READY-MADES: OUTLINE OF SOME STRATEGIES CONCERNING THE MASS-PRODUCED DETAIL

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We are faced with a situation where 30-50% of the building is outside reach of the architect[1] and therefore depending on the know-how of engineers and manufacturers of standardized parts for the building industry. This of course influences architectural detailing enormously. In other words the architect's space for maneuvering is very limited. But how can this field be made wider?

There are a number of socio-economic reasons for the situation which is an area where architects for sure could enter in order to change the situation. But on the other hand there have always, throughout the history of architecture, existed such technical as well as socio-economic restraints (though the present restraints are probably narrower than ever before). Another way to attack the problem might be to operate from a strictly architectural point of view, by having a closer look at the implicit design strategies that architects apply when designing—or choosing—details, in the hope that this will open up for a more spacious field for performing architectural detailing.

In the following I will try to set up a conversation between two pairs of such strategies for the architectural detail that derive from the classical framework of architecture—but have great influence on our view of standardized details—and some strategies that are shaped by the modern aspects of mass production.

ZOOM DETAILING & THE AUTONOMOUS DETAIL

One of the most common attitudes concerning the architectural detail, is the idea that the detail is a smaller part of a whole and that the detail is subordinated to this whole[2]—reflecting it. The desire for the homogeneously coherent, where everything—from the plan of the city, the site plan, the spatial organization of the house down to the detail—manifests the same underlying idea, is closely related to this attitude.

This complex of ideas is what I call zoom-detailing because one can so to speak zoom in anywhere in the building and expect to find the same ideology or underlying attitude. Detailing is perceived as a continuation of the underlying thoughts. Good detailing is then the one that holds on to, that differs as little as possible from the starting point (e.g., a functionalistic house has functionalistic details).

THE AUTONOMOUS DETAIL OR
THE DETAIL AS SUPPLEMENTARY STATEMENT

Being so widespread one could be tempted to think that the origin of zoom-detailing should be sought in the classical "common laws" of building, the statutes of which are presented in the writings of Vitruvius, Alberti, Serlio and Palladio, since minute prescriptions for every part of the building in relation to a whole, is made very explicit here. But I think that this view deserves some critical attention. In his article "Walls have ears—some aspects of Roman Baroque architectural decoration" Desmond Shawe-Taylor stresses the innovative aspect of classical detailing:

But where does this common law come from? The statutes are there in the form of treatises and the precedent in antiquity, but it is not enough, as Alberti makes clear, unreflectively to imitate even the most august prototypes. Novelties and deviations are permissible, even essential; and it is the architect's job not only to invent but also to justify them.[3]

In order to deserve the title an architect should both show that he knew the rules but also that he was able to innovate. In mannerist and baroque architecture this innovative effort reached a kind of climax where the classical prescriptions for details were completely inverted as is the case with the Biblioteca Laurentia by Michelangelo (1524): the wall is pushed out between the columns and the corbels seem to hang from, rather than carry, the columns. But the innovation does not have to be an inversion of the classical prototypes (as a reverse way to refer to them)—they can be elaborations of all sorts of architectural decoration and techniques as well as "hints" at other buildings. Desmond Shawe-Taylor suggests that classical detailing can be said to refer to a common idea in a very sublimated sense which could be expressed as a figurative reference to nature...and thereby allowing considerable freedom.

But there is not the same freedom of innovation in the development of the plans which follow a much straighter line. Even in mannerist architecture, with the most "innovated" details, the layout of the plan may be very simple, and strictly following the classical descriptions (Biblioteca Laurentia). And often architects would parallel their innovative details by Albertian and Vitruvian prototypes in various locations in the building in order to show that "it was not because they didn't know." In this way there are various levels of meaning in the buildings which are not at all straight forward referring to the same origin.

The details can be seen as supplementary statements, supplementing the attitudes present in for instance the plan with other nuances and facets. Being the main object of innovations, the details possess autonomous qualities.

When visiting Le Corbusier's Villa Savoye (1930), I was surprised to see that the three doors of the main living room (with the fireplace) had completely different characteristics. The glass door to the stairs/ramp is modern with its big glazed part

and very thin steel-framing but is otherwise quite classical in terms of proportions. The big glass sliding doors/"walls" are new and avant-garde for the period concerning their opening mechanisms and proportions. The door to the kitchen has almost straightforward classical surrounds (a kind of ziggurat-shaped wooden moulding).

