On the Paradigmatic Influence of the Bauhaus in the Nordic Countries. The Bauhaus Dessau Plan and Building Elements as Reflected in Some City Hall Projects in Finland and Denmark

Gerd Bloxham Zettersten

Presented here is a brief review of the route for and delayed time factor of Bauhaus influences, in particular via architectural journals, into the Nordic countries, as well as some examples of contemporary influence of the Bauhaus Dessau plan form from 1926 in a public building type, the city hall. Some notable building elements will also be considered. The exemplification will be focused on Finland and Denmark in the 1930s and 50s. The account takes its starting point my own research in 1994-1999 of international influences into the Nordic city hall building type in the period from 1900 to 1955; the choice of building type was instigated by its complex program and its lengthy implementation process frequently interfering with and changing the original vision of the competing architects. A major finding was in fact the social impact on the implementation of the city client group. This research investigated in depth all archival material still available, in particular competition programs, drawings and plans, which were collated with accounts of the new development in all the Nordic journals of architecture from the entire period. However, the analysis is extended here, with reference to some supplementary as well as newer literature of particular relevance.¹

Brief Introduction: On the Creation and Reproduction of Forms and Structure

Walter Gropius was the architect of the "Bauhaus Dessau" building, so named and completed in 1925/26, in connection with the "Staatliches Bauhaus" school's move from Weimar to Dessau; Gropius being its

director from 1918-28. A closer study of the influence of the Bauhaus Dessau building's compositional principles makes it clear that what will later be communicated and reflected in projects and works of architecture in the Nordic countries is above all an attitude to a way of design, a method-of-approach. For Gropius himself the "New Architecture" was fundamentally a totality, as he makes eminently clear in his apologia—an explication of intent—of 1935, having left the Bauhaus in 1928 and moved on to practice for a short time in England.² In it Gropius demonstrated how architectural Structural Instruction within the entire Bauhaus teaching is "a culminating point". Meanwhile, summing up the modus of the Bauhaus schooling he emphasized: "What we preached in practice was the common citizenship of all forms of creative work, and their logical interdependence on one another in the modern world".3



In his monograph 1960 on Walter Gropius, written and published in the US where Gropius was then at the peak of his career, James Marston Fitch attempted to summarize the essence of the original Bauhaus Manifesto from 1919. A relevant main principle affecting architecture is explicated as follows:

'The Bauhaus believes the machine to be our modern medium of design and seeks to come to terms with it'. All design must recognize this fact of life and distill a new set of criteria from it. Such a process would, for architecture, lead to 'clear, organic [form] whose inner logic will be radiant and naked, unencumbered by lying façades and trickeries.⁴

Here the word "organic"—an essential concept in Gropius' architectural thinking—must surely refer to self-consistency, in accord with an inner logic. Expanding the concept, the new striving of architecture propagated by the Bauhaus teaching soon evolved into a striving for an organic totality that embraced not only technology but in equal measure the social dimension of our existence.

Narrowing an investigation down to mere reflections of building plan and elements might therefore be considered to be very nearly a decapitation of the issue; yet it appears indicative of the method-of-approach. Gropius himself had experienced as early as in 1935 that reception of the concept of

the New Architecture had often been inadequate or erroneous, and that assimilation had proved misguided.

But the development of the New Architecture encountered serious obstacles at a very early stage of development. Conflicting theories and the dogmas enunciated in architects' personal manifestos all helped to confuse the main issue. Technical difficulties were accentuated by the general economic decline that followed the war. Worst of all, "modern" architecture became fashionable in several countries; with the result that formalistic imitation and snobbery distorted the fundamental truth and simplicity on which this renascence was based.⁵

Instead, the act of design could apparently become a matter of imitation. The contemporary evidence seems to tell us that the process of reproducing forms and structure quickly may become eclectic or even esoteric, while missing the ethics of the content. In the following brief study here based on the analysis of a few examples a main question to be raised is what types of assimilation can be noted. Is what we shall see happened in the Bauhaus era of influence a matter of "objectification" of impulses? The concept is used in 1999 in chapter four of Panayotis Tournikiotis' historiography of the modern architecture.6 Or is it a matter of "codification", as claimed by Henry-Russell Hitchcock in his epoch-making 1932 presentation of the International Style?⁷ Or of consolidation and/or a changed paradigm for compositional analysis?

A Genealogy of Paradigmatic Works, 1909–1925

From its position in modern historiography the Bauhaus Dessau building's paradigmatic composition and design in itself might be seen as the third instalment in a genealogy of three Gropius-related buildings of huge significance for a later development and its influence.8 Here innovative designer Peter Behrens and his AEG Turbine Factory in Berlin from 1909 had played a decisive role. As a young architect Gropius started out as the chief assistant of Behrens in his studio in Berlin. Gropius claims in his 1935 explication of the New Architecture that "it was Behrens who first introduced me to logical and systematical coordination in the handling of architectural problems"9. However, in the course of his association with Behrens and the discussions with him and other prominent members of the Deutscher Werkbund, Gropius' position evolved:

My own ideas began to crystallize as to what the essential nature of building ought to be. I became obsessed by the conviction that mod-



ern constructional technique could not be denied expression in architecture, and that that expression demanded the use of unprecedented forms.¹⁰

But the underlying, basic need was seen by Gropius as rationalization in its role of "a purefying agency", meaning the use of new technique in rationalized construction and the use of what Gropius described as "new synthetic substances—steel, concrete, glass" which should actively supersede the traditional raw materials of construction. 11 In Gropius' *Faguswerke* in Alfeld-an-der-Leine which he designed in 1911 in collaboration with Adolf Meyer his architectural ambition was amply realized, which makes the building into this genealogy's second paradigmatic work. Here the syntax of Behrens' Turbine Factory was adapted into a more open architectural aesthetic. Its famous massive corners are here of glass. Kenneth Frampton in his Critical History describes the relation between the two buildings clearly:

The vertical panels of glazing, set forward from the battered brick facing, give the illusion of being miraculously suspended from the upstand at roof level. This 'pendant' effect, plus the translucent corner, inverts the composition of the Turbine Factory, the sheer planar quality of the vertical glass façade being accentuated by the 'Classical' entasis of the brick-

faced frame. Despite such transpositions, the Faguswerk, with its atectonic glazing and its nostalgia for the Classical, remained subject to the influence of Behrens.¹²

Route for and Delayed Time Factor of Bauhaus/Deutscher Werkbund Influences

Several different waves of influence on architectural design came from central Europe during the first half of the 20th century, from Germany as well as from the Netherlands and France, and in the early period, notably also from England and Italy. Directing specific attention to the impact of the Bauhaus movement the following account is focused on the period of admittance of pioneering modernism into the Nordic countries, and on its consolidation, but also with a more diverse conception of building, in the 1950s.¹³

Looking at the route for and delayed time factor of Bauhaus and Deutscher Werkbund influences one can see parallel manifestations originating in a shared or reciprocal reception of impulses that caused debate at the time within the Nordic countries.

In focus here is influence that concerns plan and spatial composition, as well as some elements affecting building plans, to some very small extent already from the mid-1920s, but more particularly from around 1930. From the end of the 1930s and up to the start of the 1950s this influence intensifies, in particular in the balanced plan composition; the evolution includes the integrated courtyard which becomes prominent from the end of the 1940s. "Loans" may be construed to have concerned design solutions and plan forms on the one hand, and the spatial grouping of units and the separation of volumes and functions on the other. Meanwhile the contemporary rationalist interest in typology and the formation of types may have served as one triggering factor.

A few public building projects can be said to have served as a paradigm for compositional analysis, and Gropius's Bauhaus Dessau design from 1925-26 is one such. A year later the League of Nations competition project for Geneva by Le Corbusier and Pierre Jeanneret became a separate example of a paradigmatic influence that was clearly delayed, but which later gave rise to fundamentally fresh plan analysis in some cases. And when it comes to city hall projects the delay of Nordic impact becomes a rule; however, such delay varies considerably between the different Nordic countries. It manifests itself in shifts and within different areas of design



activity. Apparently one reason for that can be attributed to the level of cultural activity of different individuals and groupings which in itself was affected by the national, economic and political context.

Two aspects of the study of influences can merely be mentioned here. An engagement in social and socioeconomic conditions has dominated as a steering factor within the Nordic evolution of modernism in architecture in all the Nordic countries ever since the 1920s, finding its main focus within residential planning and design, and in an extension, in urban design. International influence within these areas has undergone continual historiographic and critical scrutiny and mapping, much of it well published within the individual Nordic countries and by now widely established.¹⁴ While on the other hand, the aspect of inter-Nordic influence sometimes following local international impact deserves specific study. One may ask if at times an inter-Nordic domino effect could be said to have occurred.

Relevant here, then, is the discrepancy between the manifestation of decisive news internationally in relation to its essential breakthrough within the Nordic countries. The publications of the international avant-garde in relation to the accounting for it in the Nordic countries were two separate scenarios.

Therefore there were some extreme limits to what one generally may have assimilated of reeking hot news from the outside when it comes to the actual situation of a competition for a public building. Le Corbusier's and Walter Gropius's works and experimental results from the 1920s onwards were in each case published almost consecutively as they appeared, under the architects' own supervision; in Gropius's case-among other titles—in the two series of Bauhausbücher. 15 This was done alongside the publications of the works of the rest of the international avant-garde, communicated under the general concept of internationale Architektur. 16 Meanwhile, the journals of the Nordic architectural associations published lists of foreign literature and mentions of articles in the foreign journals worth paying attention to. This was done in different ways in each country; it should just be mentioned here that on this count Finnish Arkkitehti/Arkitekten took a strong, leading position through their monthly issues, accounting for the essential content of a very great number of international journals, starting in 1928; from 1934 one passed on to editing the mentions of articles into categories and according to topic.¹⁷ While the Swedish *Byggmästaren*, referring to the usefulness of "the international exchange of ideas and experience", at the start of 1931 printed a complete list of the subscriptions to foreign journals, at that time 43, by the journal's library.¹⁸

In Denmark one behaved differently. The periodical Kritisk Revy which became influential particularly in Norway and Sweden, was published in eleven issues between 1926 and 1928, but it is considered to be the only one among the contemporary Danish publications which gives evidence of the actual reception of new architectural impulses and ideas from Germany. Its message was a culturally broad one, with contributions from the visual arts. music and literature and with critical texts on a number of societal issues. Its promoter and chief editor Poul Henningsen was the designer of the soon famous PH lamp, while the frequent collaborator/contributor Norwegian-Danish architect Edvard Heiberg campaigned for socialist ideals; he had both studied at the Bauhaus in 1928 and returned there to teach briefly in 1930 under



the directorship of Hannes Meyer who entirely changed the previous aesthetic teaching approach to an entirely socially praxis-oriented one.19 Among other contributors to Kritisk Revy was Alvar Aalto, who had been introduced to the German new architecture—though never himself reaching Bauhaus Dessau-by the older Swedish internationally motivated architect Sven Markelius who had visited there in 1927, making friends with Walter Gropius.²⁰ Before that, Heiberg had already in 1924 designed his own house in Virum, northwest of Copenhagen, a preliminary touchdown of the new architecture in the Nordic countries, reflecting the Bauhaus experimental villa Am Horn by Georg Muche from 1923.

