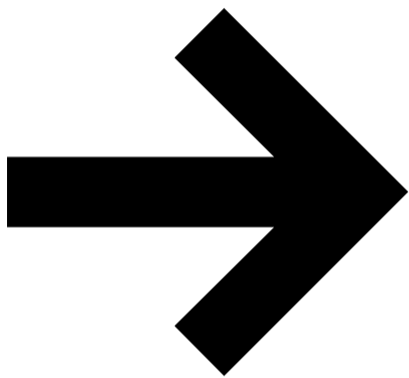


# Reduce

# Reuse

# Recycle



## A new Language of Redevelopment

The Venice Architecture Biennale is the world's most important platform for the international exchange of ideas and experience on contemporary trends in architecture and urban development. Every two years, in the German pavilion, we set up a showcase highlighting the latest issues and discussions in Germany in the field of *Baukultur* (improving the quality of the built environment). This showcase addresses specific tasks, solutions and societal debates. Because architecture not only has to focus on the context in the structural sense, but also has to seek public acceptance time and again.

With *Reduce Reuse Recycle*, the General Commissioner of the German contribution in Venice, Muck Petzet, is presenting one of the burning issues of the day. In the years ahead, the stewardship of urban resources will be one of our main preoccupations—in both urban development and architecture. The three headline terms of the contribution stand for a new alliance between old and new. The exhibition thus addresses the conflicting interests of *Baukultur* and the approaches to urban development that are currently being discussed. Questions of energy, climate change and demography are placing our towns, cities and regions under significant pressure to change. The multiplicity of the tasks we face means that we need the architect in a new role—that of the developer of existing structures. It is not just the new that is spectacular, but, increasingly, the challenge of the commonplace. I have no doubt that the architectural strategies that we in Germany find to tackle these challenges will attract international interest and debate.

Dr Peter Ramsauer  
Member of the German Bundestag  
Federal Minister of Transport, Building and Urban  
Development

## Architecture as Resource

For architectural practices in Germany, working on the existing inventory has long become the most important task at hand. Processes of conversion and reappraisal are taking place on a vast scale: peripheral regions are becoming increasingly depopulated. There is too much architecture and even where growth still plays a role, there is no *tabula rasa*. Climate targets can only be achieved by improving what is already there. But the greatest task of refurbishment that lies ahead—the post-war buildings erected from the 1950s to the 1970s—is considered problematic. These buildings seem to be too unsuitable, too slipshod, too inefficient to serve as housing in the future. Where economically viable, “outmoded” buildings and housing estates are torn down and replaced. The “grey” energy stored in the materials is not factored into energy studies and unscrupulously released in demolition.

Evaluating and developing existing qualities to implement affirmative strategies of transformation requires a profound change in attitude, much like that achieved by environmentalists in the 1970s and 1980s with respect to waste management. Even supposedly worthless buildings have potential and qualities: the balkiness of existing architecture can be an inspiration for new solutions and can open up avenues of action.

*Reduce/Reuse/Recycle* stands for a successful shift in value from waste to reusable material. The three Rs form a waste hierarchy in which avoidance comes first followed by direct use and, in third place, recycling which changes the properties of the material. The same logic may be applied in setting up a new value system to address existing buildings: the fewer changes that are made and the less energy used, the better the process.

By using the logic of *Reduce/Reuse/Recycle*, various strategies of remodelling can be classified on the basis of the relationship between old and new, the depth of intervention and the degree of modification. Treating built architecture as a substantial and formal resource opens up a wide range of possibilities and approaches. *Reduce/Reuse/Recycle* shows projects and perspectives by architects who take a positive, empowering view of existing structures as an inspiration and motivation for further development. The quality of the projects shown here lies in the intelligence of their strategies and not in the spectacular form of their interventions.

Muck Petzet  
General Commissioner

German Pavilion  
13th International Architecture Exhibition  
La Biennale di Venezia 2012

# Avoiding Architecture?

The 3R waste hierarchy classifies and evaluates methods of dealing with waste according to energy consumption and energy loss: the less the material has to be processed, and the less energy required to do so, the better.

The 3R system is often portrayed as a pyramid. At the top is Reduce, preferably avoiding waste entirely. Below that comes Reuse, in which items that might otherwise be discarded are used again. At the bottom of the pyramid is Recycle, which involves transforming materials into new products.

Applying this logic and evaluation directly to architecture would have an enormous impact. The smallest intervention would suddenly be the best one—and no change at all would be even better still. It is an approach that may at first appear at odds with architecture. After all, architects are usually called upon to change or renew what already exists, and they are expected to do so as thoroughly and radically as possible.

There are rights and wrongs to applying the Reduce / Reuse / Recycle formula to architecture. It makes sense in terms of energy-saving, but might stifle architectural developments seeking new criteria and priorities. On the other hand, it can help to promote the evaluation of architectural intervention, and weighing up whether an intervention is appropriate or not.

We have selected eleven strategies of refurbishment and arranged them in an order that corresponds to the logic of waste hierarchy: from the least to the most elaborate intervention. Unlike the 3R waste hierarchy, however, this sequence does not represent strict evaluation. In architecture, in addition to physical energy, other energy factors also play a role: the potential inherent in built architecture has to be considered in terms of architectural, historical, functional, structural, and social aspects, as well as those of design. After all, in architecture, there are cases when complete remodeling is appropriate due to the significance of the task and its specific characteristics or on grounds of a precise and, as far as possible, objective analysis of the existing structure. It is, however, this same architecturally holistic consideration of what is appropriate that connects back to the 3R system. Each measure implemented must result in an improvement commensurate with the energy expended.

The architecturally applicable 3R hierarchy includes strategies aimed at avoiding or minimizing intervention (Reduce); strategies aimed at maintaining, adapting and extending (Reuse); and also the material and ideal re-introduction of existing architecture, either formally or ideally, into architectural circulation (Recycle). The change of perspective provided by applying the 3Rs to refurbishment opens up new ways of looking at such aspects as perception, behavior, and conservation, which are fundamental ways of dealing with existing buildings. The 3R shift in viewpoint clarifies how priorities are set and indicates why recycling has so little traction in architecture in the current economic climate.

The strategies are rarely implemented in their purest form. Often, a variety of strategies can overlap, coincide, or contradict each other. Each of the projects presented in the exhibition exemplifies a particularly incisive aspect of the strategy.

Muck Petzet

## Reduce

Avoiding and minimizing are rarely thought of as architectural tasks. Yet even a small shift in → Perception can effect a complete re-evaluation of existing buildings and prevent the need to alter or demolish them. Reducing expectations and changing → Behavior can help to avoid unnecessary interventions. Constant → Maintenance effectively counters alterations to the existing structure. Care and repair are material expressions of how much the existing structure is valued.

## Reuse

Modifying existing stock for continued use is the broadest of the three categories, and includes such “classic” refurbishment strategies as → Renovation: upgrading an existing building to conform to technical and functional requirements, while leaving the appearance more or less unchanged. Structures that are no longer in use can be revitalized through → Conversion and by → Infill, in gaps and spaces. → Redesign involves a radical renewal of the existing structure in which the design of the new includes formal references to the “original.” → Subtraction as a strategy for reducing buildings and urban structures is a new challenge for architects in situations of depopulation. → Addition, its opposite, is more familiar to us as a growth process driven by the need for more space.

## Recycle

Collecting and transforming building materials to produce new materials plays a relatively minor role in architectural reality. The technical and financial framework for doing so are inadequate. Among the common forms of → Material Recycling there is also a strong element of downcycling. A higher value is placed on historic material if it has a strong aura that contributes to the enhancement of the new. In the case of → Gestalt Recycling the imagined or actual design of an existing structure can be reproduced and reused, while historical and traditional typologies and designs can be recycled by transposing them into the present-day context.

# Urs Füssler & Jörg Leeser / The Flower Shop in Oberbarmen: The Wuppertal Studio and Seminar → Perception

1

Urs Füssler and Jörg Leeser in Conversation with Axel Sowa and Susanne Schindler of *Candide: Journal for Architectural Knowledge*

In 2008 and 2009, Jörg Leeser and Urs Füssler organized two classes at the University of Wuppertal: “Findlinge” [Erratics] and a studio project called “Dramatyp” [Dramatype]. In April 2011 in conversation with the magazine *Candide: Journal for Architectural Knowledge*, they explained their teaching approach and how the existing buildings serve as the basis of their “elaboration” and “refashioning” of the city. The act of seeing was a central aspect addressed in both courses: “To superimpose the perceptible reality of a place with its own idea of a possibility of this place.” This “looking” is constructive, an integral part of the design process, which focuses less on the insertion of new buildings than on the transformation of the existing. In this sense it is not “building within existing structures,” but “building with existing structures.” The students developed possible use scenarios with fictional clients for a post-industrial, shrinking city—which became all the more endearing, the more problem areas were discovered.

This is an abridged version of an article published in *Candide: Journal for Architectural Knowledge 4* (July 2011). The complete article can be downloaded at no cost at [www.candidejournal.net](http://www.candidejournal.net).

**Candide:** You taught a design seminar together called “Findlinge” [Erratics] as well as a studio project called “Dramatyp” [Dramatype]. It is easy to see how “erratic” [...] would refer to existing buildings, especially since in German the word also alludes to “found object” and “remains.” [...] What exactly [do you mean by “dramatype” in architecture]?