ZOOM DETAILING AND STANDARDIZATION

It is likely that one of the origins for zoom detailing can be found in the Age of Enlightment where a parallel development of the academic schools of architecture and the first encyclopedias of standardized building parts (for the use of craftsmen) took place. The 18/19th-century rationalist J.N.L. Durand, who was a professor at the Academy in Paris, taught his pupils that the first thing one should learn in order to become an architect was to divide up a square into a regular grid. Architecture was for him to a great extent a question of placing elements according to a grid.[4] All elements would then refer to the same system, enabling zoom detailing to take place.

It is evident that this rational attitude has strong parallels to present day commercial building practice where the module grid is determining the relation between the parts and the whole. But are the non- figurative, silent,[5] rational qualities of efficiency enough to be the content and meaning of architectural details—which as shown above have a much greater potential?

For the 18th-century architect G.B. Piranesi (and the school of "l'architecture parlante"), the role of the architectural detail in relation to the building equalled that of a word in a sentence.[6] In order to compose this sentence Piranesi developed a graphic "tool" called "l'analytique: on a single sheet of paper plans, sections, details are drawn in a pell-mell of different scales.[7] In this process an architectural "sentence" will take shape between the plan (representing "the whole"?), facade, sections etc. and the details. There is a very interesting ambiguity to this project because "l'analytique" seems to be the perfect tool for zoom-detailing, the parts and the whole can be made to correspond with the same intention. But that was not how Piranesi used it. On the contrary, he above any was concerned with the autonomy of the detail as his work clearly shows.[8] When one performs "l'analytique" the question can be put in this way: are the details subordinate to the form of the plan or do they inflict on the plan too?

DETAILS AS THE "CLOTHING" AND DETAILS AS THE JOINTS

DETAILS AS THE "CLOTHING"

The Austrian architect Gottfried Semper (1803-79) was of the opinion that the origin of architecture was a hut made of branches covered with textile (like the dwelling of Caribbean indians). The detail was then naturally related to textile art with traits such as the seam and the border (and represented by artefacts such as the wreath)—and to the building technique of cladding a construction, of the ritual and symbolic "clothing" of the building.[9]

DETAILS AS THE JOINTS

The 19th-century rationalists Viollet-le-Duc and A.W.Pugin had a completely different idea of the primordial

detail. They sought the origin of architecture in the timbered hut, the wooden posts and beams which lead to the classical stone temples of the Greeks. The details can then be defined as the joints of the construction or simply as the joints.

These two different ideas of details are still the core of the discussion of detailing.

MONOLITHIC COMPONENTS AND EXPOSED STRUCTURAL JOINTS

The Arts and Crafts movement based a great part of its theory on Viollet-le-Duc's and Pugin's thoughts and clearly favored the timbered hut as the primordial role-model where the details are the joints. One of the movement's main issues was the struggle against industrialism for a return to the production methods and social organization of the medieval guilds. And one of the cornerstones in this struggle was the claim for exposed structural joints. With this claim at least three mayor obstacles to industrialism were formed: It promoted monolithic building components because the "falseness" of e.g., veneered, industrially produced cast-iron beams would in this way be unveiled via the exposed joints. Secondly exposed joints of monolithic building materials demand a very high level of craftsmanship and in this way workers would be saved from "industrialism's slavery." At last should be mentioned that of course exposed unclad joints would also diminish the market for machine-made mouldings.

There is no doubt that modern architecture took the side of the Arts and Crafts movement's notion of the detail—to such an extent that the exposed uncovered joint has become a kind of "trademark" for the modern movement. Of course, the detailing of the great masters does not fit into this rough description—as the example of Villa Savoye showed—but still, it is a general trait of modern architecture, examples are easily found in most modern buildings of this century. E.g., in the Jacobs house (1936) by Frank Lloyd Wright the connection between floor and wall is not mediated by any mouldings but is simply the last joint of the masonry-wall. And in Villa Tugendhat (1930) Mies van der Rohe makes use of a very "popular" modern detail; the groove—in the curved ebony wall the meeting of the solid ebony base and the top is transmitted via a groove instead of the classical cladding of the joint.

