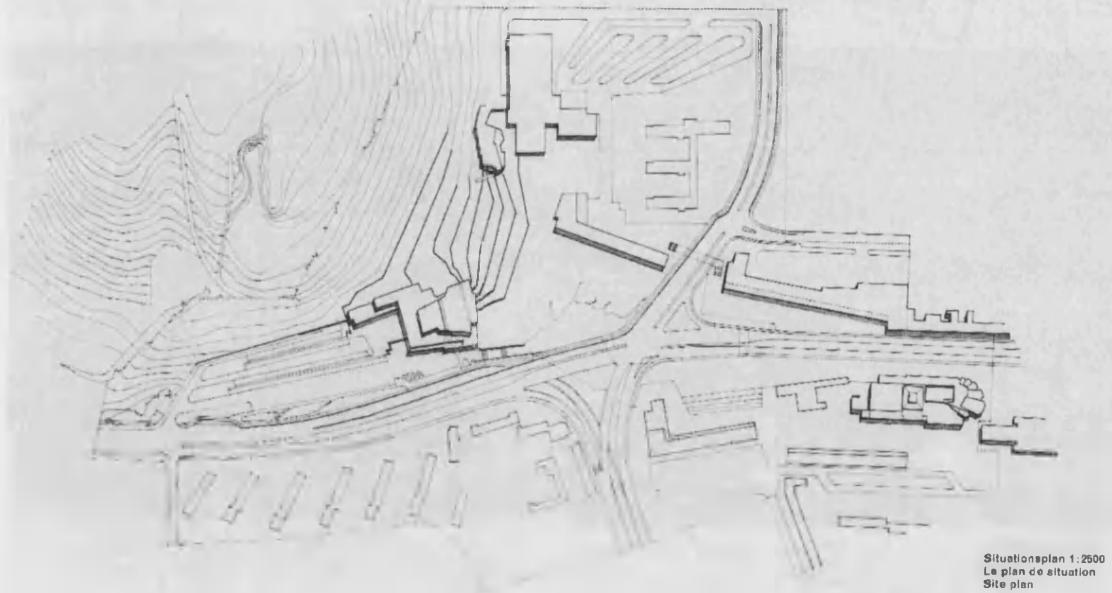
fig 10.1 The Aaltos' dining room at Riihitie in 1939;
AAF



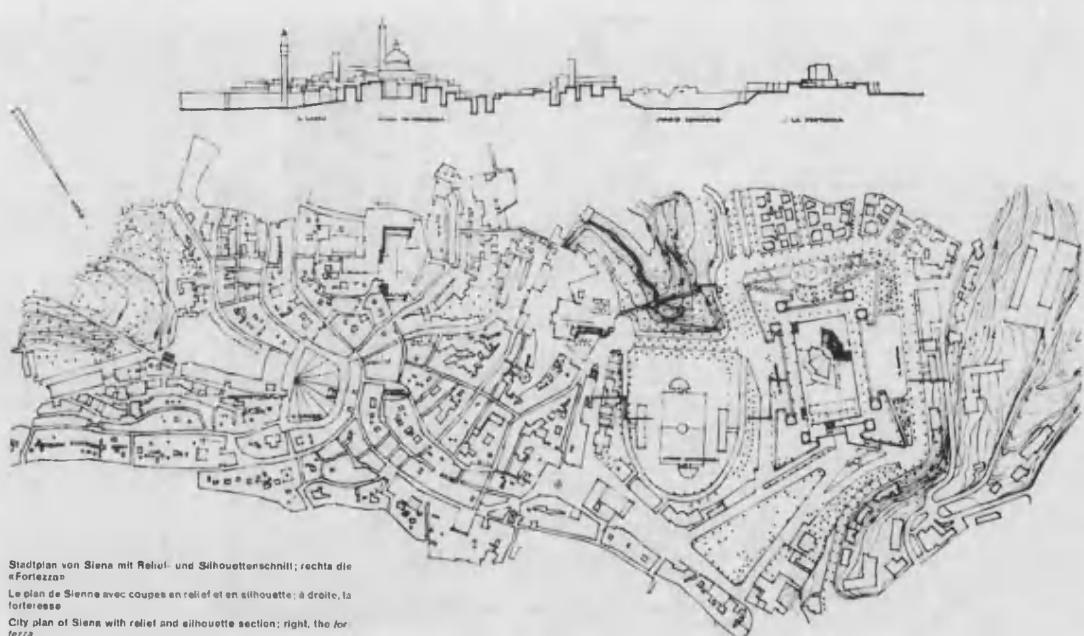
fig 10.2 Nolli's *Map of Rome* 1748
reproduced in
Brinckmann (1920)