**Jörg Leeser:** We use dramatyp as an analogy. It is a term some biologists use along with the terms genotype and phenotype. Dramatyp describes the immediate reactions of an organism to its environment. In contrast to a genotype, which constitutes the genetic predisposition of an organism, and a phenotype, which is the observable characteristics of an organism, including the ways it is modified during the course of its lifespan, a dramatyp is a direct response of an organism to a particular situation. Dramatypes are fickle by nature.

**Urs Füssler:** [...] [One can understand] the city as a biological organism. A city’s buildings are built over the course of time in response to each other. And the seminar title “Findlinge” refers to our penchant to think about and work with existing buildings. In this sense, the two terms are paradigms that are key to our design philosophies and lay at the base of our joint teaching program: that architecture in the city, first, works with and responds to what is there, and, second, is something that is always changing and transforming and adapting, resulting in collisions and conflicts.

**C:** In the blog that you set up and used as a tool for the seminar and studio, but also in your lectures, language and terminology play an important role. In your teaching you use terms like dramatyp but

also choose verbs to describe the possible design interventions of your students, such as declutter, dismantle, perforate, weave in, pile on, slide in, grout over, paint.

**UF:** The established vocabulary [...] frequently fails to describe what architects do with existing architecture. This is why our design practice includes coining new terms that enable us to talk about what

## This “looking” is constructive, an integral part of the design process

it is we are doing. We try to slightly alter the meaning of certain terms used in the discourse through the way we use them.

**C:** Could you explain how you conceptualized as well as experienced the relationship between analysis and design in the studio and in the seminar?

**JL:** [...] The “Findlinge” seminar and the “Dramatyp” studio [were] both dealing with the same issues but in very different ways. For the seminar the final product [...] was one single image of an architectural setting. Through this image, we wanted each student to generate an architecture, which, while originating from built reality, would transform this reality into a possible built reality. [...] While the seminar participants were required to use only visual, two-dimensional means to engage the perceived properties of their sites, students partaking in the studio were also asked to operate in three dimensions, addressing further issues such as a building’s structure. They were required to work with architectural forms of representation: black-and-white drawings drawn to scale, with pre-determined line weights and a standardized axonometric projection, floor plans, sections ...

**UF:** ... the drawings as a form of abstraction and a way to list the things the students had taken note of, like creating a vocabulary for a picture dictionary. **JL:** The site for their design projects was along the path of Wuppertal’s floating tram, running fourteen kilometers between Oberbarmen at one end and Vohwinkel at the other. The students looked at the areas around the twenty stations in between, searching for locations where they might intervene. [...]

**UF:** [...] We took a stroll with the students as an exercise in collectively contemplating the city, and then speculating about what could be done with it. It did not take long before there were sites where students called: “Over there! Check it out!” Another would say: “Do you know this place? Totally relevant!” As a result, our stroll did not follow a fixed path, but

was determined by constantly being led astray. This method was highly enjoyable, like a game, an architectural game that involves meandering, pointing, exchanging ad hoc ideas about what could be done with a particular place, improvising architecturally. In order to learn how to speculate in this way, strolling is fundamental.

**C:** As educators you must draw from a body of knowledge and experience that is particular to your own generation. For example, Wuppertal’s floating tram features in Wim Wenders’s [...] nineteen-seventies road movie *Alice in the Cities*. [Are you the generation to rediscover these] forgotten sections of our disparate urban regions? [...]

**JL:** The visiting professorship in Wuppertal was an opportunity for me to return to places where I spent my youth: Essen, Wuppertal, Heiligenhaus. I wanted to use and describe the narrative potential and intensity of these places. The chair I was asked to fill on an interim basis was called “Bauen im Bestand” [Building within Existing Structures]. If you take “existing structures” to include everything that is there, from spectacular to unassuming, from ruinous to new and ugly, then it must be possible to pick up on and develop the qualities of these places architecturally by working with the existing structures.

**UF:** When I studied with Fabio Reinhart and Miroslav Šik at ETH Zurich, we discovered the importance of urban peripheries. The analogies and references we used in designing buildings were no longer the icons of architectural history—still a subject of postmodernism at the time—but rather anonymous architecture, often industrial buildings. “The Lindner,” Werner Lindner’s book *Bauten der Technik*, was one of our bibles. When I moved to Germany, I got to know cities that were utterly foreign to me, at first Frankfurt am Main and Kassel, and later Berlin. I learned to see the city in a new way: not as a beautiful, finished object, but as an evolving organism, interspersed with vacant sites invoking architectural intervention. The Wuppertal films by Wim Wenders, Tom Tykwer, and Benjamin Quabeck depict very specific views of this city. And Jörg Leeser talked about Wuppertal. He sent a stream of photographs of things he wanted me to see. This is how the city became familiar to me from a distance, even before the semester began.

**JL:** One of the key influences on my approach to architecture and the city was Peter Eisenman’s thinking on semiotics. He sees architecture as a discipline that engages language as a means to understand the process of its coming into existence. Later I broadened the context of Eisenman’s ideas by contemplating and incorporating melancholy, the city and its history, and the ordinary and the everyday. Because of our different backgrounds, working closely with Urs on a studio and seminar was exciting and unpredictable.

**C:** [...] Together with your students, you combed through the area along the floating tram, taking note of the things you saw. To what extent did prior knowledge of what you saw influence the students’ search for suitable sites and the development of their projects there? Knowledge

of postwar urban planning, the processes of modernization and rationalization trends, building materials? How did you link observations with knowledge?

**UF:** We both accumulated baggage during our studies, while working for architecture firms and on our own, as well as through teaching. We both have backpacks, and we cannot simply cast them aside. But we would like to think that the contents of these backpacks are diverse enough for us to develop our teaching in response to our students’ ongoing discourse, and in a way that the outcome of the students’ work remains unpredictable. If we ever tried to impress our students we did so not by displaying our knowledge or because of the contents of our backpacks, but by our unanimity in front of some obscure building and demanding that they really look at it!

**JL:** It was important to us that the students were able to begin working without any particular prior knowledge about the history of architecture and planning. In this sense, the observation phase—looking at what was there—and the selection phase—choosing a site—took place largely while the students were still getting to know the sites. In the course of their further investigation, their passive observational knowledge was gradually replaced by more active interventionist knowledge. The students documented the city by taking photographs and drawing, and looking up information about the city and its various histories. They also looked for older and more recent plans of the city and its buildings. Typically, no plans existed, which meant that students had to work out the dimensions themselves. [...] Through this process [...] the students were able to translate the physical manifestation of a building into an abstraction. [...]

**UF:** This process was interesting for us as well. And since the close study of the city developed its own dynamic, it happened very quickly. All of the sudden, the students had plans. And these plans included things that are normally omitted but which are useful as inventories of particular situations: lamps, advertisements, and so on—micro architecture.

**JL:** We always tried to get students to observe the fundamental things, to look close-up, to document their impressions and ideas about the spaces. We wanted students to consider what was there, including the smallest of details. [...]

**UF:** We mainly focused on anonymous architecture, the sort of architecture that is not listed in an architectural guide of Wuppertal. [...] We looked at primary material that had not yet been researched by scholars. [...]

**JL:** We introduced and discussed all sorts of perspectives, ideas, and references with the students but we wanted to free them from the burden of having to come up with ingenious designs. We told them, “think like a craftsman! How wide is something? How large is it? What should it contain? Does it need a window?” [...] We wanted the students to develop their projects free from the imperative of design ambition.

**C:** It is interesting that students had to not only find a site to develop, but also imagine a client

and then design an architecture that would fit the client's needs and desires. So it's no longer just about buildings, but about a plot. [...] Were there scenarios that would have gone beyond the scope of the project or that would have been unsuitable for Wuppertal? What were the ground rules that you set?

UF: We did not set any explicit rules. To us, every site has its own characteristics just like every student is different. We raised questions about what is appropriate or to scale, but always in reference to a particular situation. [...]

JL: We wanted to get the students hooked on the ordinary and the everyday processes of architecture. We wanted to point out possible real-life scenarios that happen in Wuppertal: homeless shelters, churches, a company that provides security guards. By looking at this normality, the students' programs evolved from the sites.

UF: What is the hidden treasure of a city such as Wuppertal? A city can instigate thoughts and ideas. We asked students to open themselves up to the city and *take in* what it has to offer. This was one of the goals of the seminar and studio. [...]

JL: For example, *gucken*—the act of looking, watching, examining—[...] [like our view on Wuppertal,] is a practice that anyone can cultivate.

UF: We tried to see Wuppertal not for what *it is*, but for what it *could be*. Although Wuppertal may be a unique city with specific needs, we believe our approach to Wuppertal is applicable much more generally. We are not interested in the aesthetic of industrial ruins but in locating points of possible transformation. [...]

JL: In retrospect we ask ourselves: What characteristics made Wuppertal into a city that we could successfully build on and add on to?

UF: Perhaps the reason is the multitude of buildings in Wuppertal that can so easily be reinterpreted and reframed. So many buildings

# It would be wonderful if architects designed and constructed buildings with the idea in mind that some day another architect will come along and mess it up.

seem ambiguous: they can be seen as glamorous or faded, bold or failed. [...]

JL: The failure of architecture in the city goes hand in hand with an optimism that is implicit in even the deepest melancholy. This was the moving force for us in Wuppertal. Are we dependent on a form of architectural decay that moves the heart in order for a new form of architecture to blossom?