It seems a paradox that modern architects, who were very concerned and inspired by the possibilities of industrialized building practice by choosing to detail in this way, should take the side of the Arts and Crafts movement's anti-industrial attitude. But they were of course looking for alternatives to the obvious problems of beaux-arts building practice of the turn of the century where steel-frame buildings would be concealed by classical columns of various orders (an example is the Knickerbocker Trust building by McKim, Mead and White, 1904). This is obviously challenging the fundamental ideas of architecture where the refinements of structural expression is the basic way to create meaning. The steel constructions reduced this practice to empty icons (at least it was interpreted this way by the above-mentioned rationalists).

But as the idea of the "curtain-wall" clearly shows, industrialized building practice is really one of cladding a construction. In fact there are numerous examples of the conflicts between this implicit idea of the exposed joint of monolithic building components and industrial building practices— both in terms of work finished far behind schedule because of the time needed to craft these joints (a cladded joint does of course

not demand the same kind of precision as an exposed)—and as a result of this, the lack of ability to keep the budget. Frank Lloyd Wright's project for the Johnson Wax building was finished several years behind schedule and $600,000 over the budget, mainly because of F.L. Wright's insistence on monolithic construction methods.[10]

In contemporary buildings I often come across details as the one from Jacob's house where the meeting between wall and floor is mediated with the bare joint—only now it is seldom that of masonry but a silicone finish of arbitrary slits between walls and floors (as the construction workers left them). In his article "the perfect detail" (1990) Ben van Berkel criticizes the "modern," "functional" detail for having become an empty icon.[11] I think the plastic padding finish is an example of this sort of degeneration of the original arts and crafts/modern idea of the exposed joint and the conflict with the way the building industry works.

THE CLADDED AND LAYERED

In the last decades the work of Venturi, Scott Brown and Associates has been the prime exponent of a new interest in the concept of cladding (a steel construction). The cladding is perceived as a strategy that will "fulfill the role of representation—the communication of direct or associative, socially determined meaning through signs and symbols."[12] From my point of view they have not completely overcome the true challenge put on architecture by industrial building practices—even though they take care to reveal the cladded aspect by "presenting the surface as cut from a larger fabric...dividing surfaces composed of structural units into panels that demonstrate their a tectonic nature...(and) under-cutting apparent support." In fact this sort of "revealing-the-falseness-detailing" was already common practice of the turn of the century beaux-arts architects. And it remains a question whether the architectural language of details from the past—detached from the origins—is able to create associative meaning in our minds today?

In this sense, the work of Gottfried Semper and his student Otto Wagner suggests a bigger and more sophisticated space for creating cladded architecture where the ritual and symbolic aspects are not outlined by socially determined meaning, but is an investigation of the tectonic possibilities of the "textile object"...of architecture simply—and of the way architectural traits "travel" and are transformed in the innovating process of building. Otto Wagner saw the consequences of the steel framework building more clearly than any of his contemporaries, but since his architectural ideas were rooted in the notion of architecture as essentially cladded structure, he did not feel that it meant a break. Therefore he felt free to invent new modern details of cladding, as for instance the exposed bolts of the Postsparkasse (Vienna 1906), which are in fact aluminum covers of the real bolts—without having to leave the myths of architecture and without turning architecture into silent, immaterial curtain-walls or a tectonic ironical architectural references.

STRATEGIES FOR EXPLORING THE POTENTIALS OF MASS-PRODUCED DETAILS

OBJETS FABRIQUES

The ancient Greeks transformed the bow—originally a thing for everyday use - into a lyre, an instrument of harmony...in much the same way our modern objets fabriques could be transformed into music of forms on the canvas as corresponding rhythms in allegro or andante they (Le Corbusier and Ozenfant) thought...[13]

Le Corbusier was in his paintings fascinated by the shapes of the industrial products which also became a source of inspiration for his architecture. The very pronounced placement of objets fabriques as for instance the wash bassin of the hall of Villa Savoye is probably not just an indication of the hygienic standards of a new epoch but is also a key to understanding the space around the wash bassin. It is of course difficult to trace the exact relation between the investigation of these objects in paintings and the transfer of inspiration and ideas to architecture but I think Le Corbusier's working method suggests a kind of "tool" for cultivating the steady flow of industrial products—for discovering their aesthetic and architectural potentials.

