

Miel Karthaus

PLAN
ANALYSIS &
DESIGN
LEGITIMA-
TION

In this article I want to take a very broad view of the term 'plan analysis'.

Although it was originally developed as an educational tool, I believe its meaning now covers more than simply learning to read a design. During the past ten years – ever since the democratisation – the term plan analysis has become more prominent in debates on architecture in Delft. So much so, that I would now like to use it as a term to describe a modern view of design and architecture. In this respect I see a link between 'plan analysis' and 'design output'. In doing so, I am giving it a broader meaning than Max Risselada does as a teacher. In his preface to 'Doel en vermaak',¹ he never links 'analysis' and the actual design process. He merely identifies an affinity between the method of plan analysis and the design process. However, especially now that plan analysis has come to be associated with concepts such as 'morphology' and 'typology', there is indeed a reciprocity between analysis and design.

The term 'plan analysis' has its roots in Delft. Although its origins derive in part from the same impulses that, on an international level, are now creating the icons of 'postmodernism', the difference between the two is even more conspicuous: plan analysis has a fundamentally different approach to history. Its methodology may still be underdeveloped, yet plan analysis offers a genuine study of all the tools and material that architecture, as an institution, has generated. This approach is more likely to help the discipline reflect on its own history than all the hype in the illustrated press would have us believe. To preserve this difference, the analyses really ought to develop into a robust set of instruments. Genuinely interested in turning its own history into an 'object' of knowledge instead of merely roaming around in it as if in a nostalgic pleasure

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Frits
Palmboom,
Doel en
Vermaak in het
Konstruktivisme
(Nijmegen,
1979).

garden, it must – as if it were a science – account for its methods. And this is not an easy assignment, as every new theme, every new task that architecture envisages, whether it relates to the city, a particular function or construction, calls for the development of an appropriate method of analysis. The search for real chances to respond to current urban and planning problems continually throws up new questions about the history of architecture, just as it calls for new techniques for deploying that history. It involves continuous debate on those instruments of knowledge. At present, criticism provides the only place for debate on methods of architecture/historical research. But however much a particular form of architecture may benefit from analyses such as those by Wittkower or Colin Rowe, they will never suffice for the simple reason that 'criticism' never leads the way. Whereas architecture may get an idea of its history in a close, reciprocal relationship with criticism, it will still have to pose its own questions, as this is the only trigger for a subsequent development in architectural output.

Initially, 'plan analysis' challenged the then dominant conception of design: that of 'Forum'.² Although the approach covered a range of different ideas and methods, it rather limited the precise meaning of the term plan analysis. It found its meaning in the coherence of what it opposed. During the lengthy battle against the so-called ideology of the artist/architect, 'plan analysis' came to mean an approach that covered the method of design as well as its professional practice, the relationship with historical material and design education. In short, it was a completely novel concept of design, a new approach to architecture. The positions that were adopted then, about five years ago, must be retained and reconsidered, as they provide a theoretical foundation for the further development of the 'instruments of knowledge'.

Over the years the term plan analysis has been associated with such a diverse range of aspirations and movements in architecture that the term now circulates too widely. A great deal of international work, such as that of the five Americans, Stirling, Rossi's typological work, and so on, has also left its mark on those studios that draw on plan analysis. As a consequence, the term has become rather imprecise. Right now, it refers to a certain approach to design rather than a clearly defined method. A single method among many.

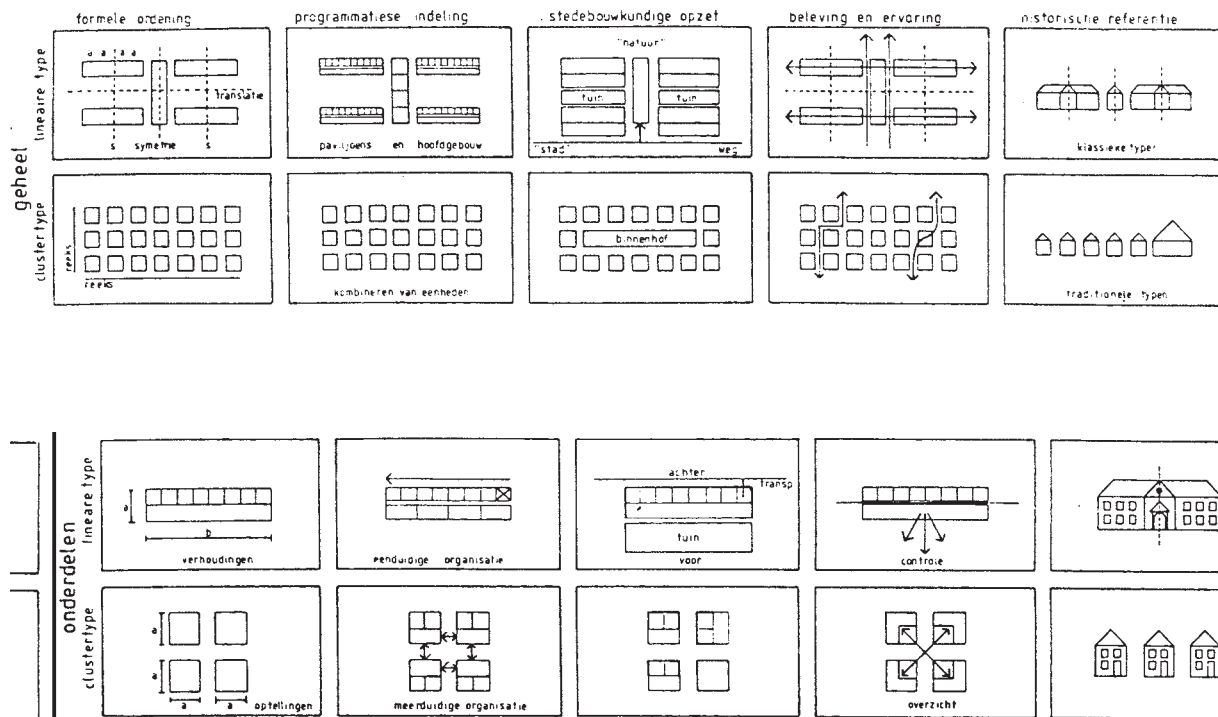
This imprecision need not be a barrier to the concept's effectiveness at all. Something that is difficult to define in any detail can still be extremely effective in a wide range of areas. This is particularly pertinent to matters governing human behaviour. And to some extent it also applies to 'plan analysis' as an 'approach'. It actually managed to establish itself fairly easily in education, and I suspect that the current generation of students cannot quite understand what we were struggling with at the time of the reappointments of Van Eyck and Hardy.³