fig 10.3a Competition entry for Wolfsburg Theatre 1966
proposing link to the Aalto atelier's already completed
Town Hall, bottom right
10.3b Proposal for Civic Centre in Siena, 1966



10.3a



10.3b



fig 10.4 Alvar Aalto: Gravestone for
Ahto Virtanen 1937;
Schildt (1994)



fig 10.5 *Tango Markkinat* festival,
Seinäjoki 2004;
www.danceoftheheart.com

APPENDIX 1

CHRONOLOGY

Not all projects of the Aalto atelier are listed.

Competition dates are deadline dates.

Dates taken from Arne Heporauta (1999) and Göran Schildt (1994).

Indent = building project or competition

Italics = competition motto.

1894

Aino Marsio-Aalto (née Marsio, fennicized from Mandelin 1906) born in Helsinki

1898

Alvar Aalto born in Kuortane

1903

Alvar Aalto moves with family to Jyväskylä

1906

Alvar Aalto's father J. H. Aalto elected to Jyväskylä Council

1907

Alvar Aalto's mother Selma dies, his father marries Flora Hackstedt, his mother's sister

1908-16

Alvar Aalto attends Jyväskylä Lukio

1913-5

Alvar Aalto submits vignettes for Keski-Suomi newspaper

1914

Aino Marsio studies architecture at Helsinki Polytechnic

1916

Alvar Aalto studies architecture at Helsinki Polytechnic

Alvar Aalto arrested for suspected involvement in Jaeger movement

Alvar Aalto surveys Ostrobothnian farmhouses for Toivo Salervo

1917

December 6 Finnish Independence declared

1918

January – April, Civil War Alvar Aalto fights alongside family on White Side, culminating in the Battle of Vilppula-Tampere. Meets Swedish architect Sten Branzell and archaeologist Axel Boethius. Aino Marsio in Helsinki.

Alvar Aalto works at Björklund-Helenius and Myntti architects in Vaasa.

1919

Alvar Aalto designs Mammula house for parents and Alajärvi Youth Centre.
Aino Marsio works for plantsman Bengt Schalin

1920

Alvar Aalto trip to Stockholm

Aino Marsio graduates from Helsinki Polytechnic

1920-22 Alvar Aalto writing as 'Ping' for *Kerberos*

Alvar Aalto founds Konstindustriel Ritbyrå with Henry Ericsson

1920-2 Aino Marsio works for Oiva Kallio

1921

Aino Marsio, with Aili-Salli Ahde and Elli Ruth makes extensive tour of Central Europe and Italy

Alvar Aalto curates and exhibits paintings in Riga, works as art critic for *Iltalehti* newspaper