Generally speaking, in the period around 1930 there was notable activity on the part of certain Nordic architects engaging in international study visits, friendships, exhibitions.

For both Gropius and Le Corbusier the rapid publishing of results was *per se* in the nature of the mission of pioneering modernism, as were frequent public appearances and lectures. In March 1928 Gropius visiting Stockholm for the first time gave a lecture on modern architecture and industrial art, returning in October 1931 to lecture specifically on the rationalization of

the building industry; this lecture was published in Swedish translation in *Byggmästaren*.²¹ Le Corbusier visited Sweden and Norway in 1933, giving lectures which were reported in the architectural journals, being at the time already an international celebrity.

Yet it is striking that in the Nordic countries in 1925–35 it is only a relatively small number of architects engaged in independent inquiry, who take on board or spread further any essential knowledge of this theoretical development. Furthermore, from the end of the 30s non-radical tendencies, later dubbed "new empiricism", make inroads, in part due to a growing scarcity, caused by the world war conditions, of the industrial materials, steel and glass as well as concrete, that were favoured by rationalist construction.

It should be emphasized, too, that after the closure of Bauhaus Dessau in 1932, and of the Berlin Bauhaus in January 1933, in spite of some continued cultural exchange in 1933, Third Reich architectural preferences could hardly be honoured in the Nordic countries.²²

However, for architects engaged in competition projects Walter Gropius's analyses, aiming for systematic and partly industrialized construction, would have been highly

relevant, as they found expression in new plan solutions where separate elements and volumes were possible to re-combine; these were suited for adaption within monumental, public or institutional architecture. Such solutions were in organic congruence with functional modernism's paradigmatic philosophy of composition which had found its mature expression in Gropius's design of the Bauhaus building in Dessau in 1925.

What we see, then, is that the interest among progressive architects who were willing to experiment was above all directed towards Germany—from the Finnish and the Swedish side, as well as from Denmark. Their attention also included individual practitioners and groups in France and the Netherlands, in particular, which was a main source of Norwegian aesthetic architectural interest. At the same time, among some younger architects in Norway in 1933 it was a socialist engagement with housing that came to the fore and became dominant.²³

Examples of Influence of the Bauhaus Dessau Building and Its Plan Form

When studying Nordic city hall projects in the 1930s to 50s it turns out that there are



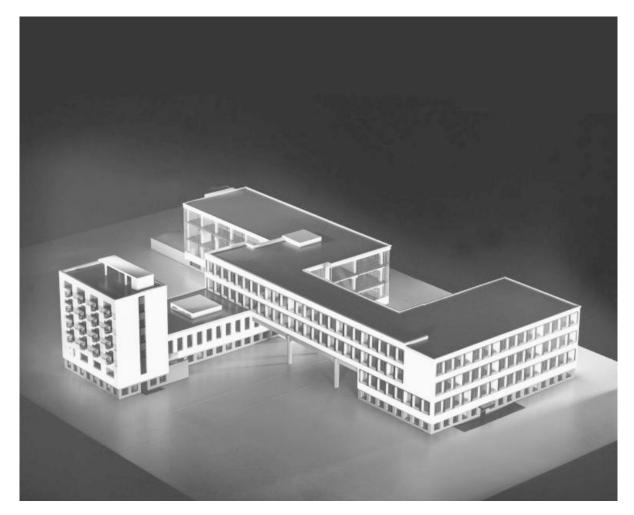


Figure 1. Photo of a model of Bauhaus Dessau, viewed from the northeast. Bauhaus-Archiv Online, https://www.bauhaus.de/en/sammlung/6299_sammlung_online/.

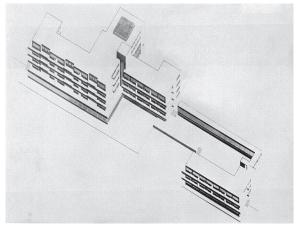


Figure 2. Walter Gropius, the 2nd project for an Academy of Philosophy, Erlangen, 1924. Bloxham Zettersten, *Nordiskt perspektiv på arkitektur*, 111.



clear examples of radical German influence notably in Finland both in competition projects from the 1930s and in the odd completed building. When it comes to the Bauhaus Dessau building specifically, it has been seen as "the built manifesto of the Bauhaus system". Frampton sees it as Gropius's mature implementation of the *Neue Sachlichkeit*/New Objectivity ideology being developed in Germany, Holland and Switzerland in 1923–33 and upheld by the Deutscher Werkbund. Its impact of course also reached Finland.

But what is it that makes this building influential? The new composition principle demonstrates an asymmetrical grouping of volumes which here also, on top of it, assumes a centrifugal, pinwheel form. This was entirely new. And the construction includes the non-ornamented wall planes, the suspended glass panels and the suspended glass façade in the workshop wing, which had previously first been tried out by Behrens in his Turbine Factory, to be elaborated and refined in the two paradigmatic Gropius buildings discussed above. The façades of the Bauhaus building exhibit a new, sheer planar quality which became a trademark of the Neue Sachlichkeit movement [Figure 1].