Certainly enough to not pursue it any further. Yet this fosters a number of misunderstandings. One such misunderstanding is the notion that you can use 'plan analysis' to design. Another is the idea that a typological study is indispensable if you are commissioned to build a library or psychiatric institution. After all Jos Louwe,⁴ in his explanatory notes to the competition entry for a psychiatric institution, wrote: 'The type. The concept of type plays an important role in our *understanding of form*. In general terms one might say that the type is a fundamental principle that

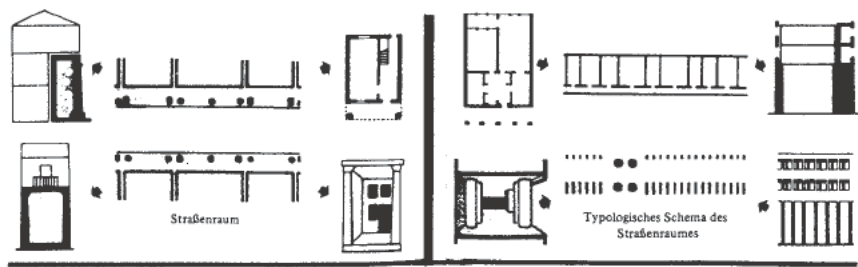
2
The name
'Forum' refers to a maga-
zine in which
architects
Herzberger,
Van Eyck,
Apon, Bakema
and art histo-
rian Hardy
published
work between
July 1959 and
May 1963.

3
For those who
are interested,
the debate
surrounding
history educa-
tion provides
a good entry
point. In
Delft, too,
there was
a struggle
to establish
historical
materialism
in education.
One might say
that this laid
the foundation
for the 'plan
analysis' that
would emerge
later. See the
reports *Histo-
rie Nu* (June
1973) and
*Historie Nou
En* (October
1973).

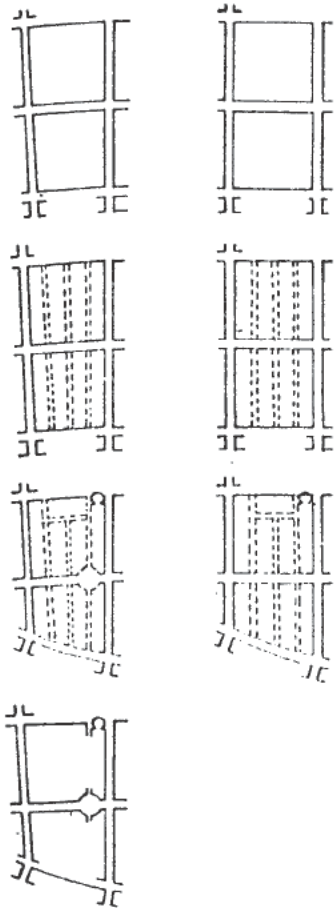
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Jos Louwe
was long asso-
ciated with the
working group
of C. Weeber
and L. van
Duin, one of
the studios
that developed
plan analysis
in education.
Last year he
and C. van
de Hoeven
submitted a
design called
'März, no.
223' to a
competition
for a psychi-
atric institution.
Quote: illus-
tration, 1.