1922

Elissa Aalto (née Elsa Mäkinen) born in Kemi province

Alvar Aalto undertakes National Service

Alvar Aalto designs trade stands for Tampere Trade Fair

1923

Alvar Aalto contributes as 'Remus' to *Sisä-Suomi* newspaper

Gothenburg Jubilee Exhibition

Alvar Aalto already in contact with Gunnar Asplund

Alvar Aalto works for Arvid Bjerken in Gothenburg

Eduskuntatalo competition

Alvar Aalto opens architectural office in Jyväskylä

Aino Marsio works for Gunnar Wählroos in Jyväskylä

1923-7 Design / Remodelling of 6 churches in Jyväskylä region

1924

October Alvar Aalto and Aino Marsio marry – 6 week honeymoon in Italy

Aino Marsio works for Alvar Aalto

1924-5 Jyväskylä Workers' Club

1924-5 Jyväskylä Railway Workers' Housing 'Aira'

1924-9 Seinäjoki Defence Corps Building

1925 Villa Flora, Alajärvi (usually attributed to Aino Marsio-Aalto alone)

1926

Aaltos visit Sweden and Denmark

Design for Jyväskylä 3 Squares

Jyväskylä Defence Corps competition, *Intra Muros* 1st prize
(built 1928-9)

League of Nations competition (not submitted)

1926-9 Muurame Church

1927

June Aaltos move to Turku

Taulumäki Church competition

Lounais-Suomen Maalaistalo competition, *Acer* 1st prize
(built 1927-8)

Viinikka Church competition

Töölö Church competition

Viipuri Library competition *V.V.V.* 1st prize
(built 1934-5)

1927-9 Tapani Standard Apartment Building

1928-30 Turun Sanomat Newspaper Offices and Printing Press

1928

April 28th Sven Markelius lectures in Turku. Aaltos already intimate with *acceptera* circle in Stockholm – Gunnar Asplund, Otto Carlsund, Gottfried Johansson, Sven and Viola Markelius, Gregor Paulsson, Uno Åhren

Aaltos undertake *Kordelin* Foundation sponsored Air Tour to Denmark, Netherlands, France – meet Poul Henningsen, J J Oud, Le Corbusier, André Lurçat, Alfred Roth

1929

October Alvar Aalto attends CIAM 2 Conference at Frankfurt – meets Siegfried Gideon, Ernst May, László Moholy-Nagy, Richard Neutra

Vallila Church competition

Paimio Tuberculosis Sanatorium competition *Piirretty ikkuna* 1st prize
(built 1930-32)

Tehtäänpuisto Church competition *Sekä että*

Turku 700 Anniversary Fair (with Erik Bryggman)

1929-35 Collaboration with furniture maker Otto Korhonen

1930

Stockholm Exhibition – meets Philip Johnson, Philip Morton-Shand

Aaltos spend autumn in Berlin and Switzerland

Vierumäki sports academy competition *Mens*

Sets for Hagar Olsson's Play *SOS*

Minimum Apartment Helsinki Exhibition

1930-33 Oulu Toppila cellulose factory for Serlachius Oy

Aaltos send furniture prototypes to Siegfried Giedion in Switzerland

1931

Alvar Aalto attends CIRPAC conference in Berlin – visits Bauhaus, meets Josef Albers, Walter Gropius

László Moholy-Nagy and Ellen Frank spend month with Aaltos

Zagreb Hospital competition *SUD*

Lalluka Studios competition *Lucca and The Bees*

Helsinki University Extension competition *YLI*

1932

Alvar Aalto in fight with Bertel Jung at Nordic Building Fair

Karhula Glass competition Aino Marsio-Aalto *Bölgeblick* 2nd prize

Riihimäki Glass competition Alvar Aalto *Riihimäen kukka* 2nd prize

Insulite Standard House competition *Bio* purchased

Norrmalm Master Plan competition 7089
Helsinki Stadium competition 456 purchased
Tempeliaukio Church competition 50

1932-4 Villa Tammekann in Tartu

1933

J. S. Sirén appointed as Professor of Architecture in preference to Alvar Aalto
July Alvar Aalto attends CIAM 4 in Athens with Nils Gustav-Hahl
August Aaltos move to Helsinki – 1934-6 Japanese connection
November Aaltos exhibit furniture at Fortnum and Mason in London – meets William Lescaze
FINMAR established to sell Aaltos' furniture in Britain