Gropius wrote about the Bauhaus teaching principles that a "modern building should derive its architectural significance solely from the vigour and consequence of its own organic proportions". The old solid walls and massive foundations of masonry must vanish, and with them "the old obsession for the hollow sham of axial symmetry [...] giving place to the vital rhythmic equilibrium of free asymmetrical grouping".²⁶

An embryo of the Bauhaus Dessau plan may be found in the Academy of Philosophy

plan for Erlangen from the previous year, 1924, by Gropius and Meyer; this is particularly evident in the 2nd project by Gropius [Figure 2]. And it is in the competition for a city hall in Kotka, Finland, in 1930 that one group of projects show a similar interest in the asymmetrical grouping of volumes that have been differentiated as to function, a plan form that had become very popular at the time [Figure 3].27 And the way that the grouping of volumes was often resolved was through variations of the use of the L-plan. For example, as a double-L figure with an extra twist to the tail, as in Yrjö Lindegren's awarded project ("10 pennis stämpelmärke") [Figure 4]; in an anonymous project ("Tecknad gyllene fågel") [Figure 5] the extra twist of the double-L figure forms the wing containing the council chamber - which can be seen as a copy of the Bauhaus Dessau plan, but with the rotating 3rd wing left out.

In both projects one also finds the side corridor system favoured by Gropius and the *Neue Sachlichkeit* movement, which was advocated for institutional and office buildings as it allows daylight into the corridor. It is prominently used in the first Erlangen project, while refined to a single corridor ele-

ment in the 2nd project. In the Bauhaus Dessau plan it was used in the famous bridge element connecting the two main volumes, while also allowing the use of an expanse of glass window. [Figures 6–7].

It is this bridge element feature – a direct quote from the Bauhaus Dessau composition and plan, though lacking that 3rd win - which is strikingly used by Risto-Veikko Luukkonen twenty years later in the town hall in the municipality of Valkeakoski, 1950-56, in a forested region in south central Finland [Figures 8–12].²⁸ The use of the bridge element here is the principal architectonic and functional idea of the design. The bridge element, supported by six pillars, spans a wide opening that connects the exterior, the entrance side of the building, with the interior of the building site on a downward slope which is then bordered by the town canal. Its very function was the creation of this visual and symbolic link between the town hall and the canal area with the industry behind it which is the heart and the livelihood of the municipality. The side corridors on the two storeys of the bridge element with their horizontal ribbon windows – which was another feature of the Neue Sachlichkeit ideology – allow the



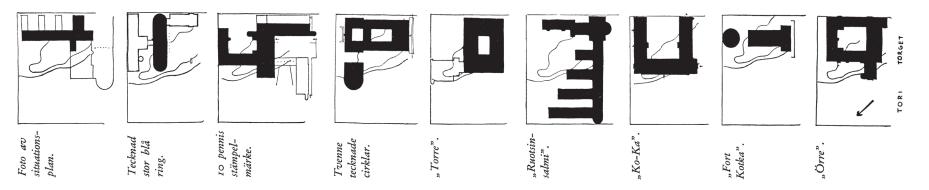


Figure 3. Series of plan forms, competition projects for a city hall in Kotka, Finland, 1930. Gerd Bloxham Zettersten, *Nordiskt perspektiv* på arkitektur, 109.

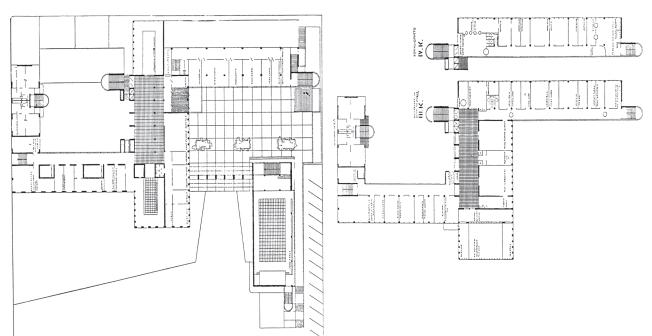


Figure 4. Yrjö Lindegren's project ("10 pennis stämpelmärke"), 3rd prize, for a city hall in Kotka. 1st, 3rd and 4th floor. Bloxham Zettersten, *Nordiskt perspektiv på arkitektur*, 110.



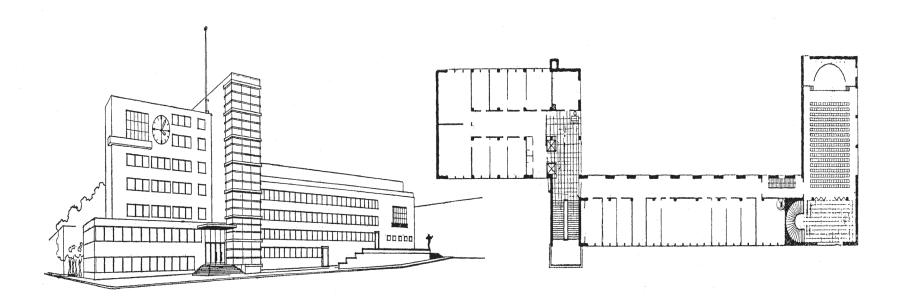






Figure 5. Anonymous competition project ("Tecknad gyllene fågel") for a city hall in Kotka. Perspective sketch and plan. Bloxham Zettersten, *Nordiskt perspektiv på arkitektur*, 111.

Figure 6. Bauhaus Dessau, ground plan. Bauhaus-Archiv Online, https://www.bauhaus.de/en/sammlung/6299_sammlung_online/.