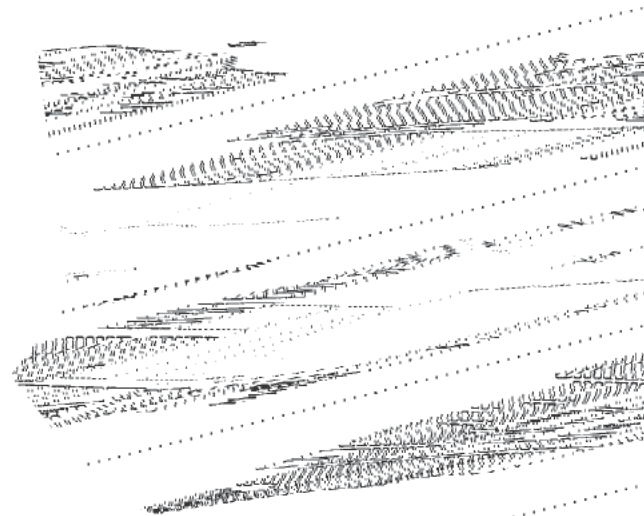
Studies by Jos Louwe & Casper van der Hoeven



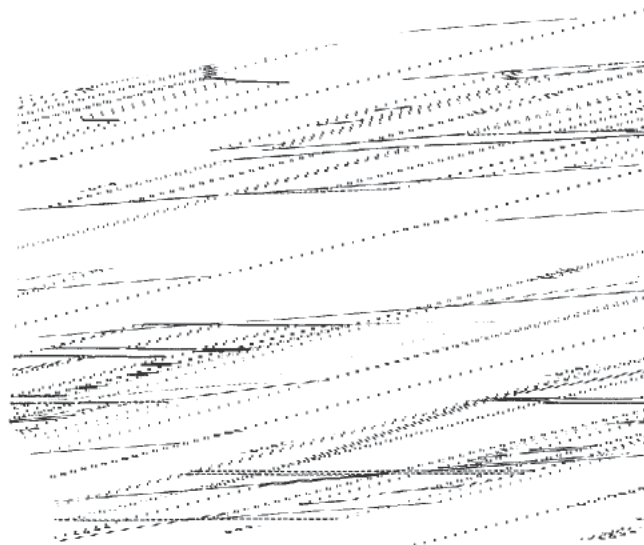
Aldo Rossi



Aldo Rossi



'Witte nota' (white paper)

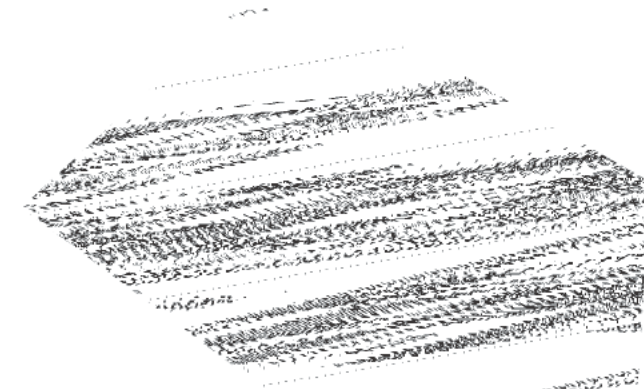


'Witte nota' (white paper)

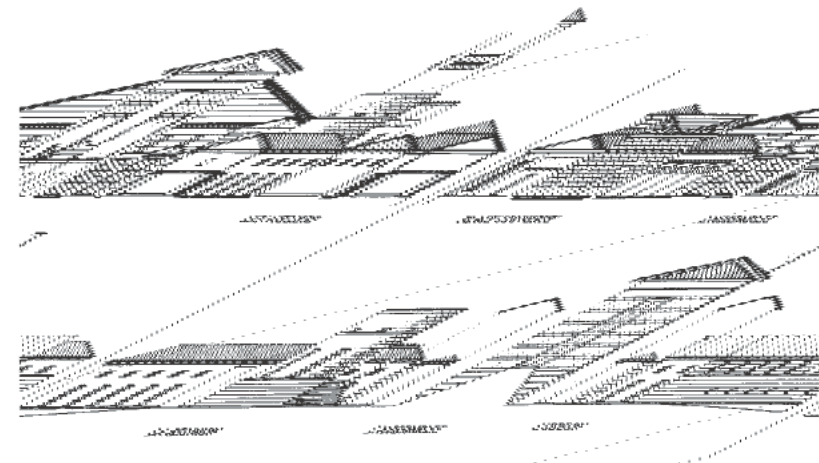
governs the construction of buildings. Because a type has crystallised over the years it offers the guarantee of satisfying certain practical requirements and finds itself embedded in the experience and collective memory of users. It thus offers the designer a starting point from which to interpret the type and arrive at a 'good' design.'

Following Rossi, a great deal of modern, so-called formal work is characterised by 'typological clarity'. These designs present themselves 'as' type, and not as concrete, temporal and spatial *interpretations* within a typological series. In these instances an analytical tool, the typological, is instantly assimilated in the design. Type becomes Form. Strictly speaking, any reference to a type to legitimise a particular form is based on a misunderstanding of the role of analysis in design. Of course, a design touches upon the *reasons* why a type transforms or survives. It's those reasons that legitimise a design, not the analysis itself. This kind of misunderstanding is to be expected at a time when architecture wants to show an interest in its history. At that point plan analysis is in fact its opposite, because it is not used as an instrument of knowledge but as a design tool. There is no one-to-one relationship between analysis and design. No more than form ever followed function, does form follow type.