1934

Helsinki Messuhalli competition *MP*
Malmi Cemetery competition *Lehto*
Helsinki Post Office competition (*Drawing of Carrier Pigeon*)
Tampere Railway Station competition *Loko*
1934-5 M.G. Stenius High Rise Plan for Munkkiniemi (unrealised)

1935

Alvar Aalto becomes chairman of Projektio Film Club
Otto-I Meurmann appointed as Professor of Town Planning in preference to Alvar Aalto
Alvar Aalto elected to SAFA Board
Alvar Aalto attends spring Amsterdam CIRPAC conference, visits Brussels World's Fair and Switzerland
FINMAR problems – Nils Gustav-Hahl introduces Aaltos to Maire Gullichsen and then Harry Gullichsen, chairman of Ahlström
October 15th ARTEK founded by Aaltos, Gullichsens and Hahl. Aino Marsio-Aalto appointed Managing Director
Alko State alcohol monopoly competition *In Vino Veritas*
Finnish Embassy, Moscow competition *Ex Occidente*
Corso Restaurant, Zurich with Max Ernst - Siegfried Giedion commission
1935-6 Riihitie Own House

1936

Milan Triennale – Aino Marsio-Aalto *Bölgebick* awarded Gold Medal
May Projektio Film Club closed for sedition. Alvar Aalto placed on Police Register
Outdoor Theatre Alppila (unrealised)
Paris 1937 World's Fair competition *Le Bois est en marché* 1st prize and *Tsit Tsit Pum* 2nd prize (first victory since 1929)
Iittala Glass competition – Alvar Aalto *Savoy* 1st prize
1937 – 40s Summer Sunila Master Plan, housing and factory buildings.
Beginning of approximately 25 years work for Gullichsens company Ahlström Oy, as well as other forestry enterprises

1937

June Alvar Aalto attends CIAM 5 in Paris – meets Alexander Calder, Constantin Brancusi

August William Wurster visits Aaltos in Helsinki

Tallinn Art Gallery competition *Eestilo culto*

1937-50s standardised housing for Ahlström Oy – over 2,000 units, of differing 'elastic standardisation' built in various locations in Finland

1937-50s Industrial buildings, school and housing for Anjalankoski Oy

1937-39 Villa Mairea for Gullichsens

1938

March 15 Alvar Aalto retrospective exhibition, MOMA New York

October - 1st trip to USA – meets Frederick Kiesler, James Sweeney, Edgar Kaufmann, lecture with Fernand Léger

New York 1939 World's Fair competition *Maa kansa työ tulos, Kas kuusen latvassa korkealla, USA 39* - 1st, 2nd, 3rd prizes

Lapua Metsä pavilion

Film Studio for Erik Blomberg (unrealised)

1939

March - 2nd trip to USA – meets John Burchard, Vilhelm Lehtinen. Visits Calder, Moholy-Nagy, Neutra, Wurster. Attends CIAM Phoenixville Symposium on Contemporary Architecture

Alvar Aalto becomes member of *Nysténin piiri* (Nystén circle).

Alvar Aalto elected SAFA Vice-Chairman

Alvar Aalto proposes *Den Mänskliga Siden* journal with Gregor Paulsson

1939-40 Winter War. November 30th Alvar Aalto mobilised. December released from duty to become propaganda agent.

1940

March – November - 3rd trip to USA – Propaganda – meets with Gropius, Kaufmann, Lescaze and Saarinen

July 22nd Alvar Aalto offered Professorship by John Burchard to run Bemis laboratory at MIT.