Figure 7. Bauhaus Dessau, first floor plan. Bauhaus-Archiv Online, https://www.bauhaus.de/en/sammlung/6299_sammlung_online/

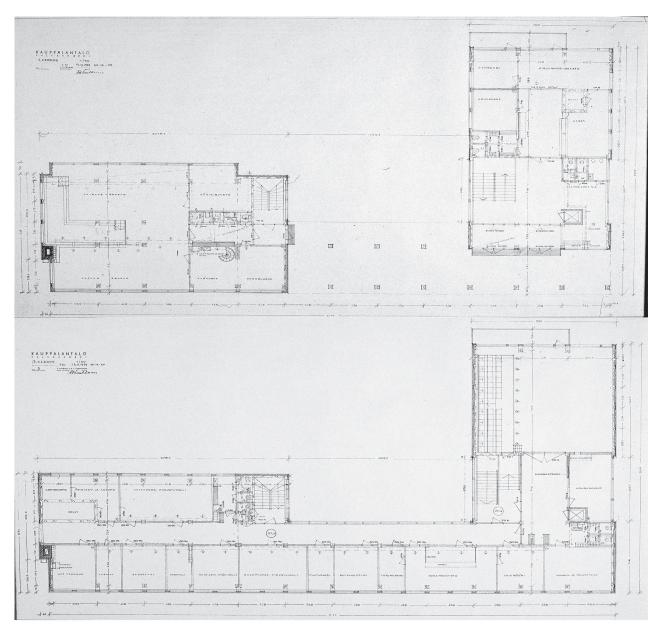
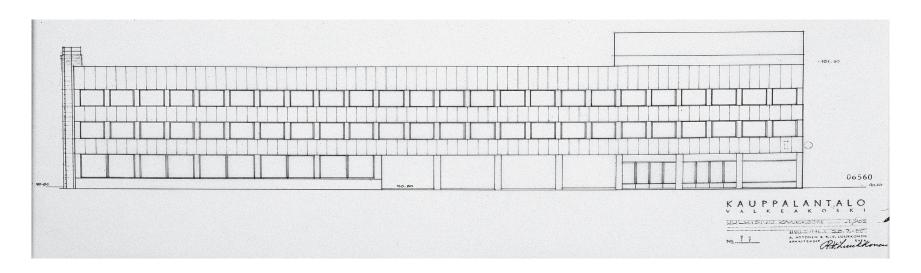




Figure 8. Risto-Veikko Luukkonen, municipal hall in Valkeakoski, plans 1st and 2nd floor, 1955 (1950). Bloxham Zettersten, *Nordiskt perspektiv* på arkitektur, 323; Valkeakoski Municipality.



Figures 9-10. Risto-Veikko Luukkonen, municipal hall in Valkeakoski, drawings 1955: entrance façade towards the south east, and façade towards the canal. Bloxham Zettersten, *Nordiskt perspektiv på arkitektur*, 324-25; Valkeakoski Municipality.

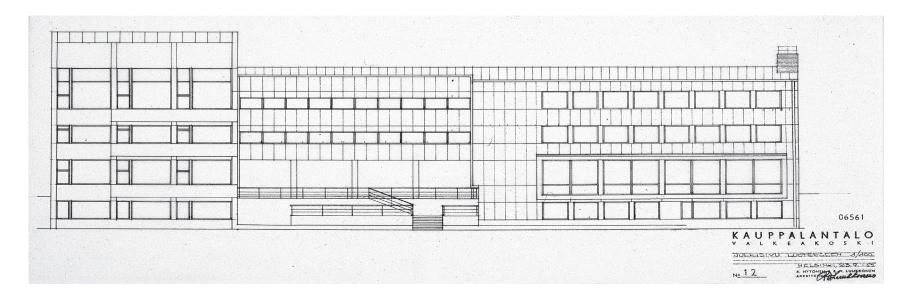




Figure 11. Risto-Veikko Luukkonen, municipal hall in Valkeakoski, 1956. The bridge element with its side corridor. Photo: Gerd Bloxham Zettersten.



Figure 12. Bauhaus Dessau, interior of bridge element with side corridor, view towards the south and the workshop wing with its curtain walls.

view towards the centre of the municipality [Figure 13] .

Meanwhile, in the Valkeakoski town hall the suspended glass façade, a prominent feature famously used in the Bauhaus Dessau building on its workshop wing as a "curtain wall", is here used more modestly to expose the main staircase, which appears in a side-ways view behind a large glass window [Figure 14]. This usage was already becoming an ubiquitous feature on large public buildings in modernist architecture. A variant, more advanced usage is seen in the city hall in Rødovre, Denmark, from 1954-56, by internationally known modernist architect Arne Jacobsen; here the suspended steel staircase is turned with its front facing the suspended glass façade which forms the entire back wall of the main volume [Figures 15–16].

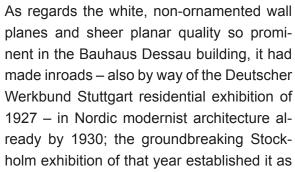








Figure 13. Risto-Veikko Luukkonen, municipal hall in Valkeakoski, winter view from the canal. The international architecture reference is obvious. Bloxham Zettersten, Nordiskt perspektiv på arkitektur, 333; photo: Rauno Mäntylä, Valkeakoski Municipality.



Figure 14. Risto-Veikko Luukkonen, municipal hall in Valkeakoski, photo showing the main staircase behind a glass panel façade, connecting the council chamber wing and the bridge element. Bloxham Zettersten, *Nordiskt perspektiv på arkitektur*, 326; Museum of Finnish Architecture.

the new mode. For the purpose of resisting damage from the acidity of the air caused by the industry, the Valkeakoski variant solution was found to be the use of light-coloured flat tiles, specifically invented and fabricated while at the same time adapting the modernist "whiteness" as a signal consistent with the new architectural ideology.²⁹ It is being made clear that the token of the time was a neo-rationalized functionality in the order of the pioneering modernism; as a building exhibiting a public symbolic status it must also be characteristically elegant.