UF: Of course, when we work with what is already there, there is always an element of destruction.

JL: As architects, we are constantly faced with the problem that in working on existing buildings we expose traces of their past. These, however, will most likely be effaced by our very work on the building. To what degree do we need to hold on to these traces? And to what extent are we able to confront history without confronting the pain of history? For me this is a central and difficult question.

UF: The notion that things only come into being when we perceive them and work with them is essentially a Constructivist epistemology. What happens if we take this idea and apply it to architecture? It would be wonderful, not to say ideal, if architects designed and constructed buildings with the idea in mind that some day another architect will come along and mess it up. Because the second architect will remodel it. Reinterpret it. Misunderstand it. Use it for a different purpose. What kind of architecture would [this be?][...]

C: The idea reminds me of a teaching method Hermann Czech used when he was a visiting professor at ETH Zurich. Every student had to bring an existing project for another student to redesign on the basis of entirely different programmatic specifications.

UF: Wow! We didn't know that. The question then is: how do I design something knowing that one day it will either be demolished or used in other ways or even be embalmed by preservationists? Can I build in contingencies that give me indirect control of the future of the building? This kind of self-reflection is integral to literature and filmmaking. In these disciplines, the creator tries to take into consideration not only the story and its protagonists, but tries to imagine the thoughts going on in the viewer or reader's mind. Any good crime story plays with the reader in this way or sometimes, as in Michelangelo Antonioni's *Blow-Up*, such self-reflection is part of the narrated story. We don't have this in architecture. Architects [...] do not think further. They point to their architecture and say: this is it. [...] They have their buildings photographed—preferably uninhabited—[and][...] want to preserve their buildings in an idealized, present state. This is to

prevent any possible change to the buildings, imagined or real, from the outset. A better way of representing a building would be to show how the architect imagines the design after it has been messed up by its users or by other architects, showing that despite all sorts of interventions, the building still has value. Or for the architect to show how the design might stimulate others to create something new. Wouldn't an architecture that confronts these issues be ideal?

C: Underlying your approach is a critique of the contemporary practice of historic preservation. Typically, preservationists draw up an inventory of structures worth safeguarding. These selected buildings are protected from what preservationists consider to be inappropriate change. It seems that you do not adhere to this notion of preservation. Rather than arguing for an authoritative, conservation-worthy, memorable inventory, you seem to argue for a vitalistic remodeling and reshaping of all buildings in the city.

UF: Not exactly! We do care about the value of buildings, yet we see this value as being determined not by what *is* but what *could be*. The possibilities inherent in a building are what determine its value. Certainly there are cases when it is appropriate for a building to be protected, conserved, placed under acrylic glass, embalmed. However, such buildings are not of much interest to us. As architects we are interested in buildings that become valuable because of what can be done with them.

The possibility of a work of architecture, especially its ability to instigate further action, is not limited to that particular work, but includes its effect on other places. For instance, we think that every building by Karl Friedrich Schinkel should be preserved. But we also think the qualities and values of Schinkel's buildings must be measured by their potential to *become* something else, to influence other architecture, elsewhere.

JL: We certainly disagree with the Venice Charter and its support for the "musealization" of cities. And we try not to differentiate between high and low culture. But we are not opposed to differentiating the value of buildings per se. We engage urban oddities as a kind of critique. When we promote a continuous elaboration of the city, we are interested in the refinement of culture. Such refinement comes from an exhaustive observation of places that appear banal. That is why Hermann Czech is such an inspiration to us. His attention to what appears to be mundane is the basis of his architectural practice. It is how he gains insight into the cultural knowledge with which these unremarkable things and situations are charged. The subtle development of meaning from what appears meaningless—this is the high art of architecture. This is why we ask our students to look at the world in its smallest details rather than aiming immediately for the grand plan!

UF: Create your *own* image of a building and get excited! Forget about what has already been mentioned in a book! And if the building and what you see in it is really good, you will be able to excite others with it as well. In this way a building can suddenly gain value over the course of a semester and the discourse among the students. As soon as a student works with a building in an interesting manner and presents this work to the group, new qualities about the building become perceptible. As a result, the students are contributing to a discourse. So along with developing their own projects, they are generating a collective architectural value system.

C: Going back to the issue of historic preservation: [...] The students' projects don't seem to originate in the present, just as one cannot really tell whether Peter Märkli's buildings were designed in the 1950s or at the turn of the twenty-first century. How did the students relate to the issue of contemporaneity?

JL: There is, of course, a temporal dimension to the relentless development of a city in which buildings are continuously being changed and modified. [...] An example of the kind of architecture we were considering was a flower shop near the Oberbarmen train station. Of all the many great examples of existing architecture our students found in Wuppertal, this is one of our favorites. The flower shop illustrates just how different forces can lead to a softening of building types and the creation of bastards. You have the typical *Bergisches Haus* with two floors, clad on the exterior with Rhine slate. But over the course of time and through the process of urbanization, the modern architecture of the nineteen-seventies found a place for itself in the building, adding tinted-glass balcony balustrades, large stained-wood windows, façade elements reminiscent of Egon Eiermann, and "BLUMEN" spelled out on back-lit cubes. Making the most of the topography, four floors and retail spaces were added. The old and the new were virtuously combined, and the back of the house was connected to a small greenhouse and garden. [...] The building of the flower shop in Oberbarmen is an excellent object of study. The only problem was that it was perfect, and there would have been nothing for our students to add or remove in the course of the studio project.

UF: [...] It should be preserved. From our constructivist point of view, well-executed anonymous architecture like this is equal to architecture authored by a known architect. But to return to the issue of contemporaneity in architecture: in our daily practice and for the students taking part in the seminar and studio project, it never came up. We didn't discuss whether a building or the building materials used were "timely" or "contemporary." Our question was simply: What can we *do* with them today? [...]

C: During this conversation, you've spoken about your take on individual buildings and about how peculiar but also seemingly banal structures can inspire you to undertake architectural interventions. Conversely, how do you relate these individual architectural interventions to the city? [...] What, to you, is the relationship between architecture and urban design?

UF: Arriving in a city like Wuppertal is a little like arriving in a gray city in Poland. You arrive by train at the station at, say, 6:30 in the morning in the year 1987. A gray city. You are overwhelmed by the feeling that you are not able to buy anything anywhere

and that you might starve to death. You fear people will let you die in a roadside ditch. But gradually you realize there is a kiosk. At the kiosk, you buy a *plan miasta*, a city map. It tells you how to find a *bar mleczny*, a milk bar. You go there, order pancakes and soup, and then you start to feel at home. So within half an hour, your perception of a city has fundamentally changed. From the very beginning, we wanted to work with the city as a whole. Wouldn't it be elegant if we succeeded in changing the city, bit by bit, by transforming individual buildings so as to enable new perspectives of the city, through a kind of *bar mleczny*-moment? As architects, we can learn from film, photography, and painting. We can learn how to generate the impression of a place by means of a few carefully edited frames. Is it possible to undertake targeted architectural interventions based on similar principles? What are the possibilities that architects have for changing their cities? The tactics used in urban design should consist of being aware of the transformative potential of one's own architecture on the city, so that outsiders, too, begin to see the city differently. In the best of all possible worlds, viewers and users of that architecture would be inspired to develop their own projects for the city. During the seminar and the studio in Wuppertal we tried to figure out to what extent one can affect the city as a whole by making small adjustments to individual buildings. These are issues of a prospective architecture.

JL: At times we seriously questioned our approach, as it took a while for the students to understand what we were after. Sometimes we had to take them by the hand. But most of them did open their eyes and we saw them begin to take pride in the city and making architecture in this dark valley. This is why, as instructors, it was such a pleasure to witness how the students developed their design proposals. [...]

UF: On our very first strolls through Wuppertal it became clear to us that only an incorrigible pessimist could fail to see that this city has a future. The city's buildings, its location, its floating tram—even if one cannot sleep near it because of the incessant screeching—all of this in between lots of empty shells left by giant snails who are now long dead. Our enemy—if it makes sense at all to speak about an enemy here—is the cynic. We wanted students to love their city. Either they must love it already or they must work on it lovingly or, at the very least, they must learn to love it.

JL: Architecture is empathy.

# Mo Horn Heinle, Wischer und Partner / Minimal and Efficient → Maintenance

## 2

Florian Heilmeyer: When your firm was commissioned for the rehabilitation, did it play a role that two of your founding partners—Erwin Heinle and Robert Wischer—had been involved in the design of the original buildings as employees in the joint venture formed by Rolf Gutbier, Curt Siegel, and Günter Wilhelm?

Mo Horn: No, we received each of the commissions through the VOF selection process [standard regulated tendering process]. But of course we were especially happy about getting the commission because both buildings are of great significance to us due to their history. Back then, the architecture department of the

**Our maxim was to only replace the materials where it was absolutely necessary**

Technische Hochschule Stuttgart [TH Stuttgart, later the University of Stuttgart] received the direct commission for the building from the city, which was entrusted in 1954 to the three professors Gutbier, Siegel, and William. The joint office established for this purpose was initially headed by Erwin Heinle, then later by Erich Wagner; Robert Wischer was an employee from the beginning. In addition, the fact that the collegiate building known as KI had served to house TH Stuttgart's architecture department was very important to us—generations of architects have been trained here, including current employees of our firm.