Now that the word is starting to crop up in job descriptions for new lecturers, it is threatening to become a magic word that can be deployed anywhere, anytime. Architects have always had a predilection for magic words to help them flog their designs. If we want to be able to discuss plan analysis as a collection of methods we must first make a clear distinction between the many purposes it serves.



Léon Krier, School ensemble

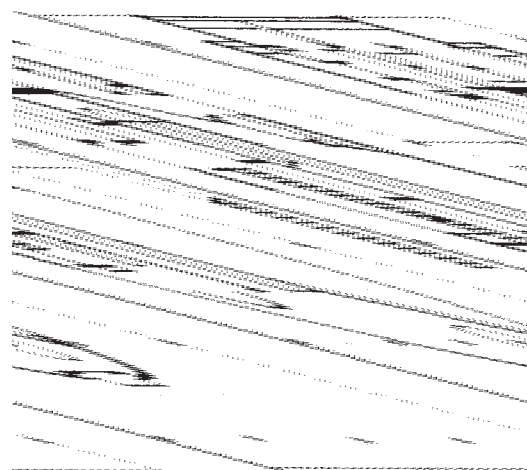


For instance, is the analysis in question quite distinct from a design commission or is it directly linked to a particular design process? Are we dealing with a study that transcends a mere ideological critique? Is it a checklist? These questions can be put to every single design with the aim of quickly obtaining similar sets of information. Or are we trying to identify the specific qualities of a piece? Is it a single piece or an entire oeuvre? Does the analysis consider the piece as a whole or is it trying to find meaning in its constituent parts? Is the key focus on urban planning or on the buildings themselves? Sometimes things become confused: in his analysis of urban morphology, in favour of squares and streets, Leon Krier harks back to a very distinct, almost allegorical historicism of monumentality.

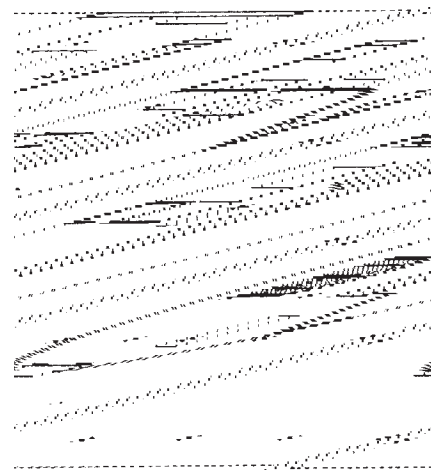
He needs this exaggerated monumentality and its 'historical value' to come up with a compelling design for these public spaces. This architecture serves his urban-planning analysis and is subordinate to it. (Unfortunately, he extends this analysis of the European city into a critique of industrial society as a whole.) A truly perceptive analysis of specific monuments within the historical context of the city and their effect amid the modernist onslaught would distract from his strategy! It would sap the power of his exaggeration. He needs the 'image' of history rather than history itself.

Our best option, if we were prepared to take people like the Kriers seriously, would be to develop, with painstaking accuracy, instruments and drawing techniques that will tell us about certain types of buildings, façades, blocks and site layouts and their relationship to the urban space. In this respect the analysis of Amsterdam neighbourhood Dapperbuurt by Engel and Hobus as well as Louwe and Louët's graduation project continue rather than contradict the Kriers' approach.⁵ I should also mention

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These two studies have never been published, but do have a place within education. The morphological study of Amsterdam by J. Louwe and Louët can be found in the architecture library; this study will soon be published by SUN.



Le Corbusier, Villa Savoye, October 1928



Villa Savoye, April 1929

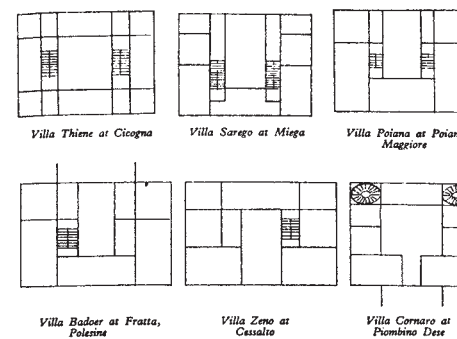
the so-called 'Witte Nota' (White Paper), a morphological study carried out for The Hague, because it was the first time a city council (its urban development department) made use of such an analysis.⁶

The case of the Kriers demonstrates that a particular form of architecture can be used to explain something else. Rather than seeking its own perfection or balance, it focuses on a particular theme that it would like to know more about. This, of course, is the normal state of affairs. However, it places the plans in a position parallel to the analysis of design. Although using different tools, both methods can aim for similar things. If Rossi had not had any specific intentions, he might as well have excluded typology from his design and included it in his analysis. This interchangeability hampers our ability to distinguish between their potential. Before addressing the constantly changing relationship between plan analysis and design, I want to look at some of the general characteristics to come out of the polemic with the 'Forum' architects.