Seeing the objet fabriques as potential details—and these details as generators of architecture—is like cutting the Gordian knot of the problem of how to find mass produced details that at best will approximate the architectural intentions, that will "fit" into the project—often when the project is near completion. Le Corbusier's method proposes to go the other way around, starting with the mass-produced detail to see what it suggests.

LEIT-MOTIF DETAILING

Carlo Scarpa did not work with mass-produced details. On the contrary, his architecture represents the best of craftsmanship. But he is an important source of inspiration because of his re-use of detail motives—like the well-known ziggurat-shapes which he used in (nearly) all his projects. In his article "The-Tell-the-Tale Detail," Marco Frascari compares Scarpa's use of the same detail in different situations with Richard Wagner's use of "leit-motif" in opera—the whole is generated around the fragment which is exposed to the influence of different situations.

I think that the mass-produced detail could be used in a similar way. It would mean to start with, e.g., the automatic door (that we know from supermarkets) or the semi-transparent roof-plate, and observe what sort of relations can be created between them and the specific situation.

READY-MADE DETAILING

It happens still more frequently that I experience that the works of the artists using ready-mades affect my daily life. Who can for instance see a can of Campbell's Baked Beans or a box of Kellogg's Corn Flakes without at the same time associate them with the work of art in which they were part? Since I saw Kunsthalle in Rotterdam (1992) by Rem Koolhaas, I have felt the same way about the semitransparent acrylic boarding which I before Kunsthalle mostly associated with garages. Rem Koolhaas also in this sense transformed the automatic door into a magical "open Sesame!-door" by camouflaging it as the rest of the semitransparent boarding of the wall. It is really just a very small change of the normal: the flat transparent glass was exchanged with the fluted character of the semitransparent boarding.

In *Delirious New York* Rem Koolhaas analyzes the surrealistic characteristics of New York. When Salvador Dali for the first time came to New York he had prepared the press meeting by making the baker of the ship bake a 2.5-meter long

baguette which he would hold during the conference. But much to his surprise nobody payed attention to it.

Rem Koolhaas' analysis of the mechanisms that are at work is centered on the term "Paranoid-Critical Method (PCM)" which "is the fabrication of evidence for unprovable speculations and the subsequent grafting of this evidence on the world, so that a "false" fact takes its unlawful place among the "real" facts." The fantastic entertainment-projects of Coney Island are megalomanic evidences of this sort of "reality shortage."

The paranoic-critical method is both the product of and the remedy against that anxiety: it promises that, through conceptual recycling, the worn, consumed contents of the world can be recharged or enriched like uranium, and that ever-new generations of false facts and fabricated evidences can be generated simply through the act of interpretation. The PCM proposes to destroy or at least upset, the definitive catalogue to short-circuit all existing categorizations, to make a fresh start—as if the world can be reshuffled like a pack of cards whose original sequence is a disappointment.[14]

The PCM turns out to be a fruitful way to look at architectural detailing: In Kunsthalle the railing is a floating trunk, the Patio Villas (Rotterdam 1988) has pedestrian crossings in front of the entrances instead of Palladian stairs and porticos...Numerous examples of this sort can be found throughout his architectural production.

In this light the catalogues of ready-made windows, door handles and cladding systems all of a sudden become more interesting. Maybe ready-made detailing is a way of making architecture "talk" again (apropos "l'architecture parlante"). We do not anymore automatically think of rebirth and fertility when we see a wreath or a garland[15] on a classical cornice, but there are a lot of other (mass-produced) details which—when used in this way—can activate our imagination.

But maybe there is also a kind of special Dutch air to it. Ever since the Dutch painters of the Renaissance were the first to take up daily-life scenes as motives the Dutch have had a kind of weakness for the profane and utilitarian.[16] In his library in Zeewolde (1989) the Dutch architect Koen Van Velsen uses a normal prefabricated steel container as a permanent element and connects it with the main building via a "link" that shows resemblances to a pallet, and the translucent acrylic boarding of the library reveals the silvery insulation materials behind it. Ready-made detailing as the love of the qoutidian.