Muck Petzet: How suitable were the existing buildings for teaching purposes? Did you have to change anything about the internal organization?

MH: Surprisingly little. Both are high-rise buildings with structures of reinforced concrete frame construction. A central idea was the combination of spaces with different heights—the large drafting rooms and lecture rooms with the smaller workrooms. This was accomplished by clearly organizing each building into five multistoried groups, each comprising three lower-ceilinged floors facing south, and two higher-ceilinged floors facing north, joined internally via open connecting stairs. Thus the buildings each have fifteen stories on one side and only ten on the other, and manageable groups of spaces are formed with generous circulation spaces. We didn't need to change anything about that; the buildings' users are very satisfied with it. Because additional lecture rooms and more library space were called for, we nonetheless had to redesign extensive areas on the north side, and, for functional reasons, also completely reassign functions to the central core zone of elevators, shafts, and ancillary spaces.

FH: What do you personally think are the best qualities of the existing buildings?

MH: The most important quality of the buildings lies in their historical and urban significance, and in their straightforward culture of design. Gutbier, Siegel, and William rank among the most

important advocates of the "New Stuttgart School" [Neue Stuttgarter Schule]. In their teachings, they advocated a classical and conservative way of building, and they were strongly committed to a craftsmanlike tradition of doing justice to both the materials and the work. Taken together, the two high-rise buildings constitute an important urbanistic accent within Stuttgart's inner-city landscape. Moreover, when viewed objectively there's a high level of design quality in all the structures and details, and the esteem of the users has grown over the years. Despite the many deficiencies and shortcomings that have arisen, everyone involved wanted to keep the ensemble. But to do so, it had to be adapted to meet contemporary needs.

MP: What were the greatest deficiencies?

MH: The solid construction of both buildings had withstood the "ruthless" student treatment over the years very well. After more than forty years of operation, they were however in need of rehabilitation, particularly with regard to fire protection, contamination by harmful substances, building services technology, barrier-free accessibility, and energy-related values, and they were no longer suitable for the enormous increase in student numbers.

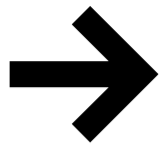
MP: Which characteristics did you pick up on in the rehabilitation?

MH: We began with a very precise survey of existing conditions. In so doing, we repeatedly discovered new, intelligent details that impressed us and challenged us to continue the intelligence and aesthetics. In particular, the rehabilitation was meant to preserve the pure character of both buildings and the clearly discernible consistency of the design. Our maxim was to only replace the materials where it was absolutely necessary.

FH: Can you provide an example?

MH: For instance, the new building services technology was supposed to accordingly remain visually restrained, like it was in the existing building. In this way we acknowledged the functional and aesthetic character of the building. Ultimately, the ensemble was able to be modernized without any significant impairment of the architectural quality and within a very tight budget, with a building standard that nearly corresponds to that of a new building. The prerequisite for this approach was the outstanding quality of the existing buildings. Our working method was therefore to accurately examine things, evaluate them, deliberate, and take sustainable action. Thus, for example, in KI the north façade was replaced but the south façade was merely fitted with interior insulation at the spandrels, since the original aluminum windows were still in quite good condition. Together with client and the users, we developed a minimal and efficient rehabilitation strategy in which the existing built substance could be retained to a great extent. Where interventions were necessary, we oriented ourselves on the original design principles.

# Arno Brandhuber / The Standards



## Behavior

3

Muck Petzet: Together we've visited the Antivilla in Krampnitz, on which you're currently working. How would you describe the two buildings located there, which you want to retain as part of this project?

Arno Brandhuber: They're two very unpretentious buildings that housed a state-owned knitwear factory in GDR times. One of them was built in the late 1950s and the other was built by a group of building apprentices around 1980. To begin with, they are not particularly attractive buildings. Especially the building from the 1980s, which will become the Antivilla, is exceptionally ugly—it's an overgrown single-family house, a monstrosity with almost no remarkable features. But on closer inspection some remarkable idiosyncrasies become evident, like the unnecessarily large number of small windows that were built; they're all the same size, but made with different techniques: lintel, arch, and so on. It was the trainees who did the building.

MP: Why are you retaining these ugly buildings?

AB: First of all, it's simply cheaper to use what is already there than to build something new. The anticipated demolition costs for both buildings had actually already been deducted from the price of the real estate. Conserving them has, as it were, paid off for us threefold: we saved the costs of demolition, the property was nevertheless cheaper, and we no longer had the necessity to erect a new building. Secondly, and to us this was at least as important, there was a chance here to have significantly more useable floor area, since the area of the two existing buildings is much greater than what we would have been permitted to rebuild after demolishing them. The building code would have permitted three small new buildings with a total of only 250 square meters. By contrast, the buildings that already exist there have 250 square meters per floor. So by retaining

**In Krampnitz, we came upon a completely different economic model: the added value doesn't emerge by creating something new, but as a result of doing less.**

the existing buildings, we got approximately 750 square meters of additional floor area. Thirdly, there was also an emotional factor. That the two buildings had survived over the years with their obvious visual shortcomings, and that despite everything they had not been torn down long ago—that had honestly touched me. They are survivors. Demolition would have meant all that emotional energy would have

been lost along with the total embodied energy of production.

Florian Heilmeyer: Which of the arguments you mentioned was the decisive one? Asked hypothetically: if it had been possible to construct the same amount of space in new buildings of exactly the same size and shape, would you have preserved both buildings anyway?

AB: Yes, we definitely would have worked with what already existed. Forty percent of the costs of a new building go into the shell and core work. So it's pointless to tear down something that could just as well continue to serve as the basis for something else. Of course it's necessary to carefully examine what can still be done with the existing building. That's an interesting reversal of the question: suddenly it's less about what I want, and more about what the building can achieve.

FH: So what abilities did the existing building have in this case?

AB: In Krampnitz we have a building with tiny or missing windows, load-bearing interior walls, and a corrugated fiber cement roof contaminated with asbestos. That raises certain questions in relation to adaptive reuse.

FH: Sounds like good reasons for demolition. So what are you doing?

AB: The roof is being disposed of and we're replacing it with a slightly sloped concrete slab that has several functions: we're using waterproof concrete, so it functions as a roof membrane without any additional roofing. Beyond that it's suitable for walking on, so it serves as additional space. In addition, as the slab independently spans between the exterior walls, the load-bearing interior walls become superfluous and an open floor plan is possible. We also no longer need all of the exterior walls for structural support, so we're able to remove two thirds of them. We'll get jackhammers and invite friends to a demolition party. Where do we want holes in the walls? Where do we want to look out? Toward the woods or the lake? Clear it out! The rough holes that result will be sealed afterward from within with glass panels. And voilà—the Antivilla is finished. One single move—the new roof slab—makes it all possible.

MP: And the other building?

AB: That has a lot more going for it. A well-functioning roof, columns instead of load-bearing walls, and large windows at the ground floor, but also here there are tiny windows on the upper floor, and just one single staircase. All the needed features exist. But they aren't always in the right place. So we developed a strategy of direct self-empowerment. We asked the two future users to move these features: the large windows from the ground floor can be copied to the upper floor, and the existing stairs can be shifted. These stipulations raise interesting questions: where do you need a staircase, and where a large window? Would the small existing window be sufficient in this location? All the changes are "copy and paste" within the existing buildings—the existing elements are the kit of parts; nothing new may be added.

FH: That sounds as if the two ugly buildings are ultimately being retained not only because it makes economical and spatial sense, but also because it would be fun.

AB: There's actually something else, too, which I think is essential. The question of excess: It's a typical situation for small weekend cottages. For weekend use, seventy square meters is more than enough. Our project work creates two buildings that are a total of 430 square meters too large. That raises questions about the follow-up costs, especially for insulation and heating. With the Antivilla, we reply by establishing different indoor climate zones. We don't heat the entire building evenly; there's a hot core, the sauna, as a central heat source. Then there's a warm zone: bathroom, shower, kitchen, and other areas with flexible climate requirement. We create these with curtains. Like an onion they surround the core; with the curtains, the zones can be adjusted and readjusted, again and again. And we don't need any thermal insulation: during the summer everything can be used without difficulty, in the spring and

fall almost everything, and in the winter, you need to settle for a smaller area. In the remaining area, you need to wear a thick sweater. Incidentally, we stay within the legal requirements, we simply construe them differently: we don't upgrade the building; instead we reduce the area in winter, defining different heat and use zones.

FH: What do you do with the space that you don't need?

AB: We don't know that yet. That's precisely what's so fascinating—the excess space opens up new questions about use and accessibility. By retaining the existing, a "plus" emerges, one that otherwise would never have been considered for financial reasons. Suddenly, an indeterminate generosity emerges: we have too much space. Who wants to use it? For what? It's a byproduct that has arisen only from retaining and working with the existing space as a resource, and it costs nothing.

FH: A "luxury of the void." That suits Brandenburg very well.

AB: Ordinarily something like this doesn't happen with architecture as it never produces "too much"; everything is precisely calculated. In this case, however, we came upon a completely different economic model: the added value doesn't emerge by creating something new, but as a result of doing less. Instead of investing in more thermal insulation, we invest in more room.

MP: With these indoor climate zones, you question established notions of standards. You don't create a fully insulated house in which all the rooms have the same climatic conditions. Instead, you actually create extreme differences. The residents then have to find out when they need what.