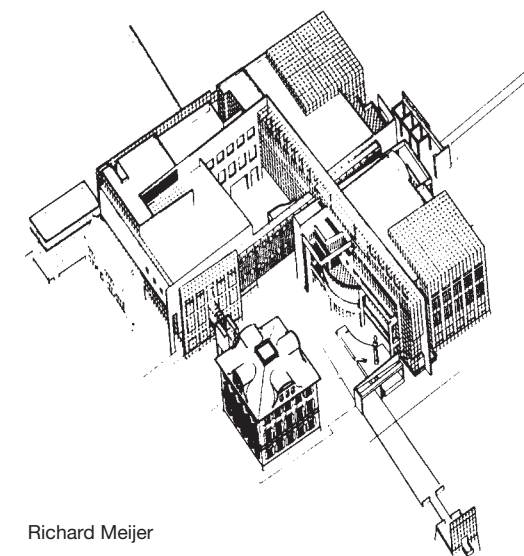
6
Urban Development Department, *The inner city layout, an urban planning approach to the problem of crossroads* (The Hague, August 1980). The morphological study was done by R. Van Genderen and J. Hoffman.

PLAN ANALYSIS AND THE CONCEPT OF HISTORY

Back in the day when everyone who wanted to familiarise himself with the world of architecture did so 'at his master's feet'; back in the day when architecture in its 'counterform' had to uphold the reality of human civilization against a deceitful, bureaucratic society; back in the day when a design could only be created by a highly personal and independent imagination and only acquired its meaning in 'experience'; back in that day, 'plan analysis' started questioning the neurotic wranglings of a discipline that had lost its function. It posed simple questions such as: 'What are the



Palladio's geometry: the villas



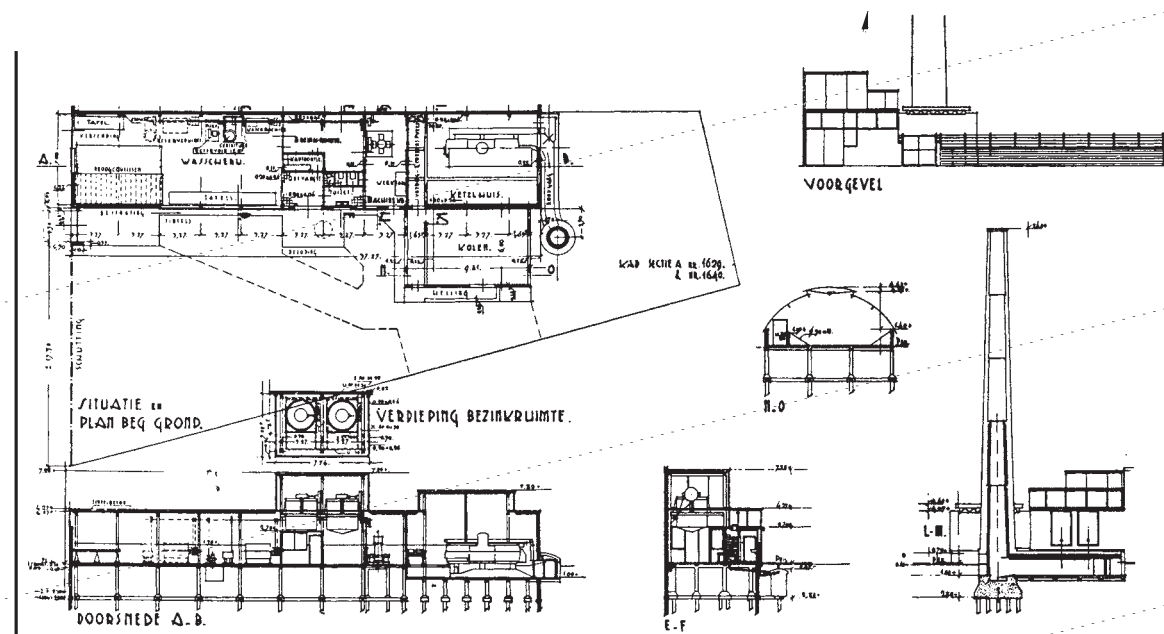
Richard Meijer

building blocks used here?’ and ‘What are we actually looking at?’

With this down-to-earth stance, plan analysis put itself up against a complex, but very cohesive system of ideas. The idea of a creative personality, who places his immaculate reputation against the political establishment, was confronted with his powerlessness in planning. The ‘autonomy’ of an independent intellect had to face up to the frustrations it was creating for itself. The individual creative process, the arena of the conscious and subconscious, the ‘image’ as the source of the design, came up against the historicity of the material. The idea of progress in history, with each subsequent design shouldering the expectation of ‘deliverance’ from an old contradiction; an architecture heading for freedom . . . The notion of the perfect, eternal work of art. Suddenly all this could be undermined. Plan analysis made us realise that the totality of a work of art or a design can be taken apart, dissected into constituent parts that, from an objective point of view, are found to be effective in the work as a whole. This realisation then provides the basis for taking the material further – further in what is ultimately a random direction.

The realisation that an analysis need not target the whole, the unique synthesis of the individual components, was liberating in the sense that the next step in the narrative need not be taken by a struggling individual, the tormented artist, who is forced to try and understand the essence of the phenomena surrounding him. It brought to an end the holy quest for a new Unity.