In the Bauhaus Dessau building Gropius had given the three wings distinctly different functions: class rooms in the north wing, administration in the bridge element, workshops in the spacious south volume, student hostel in the east wing, which was connected through a lower building link to the school wings via a *Kantine* (canteen) and an *Aula* (auditorium). The identification of function with building volume within an institutional complex was new. As the needs grew in the Nordic countries during the 1930s and 40s for combinations of different functions, both administrative and cultural, within a city hall complex, so did the variants of syntax of plan





Figure 15. Arne Jacobsen, city hall in Rødovre, 1954-56. The suspended steel staircase in the main lobby facing a curtain wall, towards the back. Bloxham Zettersten, *Nordiskt perspektiv på arkitektur*, 342; photo: Strüwing.

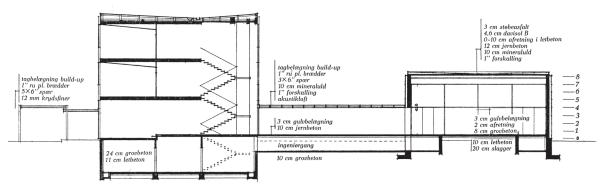


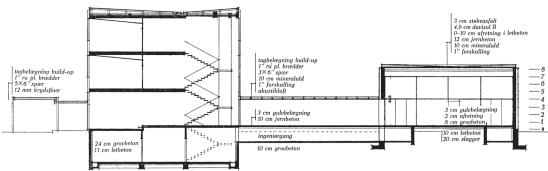
Figure 16. Arne Jacobsen, city hall in Rødovre, drawing. Section through the lobby in the main building, and the corridor connecting it with the council chamber. Bloxham Zettersten, *Nordiskt perspektiv på arkitektur*, 340.

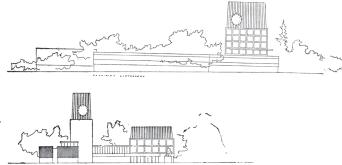


forms develop into a wealth of solutions. The result could at worst become a "conglomerate" of building units of monumental size, ill befitting a small-town urban profile, something which was debated in Sweden and Norway in 1940–42.30 In contrast, one early, celebrated example of a combination of functions – for the addition of a cinema and library – was the competition for a city hall for Søllerød in Denmark in 1939, where the program had specified the use of two main building volumes. It resulted in several solutions of groupings on the spacious grounds, but the winning project (built in 1940–42) by Arne Jacobsen and Flemming Lassen was

instead a single body of two connected, same-directional wings that were elegantly staggered in relation to each other.³¹

One final, mature example of the asymmetrical grouping trend may be included here. This is Yrjö Lindegren's winning competition project for a city hall in Kajaani, Finland, in 1950, which was never built.³² It was to include an assembly hall that could also double as a theatre, as well as a court unit and a library. The basis for Lindegren's solution was a large square courtyard, almost entirely built around, but with an opening towards the city beneath a bridge element in one corner. This yields an asymmetrical U-plan figure of





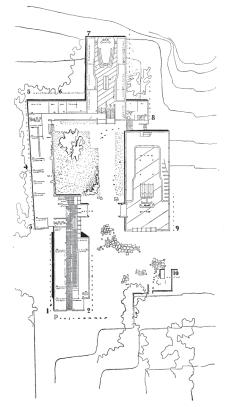
low buildings, which at each end of the U terminates with a larger building volume placed diagonally across from one another as markers, the taller one containing the administration offices and session rooms, the other the assembly hall. Meanwhile the diagonal axis from the portal across the city hall courtyard leads up a slight incline into an opposite, barely pointed corner [Figures 17–18]. It was the courtyard figure or piazza that had taken over the interest of the architects in monumental projects in the 1940s.³³

Consolidation in the 1950s? A Conclusion

By the mid-1950s when the Valkeakoski municipal hall was built the architectonic signals of international aesthetic affiliation were already taken for granted, having become an

Figure 17. Yrjö Lindegren, sketch in connection with the competition for a city hall in Kajana/Kaajani 1950; perspective, pencil drawing. Bloxham Zettersten, Nordiskt perspektiv på arkitektur, 172; Museum of Finnish Architecture.

Figure 18. Yrjö Lindegren, competition project for a city hall in Kajana/Kajaani 1950, 1st prize. Two facades and situation/1st floor plan. Bloxham Zettersten, Nordiskt perspektiv på arkitektur, 173.



Rumförklaring:

- 1. skattenämnden
- 2. drätselkontoret
- vårdnämnden
- 4. hälsovårdsnämnden
- 5. skogshushållningsavdel-
- 6. arbetsförmedlingsbyrån
- 7. magistraten och rådstuvurätten
- 8. bostäder
- 9. festsalens foyéer
- stadens grundläggares staty
- 11. stadsstyrelsens plenisal
- 12. stadsstyrelsens rum
- 13. byggnadsbyrån
- 14. stadens bibliotek
- 15. festsal



explicit trend in Finland. However, this was not the case when the building was first designed in 1950. Instead this very project belonged to the vanguard of the reaction to postwar general empiricism which had been setting in within the Nordic countries, as stated above. The fundamental idea of the project solution, its plan and its construction – which in themselves are early examples of the 1950s' favouring of the grid plan and construction using prefabricated elements – is taken further in the choice of materials and the new constructional solutions that are reached five years later.