AB: Yes. Why should everything always be equipped with the same standards? There are enormous costs associated with this and, as a consequence, a need to refinance through continuous use and specifying functions. Why can't we just say, no, for different uses and different users there are naturally different standards, and these can exist well side by side?

MP: Do you think that would also be transferable to a different scale? Aren't we dealing here with a very specific individual case for a very specific clientele? To begin with, in this case you yourself are the client, and it's also easy to imagine that other artists, architects, and designers would have fun with such a concept ...

AB: Of course, it's ideal when projects demonstrate new options in an exemplary way. I hope very much that from time to time we create examples that are transferable. Our projects think about the relationships between living and working in new ways; we call into question building standards that are rarely challenged. A building like the one on Brunnenstrasse—as we quickly realized—could be built twenty times over in Berlin and there would still be enough interested buyers.

(continued, see project no. 8)

# André Kempe and Oliver Thill / A Second Chance for Modernism



## Addition

4

Florian Heilmeyer: What was your very first impression of the Europarei housing development?

André Kempe: Our first impression of the residential blocks was shocking. The buildings all seemed at first to be completely without character—the endless exterior corridors with their ugly metal railings; the typical, closed-in ground floor with all those storage rooms; the faceless entrance lobbies with lots of gas and drainage pipes; the elevator shafts that look like they were tacked on... It was clear that architecture had played a very small role in the planning here in recent years. But it turned out that the apartments were very spacious and nice, and that the surroundings were also convincing—in particular the design of the landscape: the trees are large and verdant, just like all those classic modernist drawings one sees. Just like Le Corbusier had promised, so to speak.

FH: So it was especially important to retain the qualities of the apartments and the open spaces?

AK: Exactly. For the buildings themselves we came up with the motto “A second chance for modernism.” The somewhat naive idea was that everything that had been precluded to economize on the buildings in their day would now be amended. You could say that we wanted to make architecture out of the buildings. The goal was to make them accessible in scale and lend them dignity and a monumental quality within their context.

Muck Petzet: What were the biggest problems you encountered?

Oliver Thill: It was not until after the competition that the buildings were examined for structural soundness. It quickly became clear that it had been constructed back then to the absolute minimum. It couldn't withstand any additional loading at all; any additions would have overloaded the structure or necessitated very costly retrofitting of the load-bearing structure. As an example, it was impossible to add floating floor screeds or furred walls to improve the acoustics. They would have been too heavy not only for the walls and floor slabs, but also for the foundations. So in the end, many of the things we had suggested in our competition proposal, such as adding a story above the roof or opening up the ground floor, couldn't actually be implemented.

AK: We also couldn't create any additional openings because it would have weakened the structure too much. And we weren't able to replace the balcony slabs, even though all of them were sagging and the drainage was no longer functioning. In order to replace them, we would have also had to replace all the supporting brackets, which would have blown our budget. There were many such problems and discussions. On top of everything else, the apartments were occupied throughout the entire work period. In essence, the job was a participatory process with three thousand residents.

FH: Why was there no debate about tearing it down, either partially or completely?

AK: Actually, such discussions had already been going on for years. We were even the third team of architects to be commissioned to do the modernization. The two previous concepts failed for this very reason: complete demolition was simply logistically impossible for the housing association. The Europarei was at full occupancy, which means that ten percent of the total population of Uithoorn lives there. There simply would not have been enough alternative housing for all those people.

OT: The discussions about razing parts of the complex came up again and again throughout the process. The work of the “rehabilitation machine”—which was well-oiled and working smoothly by then—was even stopped after the sixth of nine buildings was completed in 2010. It was suddenly decided that the three buildings that had not yet been refurbished should be torn down, because they had audited the project and determined—after nine years!—that the whole operation was too expensive. The cooperative was considering building terraced houses instead. But in the end, the economic crisis meant that no concrete steps were taken.

MP: Large-scale housing developments have been criticized for a long time now. Their planning approach is considered a failure and the existing housing developments are often seen as problem zones. Is there public debate in general in the

**You could say that the size of the Europarei ensured its continued existence. It simply wasn't logistically possible to tear it down.**

Netherlands about tearing them down, or have comparable housing developments already been torn down?

OT: Of course. The Netherlands is actually the preeminent country when it comes to demolition and new construction. The Europarei is an exception, simply because it wasn't logistically possible to tear it down. You could say that its size ensured its continued existence. But many similar housing developments are systematically razed or “re-coded”—Osdorp and Bijlmermeer in Amsterdam, Moerwijk in The Hague, Holtenbroek in Zwolle, and many others. In many of those places we've put up new construction. That often means following the logic of the old sites and erecting new buildings that are principally similar to the old ones, because it's not so easy to change the layout of the streets. The biggest change afforded by the new buildings is the area devoted to living. The new housing developments generally have fewer apartments with twice as much space in each, which, in turn, means that on average the number of residents is cut in half.

MP: Both of you grew up in East Germany, where industrially manufactured, large-scale housing projects and large-scale mass production were ideologically propagated as a solution to the housing problem and built over vast areas. These days, those *Plattenbau* housing developments [built with prefabricated concrete panels] are generally seen as the symbol of a misplaced, monotonous, and inhuman modernism directed solely at optimizing production process. Did your “Plattenbau experience” play a role in the way you approached the development in Uithoorn?

AK: There's no doubt that our childhood in East Germany and the prefabricated concrete housing found there have left their mark on us. Unlike in West Germany in 1968, East Germany had not experienced any substantial rebellion against the modernism that had degenerated into a bureaucracy. It just continued there, without any significant interruption until 1989. But despite the ugliness of the individual buildings and the flawed urban planning, the logic and consistency of the production process is fascinating and in this sense it represents a quality. Maybe that experience made it possible for us to accept the essence of the Europarei and to develop it further—in other words, we did not negate its modern core, much less deconstruct it, as is done far too often with refurbishment projects elsewhere, but we developed it further.

FH: You have repeatedly worked with large-scale housing developments from the postwar modernist era—after the Europarei, your current projects have included ones in Belgium and Germany. How would you characterize your fundamental attitude toward those kinds of housing developments?

AK: Basically, we see them critically but with a positive attitude. Large housing developments are part of the failed vision of modernism. But that failure is also a challenge. Positive examples exist not only in the former eastern bloc countries, but also in Geneva or Berlin. And whether or not those housing developments can be improved or successfully developed further is only partly dependent on the quality of the buildings and their urban structure: other factors are also important, such as urban density, the functional mix, and the proximity and accessibility of mature, “evolved” urban structures such as the old city. Those things are decisive to social aspects, such as a housing development's image, popularity, the degree of anonymity of its residents, and their sense of belonging to their neighborhood. Looking back at the Europarei, in hindsight we would have tended more toward tearing it down.

FH: Why? What would you have rather torn down in retrospect?

AK: If we had known from the start how structurally deficient and technically inadequate the buildings were, we might have been more likely to tear them down. At the same time, considering our social responsibility we're aware that such reasoning is not entirely sufficient. You don't simply raze 1,100 apartments. It's a difficult issue for many of the 1970s-era housing developments in the Netherlands: The cooperatives have limited budgets and the quality of construction is poor. The decision about whether it makes more sense to demolish or renovate must be considered anew each time, on a case-by-case basis.

OT: But we still consider the Europarei a success. Even though we could not by far realize everything we had initially intended, we still achieved a level of spatial and architectural quality that enhanced the

value of the whole area. In addition to boasting better energy efficiency and modernized systems and equipment, the buildings are now characterized by high-quality, light, and friendly materials. They appear more transparent. The entrances are clearly defined. A very nice moment for us during the project was when we were able to convince the client to replace the ugly balcony railings, since otherwise it would not have been a real “facelift” for the buildings. But if we are ever to do that kind of project again, we would organize the participation of the residents better from the start.

MP: So do you feel that it's important to preserve places like that, above and beyond the need to preserve existing residential space?

AK: Of course. Urbanistically, those housing developments are often quite attractive because of their opulent green spaces, even though their size often also makes them part of the overall problem. In addition, wide-scale demolition of such areas is not the best solution in terms of sustainability. Demolition on the scale that is happening in many European countries is without precedent in history and produces an unbelievable amount of refuse, not to mention the loss of the total production energy that these housing stocks contain.

OT: The dubious part of these operations lies in an undiminished belief in growth and the continual heightening of norms, regulations, and living preferences, with the result that buildings like those can no longer keep pace with the increasing demands and expectations. That was never the case in pre-modern history. In those days, the existing building was always the starting point for modernization and technological advances, so that this kind of conflict never arose.

# Nils Buschmann and Tom Friedrich / Reinvent

## Conversion



5

Florian Heilmeyer: You describe the site for the Galerie Giti Nourbakhsh as “very charming with its three existing buildings.” Could you talk a bit about this charm?

Nils Buschmann: It’s a gap in a row of *Gründerzeit*-era buildings, closed off from the street by a brick wall and a large industrial gate. The gate opens onto a surprisingly idyllic scene with quotidian archetypal buildings: a garage shed, a commercial building dating back to the nineteenth century, and a metal box from the 1970s. A courtyard with a balanced mix of buildings and green space, an arrangement of equally important interior and exterior spaces, surrounded by the blank brick walls typically seen throughout Berlin. The heterogeneity of this accumulation makes the place rich and interesting. That’s what we meant by “charming.”

FH: How was the decision to retain the buildings reached?