The optimistic conclusion that *partial* knowledge suffices may not enable us to get an immediate sense of what makes a work of art unique, but it is enough to allow us to objectively supply material for subsequent interpretations – interpretations that may be experimental, whose direction

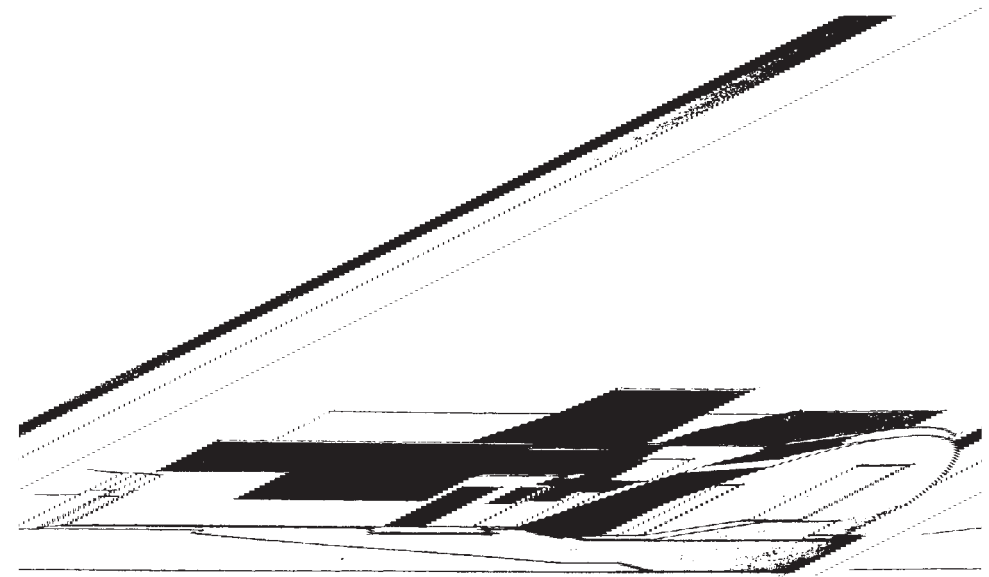


Johannes Duiker & Bernard Bijvoet, Wassierij (Laundry), 1924

is determined by minor, practical considerations. Service-driven.

This view of history, which is implied by the term ‘plan analysis’, took quite a bit of weight off our shoulders. Suddenly, many of our struggles proved futile. The futility of architecture as ‘fruitless effort’: the effort to implement a certain form as quality and truth against the constraints of regulations and across the communication quagmire of multidisciplinary planning. New prospects were opened up because the built product was no longer required to meet strong, a-priori expectations as *form*; because the built product was no longer compared with the original intentions, the idealising ‘image’ of the artist; and because the work of art was no longer competing with its creator’s original intentions. From now on, the design could incorporate bureaucratic stipulations just as easily as it had always taken its cue from natural constraints. Just as the whole area of spatial planning draws on ‘dialogue’, the team-based design process was opened up. It was now possible to ‘discuss’ the design, because its constituent parts could be named. This facilitated a new, pragmatic approach, without the risk of lapsing into opportunism.

Plan analysis as a form of historical research allowed architects to obtain design principles from a *fragmented* historical study. Gone was the need to travel like tourists through time and space, looking for lost modes of existence. And gone, too, the need to become a historian. After all, an architect need not identify a structure in history. He needs to see his commission in its historical context – not to derive it from that historical context. After all, history does not tell us what needs doing. At any moment in time, history is open to renewed interpretation. At any moment in time, you can identify new links between current commissions and what