American Town in Finland published in New York

'AA Type' house for Ahlström begins production

HAKA Sörnainen Housing competition *Etelä*

1941

April. Alvar Aalto propaganda trip to Switzerland

1941-44 Continuation War

November. Propaganda visit to Karelia

1942

May. Office for Reconstruction and Finnish Standardisation Association established at SAFA

December. Alvar Aalto establishes partnership with Albin Stark in Sweden, mainly carrying out commissions for industrialist Axel Johnson

Kokemäenjoki Regional Plan commissioned by Harry Gullichsen

Villa Tvistbo, Sweden (unrealised)

1942-66 Säynätsalo Master Plan (largely unrealised)

1943

Alvar Aalto elected SAFA Chairman

Alvar Aalto leads SAFA delegation to Germany – meets Ernst Neufert
1943 Oulu Rapids Centre competition (*Drawing of a fish*)
1943-5 Varkaus Master Plan
1943-7 Strömberg Industrial Park, Vaasa

1944

Avesta Town Centre Plan (unrealised)
Johnson Institute, Sweden (unrealised)
1944-6 Rovaniemi 'Reindeer' Town Plan

1945

Alvar Aalto curates 'America Builds' exhibition in Helsinki
Aaltos propose 'Aino' Institute for research (unrealised)
September F. R. S. Yorke visits Aaltos. Begins British 'lead' in promoting and honouring
Aaltos' work.
November. 4th trip USA Lunch in Alvar Aalto's honour. Meets Frank Lloyd Wright,
visits Taliesin and Eliel Saarinen
Nynäshamn Housing & Town Hall (unrealised)

1946

June - 5th trip USA
Svenska ARTEK opens
September UIA meeting in London
October - 6th trip USA
1946-8 Strömberg Oy Industrial area and housing, Vaasa
1946-9 Baker House Dormitory, MIT
1946 summer Hedemora 500th anniversary pavilion

1947

February - 7th trip USA
Retrospective of Alvar Aalto's work in Helsinki
May. CIRPAC Meeting Zurich
Aaltos visit to Italy, hosted by Ernesto Rogers
October Domus commissions *Arte e arte concreta*
October - 8th trip USA
Enso-Gutzeit Imatra Regional Plan

1948

Alvar Aalto elected Fellow of Royal College of Arts in London
April - 9th trip USA
Aaltos visit Switzerland, meet Henri van de Velde
Aaltos visit Italy
October - 10th trip USA
National Pensions Institute competition *Forum Redivivum* 1st prize
1948-53 Finnish Engineers Association, Helsinki

1949

January 13th Aino Marsio-Aalto dies
Siegfried Giedion published 2nd edition of *Space Time & Architecture* with Alvar Aalto
given prominence

Trips to Stockholm, Copenhagen, Holland, Paris

Imatra Town Centre (unrealised)

Olympialaituri competition *Entrez en paradis*

Helsinki Polytechnic competition *Ave Mater Alma, morituri te salutant* 1st prize
(built 1949-68)

Säynätsalo Kunnantalo competition *Curia* 1st prize (built 1950-52)

1950

Exhibition at Ecole des Beaux Arts, Paris and Stedelijk Museum, Amsterdam

April Lectures in Barcelona, Rome

June Lecture in London

Malmi Crematorium competition *Trinitas* 1st prize (unrealised)

Säynätsalo Cultural Centre (unrealised)

Lahti Church competition *Sinus* 1st prize

1951

Trip to Madrid, Andalucia, Morocco

Rautatalo *Casa* 1st prize (built 1951-55)

Jyväskylä Institute of Pedagogics *Urbs* 1st prize (built 1951-86)

Seinäjoki Church *Lakeuksien risti* 1st prize (built 1958-62)

1952

October Alvar Aalto and Elissa Mäkinen marry

Trip to Sicily

Lyngby Cemetery, Denmark competition *10791* with Jean-Jacques Baruél 2nd prize

Kuopio Theatre competition *Yksi taso* 1st prize (unrealised)

1952-8 Kulttuuritalo (House of Culture)

1952-3 Muuratsalo Summer House

1953

Jussi Lappi-Seppälä appointed President National Board of Building, conflicts with SAFA under Alvar Aalto's chairmanship