Generally at the start of the 1950s there are new pressures dictated by economy and technology which affect the process of production within architecture; rationalization and industrial construction become increasingly essential.³⁴ The central question, raised in the introduction, of "objectification" vs. "codification" of impulses has lost meaning by now. What could be seen in the Valkeakoski process was how decisions on a local level were being steered by controlling factors in the period, but are taken advantage of locally in new on-the-spot solutions. In a comparison the contemporary Rødovre

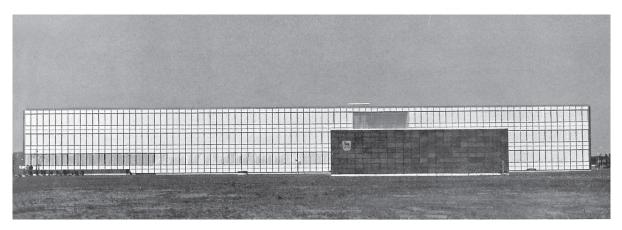


Figure 19. Arne Jacobsen, city hall in Rødovre, façade seen from the west with the council chamber wing before it. Bloxham Zettersten, *Nordiskt perspektiv på arkitektur*, 343; photo: Strüwing.



city hall, mentioned above for its suspended steel staircase, differs entirely through its process of rationalized prefabrication and the dominant use of glass, itself a result of a fascination for technology which is guided by both economic and aesthetic factors [Figure 19]. The accelerating technologization of international building construction is here for the first time in a monumental building task in the Nordic countries employed as an end in itself.

This development was criticized by some contemporary architectural writers. Even if, in a benevolent and accommodating reading, one could here characterize it as a meeting between two opposed ideologies: a dominant objectivist philosophical stand and a more diffuse, romantic subjectivity. At the same time the development was seen as a betrayal of the central principle of the pioneering modernism of the 1920s and 30s, now an aestheticized and mannered neo-functionalism which was the opposite of the objective, generative modus and spirit of the modernist pioneers. Here we may compare with Gropius' early vision of vibrant, organic architectonics brought into life by an animated yet rational, "machine" method-of-approach:

The artificial desires to conquer the natural, to find release from the antithesis in a new kind of fusion: this process is realized in a struggle of spirit with material. The spirit creates a new kind of life which is different from nature's.³⁵

This proposal for an awakening had at first inspired the Nordic pioneers. However, a conclusion appears to be that the consolidation seen in the 1950s is two-faced. The paradigm for compositional analysis has changed with the times. The fact is that in the 1950s the development had moved on, but it could not have taken the form it did without the initial impetus created by that inspired building, the Bauhaus Dessau, in its function as a breakthrough and as the initiation of ideas within the early Bauhaus movement. Stating anything else would be a counterfactual argumentation. There were complex, related, international influences at play. What we see happen exemplifies an ongoing historical evolution in our time. Therefore, discussing on the basis of plan form and building elements what types of assimilation may be seen by the 1950s as a post-Bauhaus phenomenon appears a bit too indefinite an exercise. The delineation of an evolution should suffice.

Endnotes

- 1 The research underlies my dissertation of 2000, Gerd Bloxham Zettersten, *Nordiskt perspektiv på arkitektur. Kritisk regionalisering i nordiska stadshus 1900–1955* (Stockholm: Arkitektur Förlag, 2000.
- 2 Walter Gropius, *The New Architecture and the Bauhaus* (Cambridge, Massachusetts: The M.I.T. Press 1965/66). Originally published in 1935.
- 3 Gropius, *The New Architecture and the Bauhaus*. 85.
- James Marston Fitch, *Walter Gropius* (N.Y.: George Braziller, Inc., Masters of World Architecture, 1960), 11. The sentences set in italics are quotes made by Fitch from Gropius' manifesto, while here the plain typography shows Fitch's own comment.
- 5 Gropius, *The New Architecture and the Bauhaus*, 20f.
- 6 Panayotis Tournikiotis, *The Historiography of Modern Architecture* (Cambridge, Massachusetts and London: The M.I.T Press, 1999).
- 7 Henry-Russell Hitchcock and Philip Johnson, *The International Style* (N.Y. and London: W.W. Norton & Company, 1966). Originally published in 1932 under the title *The International Style*. *Architecture Since* 1922.
- 8 The concept of genealogies in architectural historiography, and different versions of them, is discussed in depth by Tournikiotis, *The Historiography of Modern Architecture*, ch.1. The historian Nikolaus Pevsner, in his *Pioneers of the Modern Movement from William Morris to Walter Gropius*, 1936, was one who identified Gropius with the rise of the modern movement, setting up a Gropius genealogy of three model buildings, as proposed here, but in which the third building was the model factory for the Deutscher Werkbund exhibition of 1914. This genealogy was objected to in 1960 by Reyner Banham, in his *Theory and Design in the First Machine Age*; cf. Tournikiotis, 149.