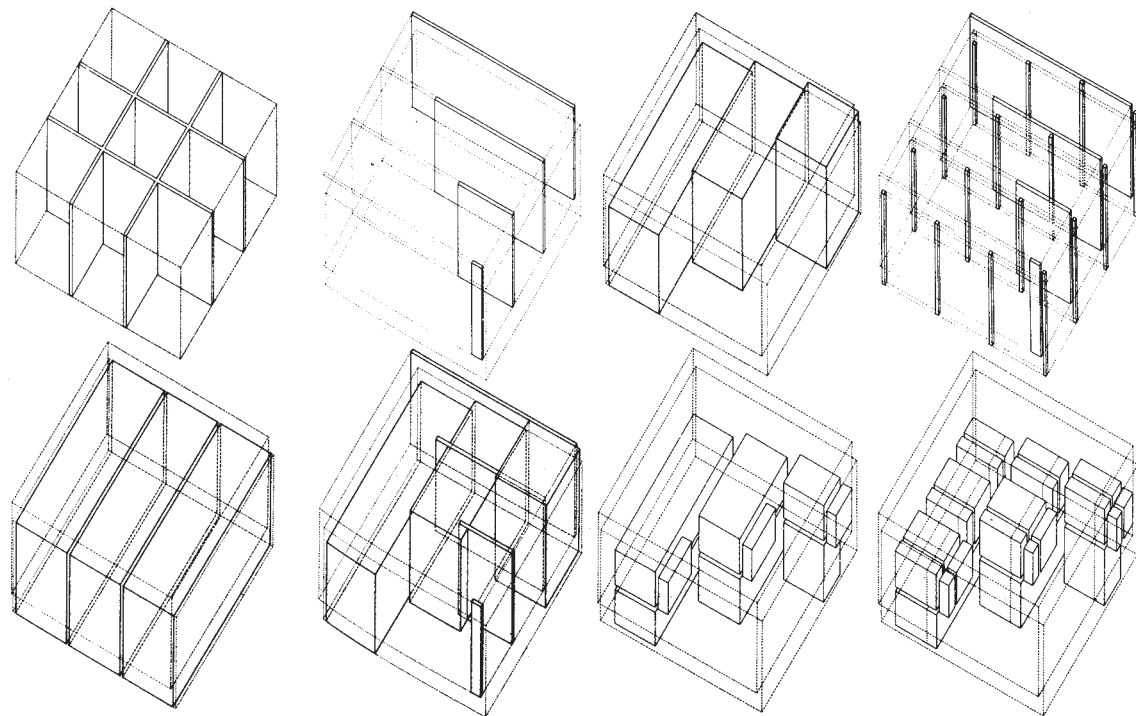


Johannes Duiker & Bernard Bijvoet, Wassierij (Laundry), 1924

has gone before. Plan analysis stands for an instrument that, in contrast to the subjective experiences of the 'tourist' travelling through time and space, can obtain an 'objective' knowledge from the history of architecture. Objective because it objectifies this history: examines its constituent parts and their effect. It never 'subjectifies' by trying to find the answer or the solution to its own problems in history.

Plan analysis as an instrument of historical research also stands for a 'fragmented' knowledge, because it never organises history or attributes an underlying plan to history; instead it names and examines fragments thereof. It makes history available to us as material that can be interpreted. Nothing more and nothing less. 'The way things were' is of secondary importance. What matters most is the question which elements, which fragments are most evident in history. This is where it differs from a plan analysis at the service of historiography. The question of which historical elements are objectified – and thus isolated and turned into material – is an extremely practical one. Deciding which questions to ask of the historical material, into which constituent parts to deconstruct the work, and which levels to distinguish: in a word, the analytical methodology need no longer legitimate itself in terms of historical accuracy. The method can be directed by the practical problems posed by the present commission. For instance, the method of plan analysis could be built on the products of Wittkower's historiography. In 'Architectural Principles'⁷ he demonstrates how architects such as Alberti and Palladio based their designs on archaeological research into the ruins of their illustrious past. Using detailed analysis, Wittkower shows us how they experimented with these 'archaeological fragments' in brand new commissions. I mention this text

7
Rudolf
Wittkower,
*Architectural
Principles in the
Age of Human-
ism* (London,
1974).



Peter Eisenman

at the roots of 'plan analysis' because this reading of Palladio's work was once the subject of a polemic with Van Eyck, who stressed that Palladio's mannerism achieved a new relativist unity. Whereas Van Eyck seeks a new balance, a new synthesis, unity, Wittkower exposes the montage technique that uses fragments of form. Plan analysis is more of an archaeological task than a form of historiography. Frits Palmboom notes something similar when he describes the work needed for 'Doel en Vermaak'. What it shares with archaeology is an interest in the actual material being dug up. This material does not serve primarily as a means of reconstructing history, but as an end in itself. It does not seek to tell the story of the historic city and support this with examples of ancient morphologies, but tries time and again to unearth new forms from the city, and to differentiate them amid the noise of the developed city. Every form that can be differentiated by a suitable drawing is one. We can determine, quite objectively, that the form exists and is therefore effective. It is then up to the designer to determine the consequences. It is this view of history that gave rise to the major 'relief' brought by plan analysis. A culture that neither progresses, as was planned, nor fails to do so, no longer requires the kind of intellect that wants to fathom, let alone control, the overall picture.

So instead of the world becoming ever more complicated, because everything became exponentially tangled up, it became simpler. The neurotic urge to keep explaining the part in relation to the overall picture and seeing this whole in every part was replaced by the possibility of a pragmatic approach: the possibility to isolate a form from history and to explore the potential of individual aspects. Just as Foucault's words want to merge with the flow of words, architecture can now enter history and in so doing probably also the city.

This also means that architecture need not pose as history. *Architecture* is the last guise in which architecture will make its presence felt.

ARCHITECTURE IN THE GUISE OF ARCHITECTURE

This obviously paraphrases Tafuri, when he stresses architecture's will to survive. But what can we expect of an architecture that delves into history? So far I have been talking about plan analysis as a tool to enter history. As a technique this analysis is *separate* from the design process. The analysis objectifies the historical material and makes it available to us as an object; the design then works with it, interprets it.

Through analysis, the design develops a certain distance from history. Simply by keeping this moment of deconstruction separate from the design process does the design come to occupy a certain relationship vis-à-vis history. And it is *not necessarily* completely 'devoured' by history, which is, generally speaking, what happens in postmodernism. The latter gets completely caught up in the abundance of past forms. Without any degree of distance it flaunts itself by saying 'I look like architecture so I must be architecture'.

Such distance can be the strength of plan analysis as well as its weakness. Let's compare it briefly with the design process that keeps its relationship with the historical material within the design itself.