NOTES

1. Figures derive from interview with Rem Koolhaas in *ARCH + # 117* June 1993

2. Marco Frascari in his article "The-Tell-the-Tale Detail," in VIA 1984 points at the fact that in architecture the detail is very often in itself a whole. His example is the lantern of the dome of Santa Maria del Fiore, Florence by Brunelleschi (1420-34).

3. Desmond Shawe-Taylor, "Walls have ears: some aspects of roman Baroque architectural decoration," *Journal of the Society of Architectural Historians of Great Britain* vol. 36, 1993. Desmond Shawe-Taylor uses the Senatore Palace by Michelangelo as example: ..."What is especially disquieting about the Senatore surround is that the inner forms overlap the outer and the other way around, so that the frame is the most salient part. In correct classical surround the innermost fascia of the frame should be flush with the wall-plane, neither recessed nor advanced. Outside this the other mouldings and features (especially columns, consoles and pediments) should become progressively more salient, so as to offer protection from the elements. At the Senatore Palace the logic of this arrangement has been turned on its head: for the shielding columns and the console-panels merely serve to push the frames further out into the rain. There is no real justification for this contrariness, except that overlapping the other, more correct way would tend to cover fine mouldings with broad ones and thus obliterate interesting detail."

4. Robin Midleton in *AD # 11-12* 1978: "...To learn to be an architect, he (Durand) advised his pupils, one had first to learn to divide up a square into a regular grid. Thereafter architecture in France lost much of its liveliness."

5. On the silence of the architectural language of modern architecture see Manfredo Tafuri, Francesco Dal Co, *Modern Architecture* New York 1979, Harry N. Abrams Inc. Publishers. page 366, "...this meant that the prefession as a whole and its ways of working had to be reorganized and had to agree to not only drastic reduction in the time of planning and building but also to the typological standardization called for in an industrialized building industry"..."firms like Skidmore, Owings & Merrill or Harrisson & Abramowitz in the US are equipped to work at an intense speed of production and to fulfill demands for high technological levels in buildings as anonymous as the architectural concerns that build them...that is the virtual manifesto of the impersonal and illusionless purism which makes the curtain-wall the sole and silent element of the language."

6. Anthony Vidler, "The writing on the wall," *AD # 11-12* 1978, On beaux-arts architecture and the idea of architecture as language: "...that architecture embodied ideas in stone, that its forms were in some way expressive of these ideas, was a commonplace of 18th-century theory. Architecture it was said "spoke to the eyes" and thence to the soul; its geometries were like letters of the alphabet, its motifs like figures of speech, its classical repertory like a veritable language. Indeed these phrases indicated more than a simple analogy: architecture like other expressive arts, was understood to be a language on its own right."

7. Marco Frascari, "The-Tell-the-Tale Detail" in VIA 1984

8. On Piranesi's ambiguous position in relation to rationalism and the idiom of Classicism see Carsten Thau, "Piranesi—rummets agoni." *Ny Poetik # 1* 1993, Copenhagen.

9. Edward Ford, *Details of Modern Architecture* Cambridge 1991, MIT Press, pp. 203-223

10. Edward Ford, *Details of Modern Architecture* Cambridge 1991, MIT Press. In his book Edward Ford investigates the details of modern architecture by . e.g. viewing details in the light of "monolithic" or "layered"—"exposed" or "clad" characteristics. On Arts and Crafts, see page 15-123. On the Johnson Wax building, see page 347

11. Ben van Berkel "the perfect detail" from the book *Delinquent Visionaries,* Rotterdam 1993

12. Deborah Fausch "Towards an architecture of our times—scaffold and drapery in the work of Venturi, Scott Brown and Associates." *Architecture in Fashion,* New York 1994.

13. Viveca Bosson, "the architect who became a painter and sculptor" exhibition catalogue, Museum of Modern Art, Aalborg Denmark.

14. Rem Koolhaas, *Delirious New York,* Rotterdam 1994 010 Publishers, page 241

15. Peter Smithson suggested this interpretation in "Once a jolly swagman," *AD # 11-12* 1978

16. Reyer Kras "Kontinutiteten i det hverdagsagtige—design i Nederland," *Louisiana Revy #2* February 1996.