NB: We were in agreement with our client, Giti Nourbakhsh, about the most important point: this was not about representation, but about creating versatile and robust gallery spaces. Spaces of opportunity for the artists. And it was precisely that which was lying dormant in the diversity of the three buildings and the exterior spaces.

Tom Friedrich: That gave us the opportunity to programmatically and typologically adapt the found to the new requirements: we decided to not demolish or rebuild anything, but expose the existing potential and think in terms of continuity. We believe in a diverse and heterogeneous city with identifiable islands and characteristic typologies, similar to the Green Archipelago envisioned by Oswald Mathias Ungers, Hans Kollhoff, and Rem Koolhaas. So it must remain recognizable, readable.

NB: In this case, it was already recognizable: built fabric from the nineteenth century, and within it, a gap of an entirely different character. The other strengthens the rule. Precisely in places like this, it is important to not conceal anything and to not tear anything down too hastily.

TF: Then there is the question of the economy of means: are we using the budget to work in opposition to the site? What would we improve by doing so?

FH: Which characteristics in particular did you take up?

NB: We drew a comprehensive plan that treats the interior and exterior spaces equally. Inside we gutted everything. Our concept was to first create simple, clear, and distinguishable spaces, and to continue from there. What resulted are robust and generous spaces that are characterized by their exposed, then re-treated structural surfaces.

FH: Did you work “step by step,” so as to be able to repeatedly decide how to proceed based on what still exists?

TF: The urban design idea of an overall framework of interior and exterior spaces was always our guiding principle, and we allocated the required functions to the existing spaces, adapting them as needed.

NB: But there was no classic construction planning. We usually made decisions on site about what the final state would be: tearing away, clearing out, evaluating, and then continuing to build. Giti Nourbakhsh was always involved.

FH: Does sustainability play a role in that?

TF: Yes—not in terms of the German “KfW 70” energy standard, but in terms of robust spaces that have a certain autonomy and that serve more than just a single function. A sustainable building structure in terms of spaces that remain usable over the long term. In other words, more a kind of cultural sustainability.

NB: An “architecture–architecture”: architecture that develops from an evolutionary understanding of architectural history, similar to the way that Helmut Lang made “fashion–fashion”: with a cultural context

instead of a concept. It’s not always about the spectacular and brightly colored M & Ms. It’s more important to us that architecture allows qualities to emerge in everyday life. We don’t need ideologies for that, but identifiable, strong, and robust typologies that withstand changes in function or

## What’s interesting to us is whether these strategies for conversions or additions can also be transferred to new buildings.

permit hybrid combinations. Typologies that can still be designed by the users.

FH: On other projects, such as the Berlin Weekend Club, you have also worked with rather “unwieldy” existing buildings. Do you see a connection between these projects?

NB: In the case of Weekend, we were fascinated most of all by the idea of offering a roof terrace: to be able to go out onto the roof of a high-rise building directly on Alexanderplatz and continue partying some more. It wasn’t about making that visible from the outside or placing something on top of the building. You only see the people, the activity, and sometimes you also hear the music. Sunday mornings at nine: Richie Hawtin. The railing fits in with the 1970s façade structure, and the terrace is flush with the building, as if it had always been there. Except that you can now walk out onto the roof. The added value comes through use.

FH: So, is that a connection to how you went about your work on the Giti Nourbakhsh gallery?

NB: We try to express our general attitude in every individual project. Whether that’s successful is for others to judge. What’s interesting to us is whether these strategies for conversions or additions can also be transferred to new buildings, and whether architectural or urban-planning approaches can be developed from there.

FH: And? Is it possible?

NB: We’re trying to do that now with a current project: the residential development Am Lokdepot. It lies directly adjacent to a large, derelict track field that had been used by the railroad for decades. A classic peripheral inner-city site, of the kind that is still to be found very often in Berlin. It’s easy to imagine industrial architecture here, but there isn’t any. Although it wouldn’t surprise anyone if there were; the cultural references to this place would be self-evident. So we are reinventing industrial architecture, or more precisely: a typology that establishes a cultural reference to industrial architecture, but which represents a residential

typology for today that is capable of being personalized. Yet we are not copying it in a historicizing way, but rather developing it further. We are making the qualities of industrial architecture usable for housing. A loft—the classic example of conversion—but a newly built loft. A clearly new architecture that builds on the genius loci, that reinvents a story with a reference to the past. We’re not concerned here about producing a collage, but about assembling the various fragments, in all their complexity, to form a new whole.

FH: Your treatment of everyday existing structures seems almost overly cautious, as if you feared removing too much. Is that because you belong to the generation of architects whose careers began in 1990s Berlin—where, more for ideological than for rational reasons, too much was demolished; where too much vanished?

TF: We are not believers in absolute truths. But that’s actually the opposite of fear. If we were afraid, we would invent a simple truth and stick to it. A general approach to solving everything.

NB: But we are convinced by the diversity and heterogeneity of a city that has evolved over time. So yes, that means not lightly throwing anything overboard. We’re not working on a blank piece of paper, but in the cultural context of Europe. Not a tabula rasa. It’s simply wrong to believe that the old must be destroyed in order to create the new. The new can also emerge from the existing, through adaptive reuse and by developing ideas further. Yet that requires great precision and attentiveness.

TF: Our perception of the city is of course deeply influenced by our experiences while studying architecture in Berlin during the 1990s. A city of appropriation, where existing structures were converted with limited means; temporary; makeshift; here today and there tomorrow. It was about fundamental needs: good drinks and loud music. Walls with a door to go inside and a roof that doesn’t leak were good. That’s the root of our fascination with the simple, the everyday in its great complexity. But we no longer live in the 1990s.

NB: “City” emerges by means of the simplest things. Urbanity is everyday life. Architecture forms a framework for that life, for everything that takes place. Back then, a very dynamic city emerged beyond the control of official urban development policy. Naturally we understand the political and urbanistic motivations of that time; in retrospect, however, it doesn’t seem to have paid off. Too much was discarded, too much was lost. A high price for an idea.

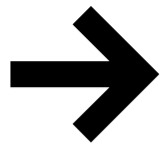
TF: We have to do a better job: define contemporary spaces within the given circumstances. Establish references; continue to develop history—not preserving it, but bringing it up to date. It’s not a matter of styles or epochs. We’re concerned with the architectural intention, the space, and what it’s supposed to articulate.

FH: Do you thus consider these ideas to be something completely new, or isn’t it more that you are linking back again to very old, pre-modern architectural traditions? Just as the idea of a Tabula rasa was above all an idea that served to clear the field for industrialized architecture.

NB: That’s correct in terms of establishing a link. But we must remember: linking up is just a starting point. What really interests us is what comes next. What new architectural opportunities arise as a result? In this sense, your motto “Reduce / Reuse / Recycle” clearly needs another term: “Reinvent.”



# Giulia Andi / Recycle and Transform



## Conversion



Florian Heilmeyer: What was the condition of the building when you saw it for the first time?

GA: The bunker is a memorial. It's a visible manifestation of violence and a determinant for the city's morphology. Its dimensions and shape make the submarine base a place with a strong and very emotional impact. It simultaneously depicts protection and repulsion. It's a real phenomenon in the landscape, like a second nature—both material and immaterial.

FH: How did you approach the design of the building? What were the first steps?

GA: This project basically started long before we joined in. Beginning in the 1990s, an attempt had been started to develop a new scheme for the harbor, to open it up and connect it back to the city. That was the first step in transforming the bunker into a cultural and social reality. In 1991, the artist Yann Kersale created a choreographic work of light and shadow titled *Nuit des Docks*, and in 1994 the symbolic *Ville Port* project was launched, marking the first reactivation of the bunker. The Spanish architect Manuel de Solà-Morales set a catwalk on the roof and opened four of the fourteen *alveoles*, the U-boat chambers, thus breaking the barrier between the city and the harbor. Our intervention began in 2003 with the transformation of Alveole 14 into a cultural space.

FH: Were there any positive strengths to the existing facilities, certain qualities or characteristics that you could build upon? How can such a building—a symbol of brute violence, war, and destruction—be considered separately from its history? Can the site once again become a positive part of the city?

GS: A radical transformation was necessary to reintegrate it into the city's day-to-day reality. The question was how to deal with this extreme situation. We were interested in developing a different approach than Solà-Morales: adding new elements to the bunker and opening it up to the city; using the bunker's energy and brutality with minimal intervention in order to maintain its double nature. We were asked to provide a methodological answer to the program. The first objective was to work with the morphology of the site, activating its intrinsic qualities—the enigmatic and raw atmosphere of the bunker cells—without opening up the bunker. We wanted it to stay massive and dark. The second objective was to develop an intervention to add a different characteristic—one that is reversible and heterogeneous. The main programs (LIFE and VIP) and their coexistence were the biggest challenge. VIP already

## We wanted it to stay massive and dark.

existed and was something of an institution in Saint-Nazaire. LIFE was a completely new concept. We wanted their spaces to be designed differently. VIP is a black-box venue for contemporary music concerts with perfect sound control, a catwalk stage, recording studios, and a bar overlooking the double-height space. In contrast, LIFE is a place for emerging art that requires great spatial flexibility. It's a tubular mono-space, 90 x 20 x 18 meters, keeping intact the volume and appearance of the existing basin. The elements we used include corrugated metal on the ceiling, two catwalks, a scenographic stage, and a mechanical folding door that opens to the harbor. The concrete floor received a finish surface of quartz powder and the walls have been left untreated.