Now that a rational formulation of function and production criteria appear to have lost their edge as a foundation for a design output, we need to develop another source of information. If this information must come

from within the discipline, and from the way this discipline fulfilled its potential in the city, it means an examination of our own tools . . . and an understanding of their historicity.

And we need to view these tools objectively, because if we don't we run the risk not of a subjective method of design, but of a tautological design output. A design may materialise, and even be beautiful, but it will only ever be self-referential (or reference its creator). Precisely because a design is not just aspiration or a sign but also always involves output, because it always (trans)forms something outside itself, it must be rooted in something external, objective to itself. This is the first meaning of objectification.

What matters is that this need for objectification also applies to an architecture that wants to root itself within itself, that is to say within its method.

We can now formulate the problem facing all post-functionalist architecture as follows: how can a design discipline isolate something from itself to objectify it, detach it from its own output, so that it can serve as a foundation, so that it can be interrogated and (trans)formed within that very same output? And what does an architecture that must objectify itself look like? To meet this challenge, today's architecture is developing as many tools as there are movements identified in the journals. These include all sorts of techniques to bring about alienation through traditional architectural means: bricolage, reversal, scale adaptations, and so forth, and so on. These can all bring about objectification. What may be confusing, however, is that it is often extremely difficult, especially for the designer, to determine whether the targeted objectification has been achieved. There is a difference between an architecture that produces a patchwork of historical quotations and keeps echoing these and one that is genuinely transformative and productive, and seems to have successfully defined an 'object'. And this object can be as literal as Hejduk's wall, Eisenman's structure, or Graves' 'referential' fragment. We can only gauge the success of these kinds of architecture if either the design itself or an explanatory note accounts for the *relationship* between the objectification and its interpretation in the design.

Things were simpler for the avant-gardes. Their declared a-historical stance complemented the fact that their object lay outside architecture, that is, modern life. This is, in fact, an exception in the history of architecture. It was possible to radically alter form by basing it on knowledge of something completely separate from the design. In that sense, the maxim *form follows function* marked the greatest possible differentiation between the two. Both throughout the entire classicist period and in our time we need to turn something from our arsenal of tools into the object of interpretation, which can give rise to a new design output capable of meeting new demands.

Architecture is similar to science in that both must always ascertain how practicable, verifiable and manageable the theoretical and practical instruments are that they have developed in order to define and map out an object. And this brings us to a second meaning of objectification: one relating to verifiability, to whether architecture will keep its tools available for some kind of assessment or debate. This is the difference between an architecture that is merely eclectic and one that is genuinely analytical. The work of someone like Eisenman meets the latter requirement.

This example of Eisenman, especially, could inadvertently create the impression that the verifiability requirement calls for a particular kind

of objective 'looking' tools. Rationalistic ones, for instance. (Eisenman himself is extremely doubtful about whether his architecture can be seen as 'rationalistic'.) Nothing is further from the truth. The objectification in question is perfectly well achievable with extremely subjective resources. What matters is that these tools can be criticised. The many neo-classicist image-boosting designs cannot. Pretty illustrations for a story that calls for change. Mere rhetoric.

We can single out two distinct moments in self-reflective architecture: a moment of analysis, that is, a moment of distancing, and a moment of output, the interpretation of the 'object' acquired through distance. Both are found simultaneously within a single design. The relationship between the two, which presents a permanent problem for architecture, must be established anew every time. If not, the design becomes tautological, capable of connecting with external social forces at an ideological level only.

Another method used to manage the relationship and distinction between objectification and output is separation. The moment of objectification is taken out of the design. And this brings us to plan analysis. Like any method, it has both advantages and disadvantages. Viewing this method as another variant allows us to compare it to other methods of objectification. Assessment of the method will be easier with a comparison than without. Such assessment, the critique of the method's validity, is necessary, as without one it would be impossible to determine the relationship with the design output. The case of a plan analysis that, as a methodology, is taken out of the design, brings with it the distinct risk that this relationship is no longer centre-stage. The reciprocity between design output and analysis will disappear from view amid the semblance of objectivity created by a separate plan analysis. Plan analysis then becomes a prefix or suffix to a design and turns into a legitimization.

The primary advantage of plan analysis is obvious. The targeted objectification, the distance vis-à-vis the interpretation, is indeed achieved by taking it from the design medium, by granting it a position of autonomy. Separating the moment of analysis, however, does not remove it from the design! It occupies a parallel position. Within the design, the relationship between analysis and design keeps calling for further definition.

A plan analysis is often seen as a preliminary study, with the design as its logical outcome; the design is the elaboration of an external learning process. In other words, you conduct a typological study and integrate its results in the design. The design analytical study is then added to the design as 'DATA'. The analysis takes on a purely legitimising function, like someone defending the form of his design by saying it has properly integrated the programmatic requirements.

The objectification achieved in the parallel analysis must also be achieved *within* the design itself, where it must be seen in relation to the interpretation. The objectification within the design will also look completely different. An analytical drawing is not a design drawing. Plan analysis thus assumes a position as an auxiliary science, in the same way that a design can utilise research by historians and anthropologists.

With this difference: plan analysis has the advantage of being more familiar with typical design questions. It is a tool for Architects.

Translated by Laura Vroomen