Trips to Italy, Sicily, Greece

March 2 Vogelweidplatz Sports Centre competition, Vienna *K123457* Joint 1st prize (unrealised)

1953-8 National Pensions Institute

1953-4 National Pensions Institute Housing

1954

Trip to Brazil and USA

Trip to Egypt

1954 Enso-Gutzeit Summa Master Plan

1955

Alvar Aalto elected to Finnish Academy,
Vienna lecture

Baghdad Bank of Iraq competition (following visit)

Gothenburg Municipal Offices competition *Curia* 1st prize (unrealized)

1955-7 Hansaviertel Flats, Berlin

1956

Gothenburg Drottningtorget competition 48261 1st prize (unrealized)
Asuntosäätiö Korkalovaara Housing, Rovaniemi
Venice Biennale Pavilion
1956 October Lincoln Centre, New York design with Wallace Harrison
(unrealised)
1956-59 Maison Carré, Bazoches-sur-Gayonne

1957

April Alvar Aalto awarded RIBA Gold Medal
Marl Town Hall & Cultural Centre competition 2211
Kampementsbacken housing area, Stockholm competition with H. Klemming
and E. Thelaus *Röde Orm* 1st prize (unrealised)
1957-62 Museum of Central Finland, Jyväskylä

1958

Trip to Capri

Kiruna Town Hall competition, Sweden *Aurora Borealis* 1st prize (unrealised)
Baghdad Art Museum Iraq (unrealised)
Aalborg Art Museum, Denmark competition with Jean-Jacques Baruél 49111 1st
prize (built 1966-72)
Wolfsburg Cultural Centre, West Germany competition 1234511st prize (built
1958-62)
1958 Seinäjoki Town Hall and central area plan competition *Kaupungintalo* 1st
prize (built 1959-60)

1959

Alvar Aalto steps down as SAFA Chairman
Essen Opera House competition, West Germany 17991 1st prize (built 1983-8)
1959-81 Helsinki City Centre Master Plan (unrealised)
1959-62 Enso-Gutzeit Headquarters, Helsinki

1960

Leverkusen Centre competition, West Germany 179991
1960-5 Nordic Bank Extension, Helsinki
1960-5 Seinäjoki Library

1961

Trip to USA—Edgar Kaufmann commissions United Nations interior
Academic Bookshop competition, Helsinki *Aureus* 1st prize
(built 1961-86)
1961-87 Seinäjoki Theatre
1961-87 Rovaniemi Master Plan, including Town Hall, Library, Concert Hall
1961-65 Västmansland-Dala students association, Uppsala, Sweden

1962

Trips to UK, USSR, Italy

1962-75 Finlandia Hall, Helsinki 29
1962-68 Nordic-House, Reykjavik, Iceland

1963

Alvar Aalto elected President of the Finnish Academy
Alvar Aalto awarded AIA Gold Medal in Miami
Attends UIA conference in Mexico City
Montreal Central Square (unrealised)

1964

BP Hamburg HQ competition 312847
Pohjola Insurance competition *Maiandros*
Jyväskylä Master Plan (unrealised), but Theatre, Police Station, Municipal Offices built 1965-81
Asuntosäätiö Stensvik housing for 80,000 (unrealised)
1964-7 Schönbühl Apartments, Lucerne, Switzerland
1964-70 Mt. Angel Library, Oregon

1965

Retrospective at Palazzo Strozzi, Florence
Castrop-Rauxel Town hall competition
1965-9 Alajärvi Town Hall

1966

Pavia, Italy housing area (unrealised)
1966-78 Riola Church, Italy
Siena, Italy Cultural Centre (unrealised)
HAKA Gammelbacka Housing, Porvoo (unrealised)
Wolfsburg Theatre, West Germany competition 2nd prize