FH: The bunker was built by the Todt Organization for the German U-boat fleet in World War II, making it an important strategic objective for Allied bombers during the war. So it bears a debt to the city that was heavily damaged due to its presence. Was there a moment when you said, we do not want to—or cannot—do this?

GA: The submarine base was an alien object imposed on the city, built in 1942 in only sixteen months. The Allies destroyed 85 percent of Saint-Nazaire but left the bunker intact. It's a manifestation of the violence from the past and has decisively influenced the morphology of the city. Paul Virilio wrote in his book *Bunker Archaeology*, "Striking examples of blindness of an era, these works announce a new primitive architecture based on proportions but not on the mental faculty." If we look at these buildings with a different eye, they look almost beautiful. It seems as if they establish a new romanticism, a "recourse of the bad and the terrifying," as Umberto Eco wrote in his *On Ugliness*. Eco cites Bonaventura da Bagnoregio, who writes, "in the middle ages the image of the devil has become beautiful as if it is representing well its ugliness."

FH: So what does that mean for your transformation?

GA: You only can describe the bunker through its double nature: it expresses power and fragility. It's an indestructible mass with the fragility of a living creature. It's the result of iron and cement coming in contact—there's a great deal of dripping water—so it is intended to decompose naturally. The difficult goal was to simultaneously reinvent the space to make it people-friendly, yet not deny the original condition of the "alveolus." A vertical link has been created to bring natural light inside and provide access to the roof. The public street—a former railroad track—is defined by a suspended light carpet made of LEDs and metal bars.

FH: How did you get the idea of taking the radar dome from Tempelhof Airport in Berlin, another building of the Third Reich, and recycling it as a think-tank area by transplanting it on top of the bunker in Saint-Nazaire?

GA: We wanted to colonize the bunker with a defined program and a light approach. It's an exploration of light and of temporary and recyclable elements. Our reuse of the dome, built in 1934 by Ernst Sagebiel, recycles the modular structure as an icon and symbol of a new transformation shared between France and Germany—the memory of change.

# Ansgar and Benedikt Schulz / Love at Second Sight



## Infill



Florian Heilmeyer: What were your first impressions of the university building in Erlangen?

Ansgar Schulz: We're familiar with this kind of architecture from our childhood in the Ruhr district. We've seen it there a thousand times, at the Ruhr-Universität Bochum, the TU [Technical University] Dortmund, and elsewhere. But we didn't want to go to college there. Not until we had continually grappled with the act of building did our appreciation of 1970s architecture change. So the task of "continuation" in Erlangen was all the more interesting.

Benedikt Schulz: It certainly wasn't love at first sight. To begin with, the building simply didn't fit the objective at all. Whether the building could even be "saved" was an open question.

Muck Petzet: Was demolition discussed?

BS: No, it was always about expanding the existing structures as effectively as possible and

**In continuing what already exists, the individual architect takes more of a back seat; architectural achievements become part of a greater whole.**

especially about making additional space for the increasing numbers of students. Razing the department would have called the entire campus into question.

AS: Another argument against razing it was that the building really did function well. If it were to be demolished, a central building block of the university's identity would have vanished.

MP: What was the greatest challenge in refurbishing the building?

BS: First of all, convincing the client to broaden the commission in order to be able to rework the structural weaknesses pertaining to circulation as well as dealing with the entire context.

FH: You have written that the project "mirrors the important confrontation with the architectural heritage of the 1970s." Why do you believe this confrontation is important?

AS: The questions posed in Erlangen are transferrable; buildings like it exist all over Germany. So what response can we offer to develop this unloved architecture further and to promote its broader acceptance?

BS: Dealing with these issues is not just important, it's unavoidable. The number of buildings from this era is much too large for us to ignore dealing with them or to simply replace all the buildings. An individual structure, such as the Technisches Rathaus in Frankfurt could perhaps be demolished. But an entire university or even an entire district cannot simply be torn down.

AS: In the 1970s, an intensive, analytical, and correct examination of the issues usually preceded planning and construction, and this is reflected in a nearly perfect building typology.

FH: To what extent do you consider the refurbishment in Erlangen as exemplary?

BS: The refurbishment demonstrates the importance of details. The building worked very well, its users were essentially happy, and the conditions for teaching and research were and still are good. The structure was good. First and foremost, the choice of materials and their workmanship were in need of improvement. Thus what was "exemplary" about the project could be defined as the precise, detailed continuation of the existing structure. Put more simply: this architecture isn't as bad as it looks.

FH: Do you like the word "pragmatic" in this context?

AS: As long as we're talking about typologically correct buildings, yes. Our way of designing is also based on a functional layout. Perhaps a certain affinity to the word "pragmatism" can be derived from that.

BS: I like the term inasmuch as we were able to use a targeted, relatively small—that is "pragmatic"—intervention in Erlangen to produce significant added value for the building and its users, without dogmatically calling it into question.

MP: In relation to this project, you have spoken about "structural beauty." What do you mean by that?

BS: The aesthetics of order, to which all design elements are subordinate. This tenacity is its aesthetic charm. The consequence for our design was to stringently and "fearlessly" always use the same elements.

FH: For a project in Chemnitz carried out between 2005 and 2008, you also dealt with extremely mundane existing buildings. You integrated a new police station into a rather banal building that used to house the *Volkspolizei* [East German police]. Do you see links to your approach in Erlangen?

AS: Yes, because the initial task in both projects was to meticulously scrutinize the potential of the existing buildings, which was rooted in many different elements. In Chemnitz, this potential was concealed most of all by numerous additions. Once they had been removed, the main building's presence was strengthened: suddenly, its positioning in the urban surroundings is nearly perfect.

BS: Both projects are founded on intense examination of the existing structures. Unlike in Chemnitz, the primary elements in Erlangen, like the entrance or the main staircase, were not emphasized. In Erlangen, we continued the existing grid without compromise, whereas in Chemnitz, we first made the grid visible by introducing story-high façade panels.

MP: When you are confronted with such mundane existing buildings, which criteria inform your decisions about what to demolish and what to retain? Do functional and economic considerations play the biggest role?

BS: Not exclusively. In Erlangen, we also asked what structural elements were important for the appearance and identity of the building. For us, they were the main staircase in the lobby, the flooring, and the surface and structure of the concrete elements comprising the long wall in the lobby that now connects the old building and the extension.

AS: Naturally, economic and functional considerations are of great importance in negotiations about how to deal with the existing. But often there's

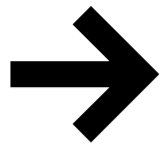
also an aesthetic argument that can be decisive when it comes to retaining or demolishing buildings. In Chemnitz, the building previously used by the *Volkspolizei* had a massive image problem due to its appearance, which is why many people supported tearing it down. Only by precisely "liberating" this building's strategically important position—due solely to its location at the intersection of the ring road and the main access road—were we ultimately able to retain the site and its volumetric form as a lasting icon for the public.

MP: Do you see a general change of thought in newer architecture in Germany that seems to deal more circumspectly than before with what already exists, even that which is beyond consideration as "worthy of preservation"?

BS: I do think there has been a shift in dealing with existing architecture. There's not necessarily an attempt to form contrasts and to differentiate each new layer from the existing as distinctly as possible. What exists is now taken up and continued much more often.

AS: In continuing what already exists, the individual architect takes more of a back seat; architectural achievements increasingly become part of a greater whole. There is a greater need for communication, however, and it carries more weight with this praxis of refurbishment, in order to also make the work of an individual perceptible to those who aren't experts in the field. It also opens up the opportunity for the wider public to fall in "love at second sight."

# Arno Brandlhuber / Bonds



## Infill



(continued from project no. 3)

Florian Heilmeyer: On Brunnenstrasse you challenged the standards that one would expect to see in a new building. You can do a maximum amount, but leave it largely undefined and unfinished. Unlike the Antivilla project in Krampnitz, however, Brunnenstrasse is largely a new building only using the ruins of the existing cellar. So to what extent are the two related projects?

Arno Brandlhuber: In both cases the place and the existing condition prescribe certain bonds. Generally speaking, I like the notion that ideas already exist in one place. There's so much information in what already exists that there's really never any reason to develop entirely new forms. You simply need to discover the information and synthesize its complexity. In Brunnenstrasse it was initially very tangible information, namely the remains of the basement of a house that was left uncompleted after an investor went bankrupt in 1994. Similar to the situation in Krampnitz, the property was somewhat cheaper because of the ostensibly unusable, abandoned construction site; the costs for its demolition were already deducted. And we didn't tear it down, but continued what existed instead.

FH: Not building *within* what exists, but *upon*.

AB: You could say that. Architecture is always "within a context" anyway, and there's a surrounding environment that "exists" and defines certain bonds. The purchase of the Brunnenstrasse site was tied to the condition, among other things, that the rear building had to receive sunlight down to the first floor. That resulted in the slope of our roof. Those are compulsory bonds. There are also voluntary bonds, such as the floor-to-floor height and the cornice height. We could have defined these freely, but we decided to orient ourselves on the neighboring buildings. The story heights of the two neighboring buildings are different, and connecting them resulted in offsets within our floor slabs and the roof edge. You could say that's nonsense, we don't need that. Or you deal with the consequences arising from it. In this case, the differences in height provided the opportunity to organize the floors without prescribing too much to the users. In addition, the result is a kind folded structure, which is effective in bracing the house and carries the external staircase in the courtyard. When we take the constraints seriously and think through the consequences, productive strategies for the design can emerge.