- 9 Gropius, The New Architecture and the Bauhaus, 47.
- 10 Gropius, *The New Architecture and the Bauhaus*, 47.
- 11 Cf. Gropius, *The New Architecture and the Bauhaus*, 23–25.
- 12 Kenneth Frampton, *Modern Architecture. A Critical History* (London: Thames and Hudson 1985, revised edition), 114. Originally published in 1980.
- 13 Cf. Bloxham Zettersten, *Nordiskt* perspektiv på arkitektur, chapters 2 and 3.
- An important recent publication, presenting significant national texts in English translation and covering architectural critical history from the mid-1920s on, with overview introductions for each nation by specialist architectural historians, is Michael Asgaard Andersen (ed.), *Nordic Architects Write.* A documentary anthology (Oxford and New York: Routledge 2008).
- 15 Bloxham Zettersten, *Nordiskt perspektiv* på arkitektur. 103ff and note 35.
- For a full account and discussion of international influence, cf. Bloxham Zettersten, Nordiskt perspektiv på arkitektur, ch.2. For a comprehensive general survey of international influences, in particular German ones into Sweden. with full literature references, see Atli Magnus Seelow, "From the Continent to the North—German Influence on Modern Architecture in Sweden". Konsthistorisk Tidskrift/Journal of Art History 85:1 (Stockholm 2016): 44-62. A recent volume of critical articles throwing light specifically on the evolution of Bauhaus design influence in the Nordic countries is Tobias Hoffmann (ed.): Nordic Design. Die Antwort aufs Bauhaus. Nordic Design. The Response to the Bauhaus (Bröhan-Museum, Landesmuseum für Jugendstil, Art Deco und Funktionalismus, Stuttgart 2019).
- 17 Cf. Raija-Liisa Heinonen, "Uuteen arkkitehtuuriin. Ulkomainen arkkitehtuurikirjallisuus Suomessa 1920- ja 1930-luvulla", in: Taidehistoriallisia Tutkimuksia/Konsthistoriska Studier



- 2 (Helsinki 1976), 13–32. This is an account of the foreign architectural literature in Finland between 1928 and 1935, with a summary in Swedish.
- 18 Under the leadership of the urban planner Uno Åhrén as chief editor 1929–32 *Byggmästaren* became the most representative organ in the Nordic countries for the new movement within residential building and urban planning, modeled on the previous, Danish, critical journal *Kritisk Revy* 1926–28; cf. the following discussion.
- A relevant, full monographic study of the individual contributor/architect Edvard Heiberg, which at the same time reflects international influence into all the Nordic countries and contemporary critical writing, is Leif Leer Sørensen, Edvard Heiberg og dansk funktionalisme--en arkitekt og hans samtid 1897-1958 (Copenhagen: Arkitektens Forlag, 2000). For a brief discussion of the differing Danish position in design, cf. Christopher Harlang, "Negotiating with the Surrounding Society", in Asgaard Andersen (ed.), Nordic Architects Write. A documentary anthology, 9-17, as well as Tobias Hoffmann, "Danish Traditionalism—More Functionalist than the Bauhaus", in Hoffmann (ed.): Nordic Design. Die Antwort aufs Bauhaus. Nordic Design. The Response to the Bauhaus. 156–61.
- 20 Markelius was at that time the most prominent of the Swedish younger architects, beside Gunnar Asplund. For his relation to Alvar Aalto, cf. the biography by Aalto's friend Göran Schildt, *Moderna tider. Alvar Aaltos möte med funktionalimen* (Keuru: Wahlström & Widstrand 1985), 46-58; in English translation, *Alvar Aalto: The Decisive Years* (New York, Rizzoli 1986).
- 21 *Byggmästaren* 28, vol 10 (Stockholm 1931): 149–56.
- 22 Cf. Seelow, "From the Continent to the North—German Influence on Modern Architecture in Sweden": 54–56.
- 23 The periodical PLAN, where the editors belonged to a group of recently educated architects

- who formed the Association of Socialist Architects, came out in four issues in 1933. See PLAN, "Our Agenda", in Asgaard Andersen (ed.), *Nordic Architects Write. A documentary anthology*, 227–37. PLAN wanted to go further than *Kritisk Revy* and *Byggmästaren* in their social focus.
- 24 Cf. for example, Spiro Kostof, *A History of Architecture. Settings and Rituals* (Oxford: Oxford University Press 1985), 702.
- 25 Cf. Frampton, *Modern Architecture. A Critical History*, ch. 15 and p. 138.
- 26 Gropius, *The New Architecture and the Bauhaus*, 82.
- 27 Bloxham Zettersten, *Nordiskt perspektiv på* arkitektur, 109–12.
- 28 For this case study and the following analysis, see Bloxham Zettersten, *Nordiskt perspektiv på arkitektur*, 321–34.
- 29 For a detailed description of the production of these tiles, see Bloxham Zettersten, *Nordiskt* perspektiv på arkitektur, 330-31.
- 30 Bloxham Zettersten, Nordiskt perspektiv på arkitektur, 151f.
- 31 Bloxham Zettersten, *Nordiskt perspektiv på arkitektur*, 145.
- 32 Bloxham Zettersten, *Nordiskt perspektiv på* arkitektur. 172–74.
- 33 Cf. the discussion of grouping syntax and analysis, and in relation to the courtyard or piazza, in Bloxham Zettersten, *Nordiskt perspektiv på arkitektur*, 165–77.
- 34 For this discussion in-depth, cf. Bloxham Zettersten, *Nordiskt perspektiv på arkitektur*, ch. 3 in its entirety.
- Walter Gropius, the Bauhaus Manifesto, 1919, cited by Keijo Petäjä, "The perception of real space", in: *Abacus. Yearbook 1982* (Helsinki: SRM 1983), 247.

Gerd Bloxham Zettersten (b. 1944) is a docent fil.dr., mag.art. associate professor emeritus in the Department of Architecture, Chalmers Technical University, Gothenburg. Recent Publications include "Reuse of Dreams/Changes of Foci. Expectations and steering conditions in two city hall competition processes in Kiruna, Sweden, in 2011-13 versus in 1956-58", in: Jonas E. Andersson-Gerd Bloxham Zettersten-Magnus Rönn eds., Architectural Competitions as Institution and Process (Stockholm: The Royal Institute of Technology and Fjällbacka: Kulturlandskapet, 2016), 62-93.