1967

Retrospective at Ateneum, Helsinki
Alstetten, Switzerland Church competition 11898 1st prize (unrealised)
1967-9 Villa Kokkonen, Järvenpää

1968

Trips to Switzerland, Italy

1969

Finnish Academy closed down
Trips to Germany and Iran
1969-72 Shiraz Art Museum, Iran (unrealised)
1969-72 Villa Erica, Turin, Italy (unrealised)
Darmstadt, Kranichstein centre plan, West Germany with Ernst May (unrealised)

1972

100th anniversary speech to Helsinki Polytechnic
Trips to Paris and Denmark

1975

Jeddah Plan (unrealised)

1976 Alvar Aalto dies

1975-81 Jyväskylä Theatre

1980-7 Seinäjoki Theatre

1982-7 Essen Opera House, West Germany

1983-8 Rovaniemi Town Hall

1994 Elissa Aalto dies

APPENDIX 2

INTERVIEWS WITH MEMBERS OF THE AALTO ATELIER

Interviews conducted by Vezio Nava (1961-84).

Assisted by Harry Charrington (1986-7), Leif Englund (1955-71), Erkki Karvinen (1951-8), Mikko Merckling (1968-94), Olli Lehtinen (journalist), Tapani Mustonen (1988-93), Jaakko Suihkonen (1957-72).

The dates the interviewee was at the Aalto atelier are in parentheses.

The original video recordings, as well as transcriptions by Jaana Kuorinka and translations into English by Jaana Kuorinka and Harry Charrington, are held in the archive of the Alvar Aalto Foundation, Helsinki.

1. Kaarlo Leppänen (1955-75)

Finlandia-Talo, Helsinki

11.4.1997

2 & 3. Frederico Marconi (1959-62)

Alvar Aalto-Säätiö, Tiilimäki 20, Helsinki

15.8.2000

4. Jaakko Suihkonen

Alvar Aalto Foundation, Tiilimäki 20, Helsinki

18.10.2000

5. Jaakko Suihkonen and Leif Englund

Alvar Aalto Foundation, Tiilimäki 20, Helsinki

8.11.2000

6. Tauno Keiramo (1953-55)

Aaltos' house, Riihitie 20 and Alvar Aalto Foundation, Tiilimäki 20, Helsinki

12.2.2001

7 & 8. Jaakko Kontio (1954-60) and Veli Paatela (1946-8)

Jaakko Kontio's House, Jollaksentie 75, Helsinki

2.3.2001

9. Kristian Gullichsen (4 periods between 1952-63) and Mauno Kitunen (1953-8)

Alvar Aalto Foundation, Tiilimäki 20, Helsinki

9.3.2001

10. Ilona Lehtinen (1961-76)

Alvar Aalto Foundation, Tiilimäki 20, Helsinki

12.3.2001 Aalto atelier

11. Mauno Kitunen

Alvar Aalto Foundation, Tiilimäki 20, Helsinki
12.3.2001

12. Olli Penttilä (1953-8)
Alvar Aalto Foundation, Tiilimäki 20, Helsinki
6.4.2001

13. Mauno Kitunen
Kulttuuritalo, Helsinki
4.5.2001

14. Heikki Hyytiäinen (1964-72) and Matti Pöyry (1965-7)
Alvar Aalto Foundation, Tiilimäki 20, Helsinki
7.5.2001

15. Eric Adlercreutz (1959-65)
Vezio Nava
Alvar Aalto Foundation, Tiilimäki 20, Helsinki
9.5.2001

16. Veli Paatela
Veli Paatela's Residence, Tapiola
16.5.2001

17 & 18. Heikki Tarkka (1950-2 and 1955-94)
Alvar Aalto Foundation, Tiilimäki 20, Helsinki
28.11.2001 & 17.12.2001

19. Per-Mauritz Ålander (1959-62)
Alvar Aalto Foundation, Tiilimäki 20, Helsinki
13.3.2002

20 & 21. Heimo Paanajärvi (1966-73), Tore Tallqvist (1965-72)
Alvar Aalto -Säätiö
18.3.2002

22. Veli Paatela, Jaakko Kontio, Ilona Lehtinen
Alvar Aalto Foundation, Tiilimäki 20, Helsinki
19.3.2002

23. Valter Karisalo (1945-46 and 1949-52)
Vezio Nava
Valter Karisalo's Residence, Lahti
20.3.2002

24. Mikko Merckling
Alvar Aalto Foundation, Tiilimäki 20, Helsinki
27.3.2002

25. Heikki Hyytiäinen And Mariikka Rimaaja (1965-6)
Alvar Aalto Foundation, Tiilimäki 20, Helsinki

10.4.2002

26. Marja-Liisa Parko (Artek), Pirkko Stenros (Artek), Hellevi Ojanen (Artek)
Alvar Aalto Foundation, Tiilimäki 20, Helsinki

17.4.2002

27. Pirkko Söderman (1962-84), Raija Sarmanto (1962-74)
Alvar Aalto Foundation, Tiilimäki 20, Helsinki

8.5.2002

28. Sverker Gardberg (1963-94)
Alvar Aalto Foundation, Tiilimäki 20, Helsinki
22.5.2002

29. Aarne Hollmén (Magnus Mallberg Engineering Office)
Alvar Aalto Foundation, Tiilimäki 20, Helsinki
5.6.2002

APPENDIX 3

SURVIVING BOOKS FROM THE AALTOS' LIBRARY

Index by Arne Heporauta, Alvar Aalto Foundation 18.12.2006
Categories by Harry Charrington

ANONYMOUS

Aalto, Alvar, Varsinais-Suomen tuberkuloosiparantolan rakennusselvitys Rakennuttaja Varsinais-Suomen kuntayhtymä ja Turun kaupunki. s.a.

Alte und neue Kirche Zürich Altstetten 1941.

L'architecture vivante : Documents sur l'activité constructive dans tous les pays publiés sous la direction de Jean Badovici, architecte 1927.

Bericht über die Siedlung in Stuttgart am Weissenhof 1929

Die Kunst im Dritten Reich 1939.

Die Wohnung für jedermann 1933.

Japanilainen ikebanakirja 1930s

Fotoqualität, zeitschrift für ware und werbung 1931.

Hansen, Povl Anton 7.11.1915 - 29.10.1942. Surunvalittelukirjeitä ja muistopuhe Povl Anton Hansenin sodassa kaatumisen johdosta.

Kooperativa förbundets arkitektkontor: 1935-1949 del 1.

Kooperativa förbundets arkitektkontor: 1925-1949 del 2.

Leuchten für Grossflächenbeleuchtung: zum Innen- und Aussengebrauch. Abteilung D zu Liste 32 Teil I Ausgabe 1928.

Materiali par Latvijas būvniecību i kopojums. Riga: Latvijas universitates architekturas fakultates izdevums, 1921.

Nordlicht 1942.

Ornamo: vuosikirja 1935.

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*PROGRAM för a-sektiones vistelse i åbo, pemar och helsingfors under studieresan till finland 1936.
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Warkauden tehtaan omakotitoiminta 1944.

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ABC Beiträge zum Bauen 1925.

Architektura polska Published by the monthly review *Architektura i Budownictwo* Warsaw 1935.

The Architectural Review Vol. LXXIV, No. 445 December 1933.

The Architectural Review Vol. LXXIX, No. 472 March 1936.

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A-talo, s.a.. Suomen puurakenteiden myyntiyhdistyksen julkaisu Helsinki. s.a.

A-talo. Pystytysohjeet, 1945. A. Ahlström Osakeyhtiö, Varkaus.

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Karbunkangas Oy, Inkeroinen 1941.

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Oman kodin piirustuksia. Otavan palkintokilpailusta 1913 Otava, Helsinki 1913.

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