FH: You're using the term "bonds," which was also used by Oswald Mathias Ungers.

AB: Yes, but I want to expand the term beyond the formal consequences that were the essential aspect for Ungers and his students. Let's stay with the Brunnenstrasse example: beyond the formal and legal conditions that we had to meet, there were other bonds. We wanted to move into the building together with the gallerists from KOW, who are friends of ours, and the magazine O32c. These aren't tenants who can ensure maximum profits, so we had to offer rents that are relatively low for this area. We reversed the usual economic model and first established the rental price. From that, we derived how much the building could cost at most. Many decisions became easier, also for the future users: how much floor area do you want? How much will that cost with burnished concrete floors? How much with parquet flooring? With lower ceiling heights, we could take on another tenant—how much could we save by doing that? We discussed all of that quite openly with the tenants. Interesting discussions arose about what's *really* needed and wanted. Many then prefer more floor area or space with a more basic, robust, and well-usable fit-out standard. Then it was easy to decide to use lots of inexpensive polycarbonate for the façade, especially since it scatters the light, producing a very good quality of light for studio or office use. And the exposed concrete doesn't have a Tadao Andô quality. If we had provided the "normal residential standard" here, we could have only built a much smaller area with our budget. It's about revealing what is possible beyond the usual standards. It's about offering options that can be appropriated and are neutral

with respect to use, ones that also meet future changing conditions.

Muck Petzet: What fascinates you about such bonds? You say it helps when you have constraints. What's wrong with a *tabula rasa*?

AB: There's nothing wrong with a *tabula rasa*. But: it doesn't exist. Everywhere there's something already there. What's more, in Germany the population is steadily declining. Except for some inner city areas, we can hardly afford to continue spending money for new buildings! It's already all

## There's nothing wrong with a *tabula rasa*. But: it doesn't exist. Everywhere there's something already there.

there. We actually have too many. From an overall economic perspective, it's completely senseless to keep constructing new buildings. Of course there are situations that are not suitable for reuse, ones that really have no positive qualities whatsoever. Demolition should not be forbidden. But it could be sensible to evaluate certain buildings or typologies to determine whether they are generally useful as models for certain forms of reuse. What could churches become? What about gas stations? The result could be a very inspiring guide.

FH: If, as you say, solutions beyond the prevailing building standards would be interesting for many of these cases of adaptive reuse, why aren't these standards conceived to be much more liberal or at least discussed more, especially in a city like Berlin, which still has a large reservoir of derelict sites and unused buildings and spaces?

AB: There's simply no interest in building cheaply—especially not in urban areas that are easy to market. The users who would be dependent upon it don't yet express themselves effectively enough. Why should the private sector do it? High-priced products are much more lucrative for everyone involved in selling or creating them: developers, investors, real estate brokers, and, of course, architects as well. For architects, it's even less attractive, because searching for solutions beyond the standards results in more work and, as long as our fees are based on the construction costs, lower fees. Moreover, there's also a certain bias in the public debate, because the established stakeholders often present any questioning of the standards as meaning that something would be taken away from the underprivileged. This knee-jerk reaction of discrediting the standards question doesn't bring us any further if we sincerely want to try to offer affordable living space in inner-city areas, whether as rental apartments or as owner-occupied condominiums.

MP: That's right. We must have the courage to seek solutions beyond the standards. Otherwise the whole field will be determined only by industrial solutions.

AB: But as architects, we then quickly start operating in an area that's not consistent with the "state of the art." Such experiments can lead to dramatic additional costs...

MP: ... or to court. The mere fact that a solution doesn't comply with the standards is sufficient to compel the architect to rectify deficiencies.

AB: Exactly. That's naturally a negative aspect of our strategy. In Brunnenstrasse and for the Antivilla in Krampnitz, we are our own clients after all, so we could venture into a complex process and then wait to see what solutions the analysis of the bonds led us to. But normally a builder wants to know right at the beginning of the project how it will appear in the end. Our strategy is also of little value for competitions. We can't depict a simulated final state. We can only suggest analyzing the site and the surroundings during the entire planning and construction period, and to develop rigorously consistent decisions along the way.

FH: By and large, architects are still trained in college to build something new. Shouldn't we also start there and give much more significance to this concept of continued building?

AB: I think it makes sense that students first learn to come to terms with themselves and a defined area of space. That's a big step and is simply more fun. I, too, avoided all the seminars where the subject was building services, construction law, or adaptive reuse. They simply weren't particularly attractive.

MP: The topic simply isn't sexy.

AB: But that only holds true for simulated projects in college. In the real world, rebuilding becomes sexy. Then there's a specific situation, a relationship, an exciting building. Then it's immediately exciting. Construction law is nothing exciting in the first place. Not until it becomes a tool that you can work with, then it's productive and exciting.

MP: That brings us to the profession's self-image, which sees itself as a master builder and less as a master rebuilder.

AB: The image of the architect has been heavily influenced—at least in the last ten or twenty years—by images of iconic architecture, almost exclusively of new buildings, and especially parametric design and its promises. It has meanwhile been proven that this formal parameterization is a dead end. Because it's simply not capable of factoring in complex bonds—social, cultural, and political ties. Thus it leads only to iconic architecture: highly complex in formal terms, but as architecture, ultimately of low complexity because so much is not taken into consideration. In this respect, the finance crisis comes at just the right moment for architecture, since it forces us to deal with our resources more economically.

MP: Does that lead us to a new, more prudent attitude in terms of what exists?

AB: Today's architects cannot, in any case, simply present ingenious sketches that are meant to resolve everything, whether it's with a thick pencil or an automated computer process. They have to deal instead with much more complex existing situations. Architecture can then also be a partial solution or a temporary improvement. It's no longer about permanent solutions or the eternal setting. I find the loss of this architectural aspiration toward permanence to be a great relief.

# Thomas Knerer and Eva Lang / Radical Rehabilitation



## Redesign



**Muck Petzet:** Aside from its size, what makes the high-rise student housing in Munich relevant? To what extent do you see something special in it?

**Thomas Knerer:** Günther Eckert's design was radical. He wanted to establish a counterpoint to Werner Wirsing's neighboring low-scale housing, the so-called Bungalow Village, where each student inhabits their own house. With Eckert's design, however, 801 students were meant to live together

**We view the work rather like music: as a variation and reinterpretation of a theme with similar instruments.**

in a single building. The radical nature of this approach was translated with utmost consistency in the design and its construction.

**Eva Lang:** It is one of the most expressive buildings in the entire Olympic Park, and we believe that to this day it remains a particularly compelling architectural document of its time.

**Florian Heilmeyer:** Can you describe this expressiveness more precisely?

**EL:** The individual apartments were depicted on the exterior by fair-faced concrete frames stacked one above the other. Together with the engineering firm SSP, Günther Eckert developed a building system with a high degree of prefabrication.

**TK:** The resulting "stacked walls" formed the east and west façades of the building and were connected by concrete beams spanning across its depth. The building's interior remained column-free, and the student apartments were added using prefabricated modules. Whether the architect chose this means of construction in order to enable subsequent conversion is something we can only speculate on.

**EL:** In any case, the resulting overall form appears to be almost accidental but is flexible. From a distance, the silhouette is—intentionally or not—reminiscent of an Alpine panorama.

**MP:** What was the condition of the building when you saw it for the first time?

**TK:** It was clear that the entire exterior supporting structure, including the loggias, needed to be packed in a thermally insulated enclosure in order to meet the requirements of current energy-saving regulations. That meant the building's rehabilitation also called for a radical approach: we hang a new structure of lightweight precast concrete in front of the existing. This provides a degree of plasticity that comes very close to that of the earlier building. The new windows and the metal panels with which we have now clad all the spandrels create a strong reference to the materiality of the original building and its façade articulation, but without copying it. Instead of the very tightly dimensioned apartments, we've inserted compact, small

apartments with various, spatially differentiated functional areas.

**MP:** You refer to the project as a rehabilitation measure, but the changes to the external appearance make it much more than that, don't they?

**TK:** To be sure, our alteration can be read in the many new details, but a connection with the building's origins still remains—sometimes more and sometimes less subtle. Changes were necessary, but we didn't want to destroy the special charm of the 1970s. It was especially important to preserve the building's character when seen from a distance. After being refurbished, the building will inescapably continue to assert its prominent place in the Olympic Village ensemble.

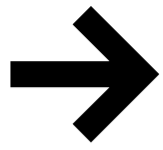
**FH:** All these considerations and subtleties—and in the end, one almost can hardly distinguish the intervention from the preexisting condition. Can this "invisibility" be satisfying at all for you as architects?

**EL:** We've talked a lot about that. Our office is in Dresden, where the subject of history is dealt with very often, very emotionally, and with great controversy. We believe that buildings must be adapted to meet changed circumstances and conditions. Thus our approach for working on the student housing in Munich is not primarily one of historic preservation, but is developed from the various requirements of our mandate. Our design represents an independent solution; it's not a restoration of the original state. That would not have been technically feasible. We view the work rather like music: as a variation and reinterpretation of a theme with similar instruments. As natives of Munich, we have always liked and admired the building. That's why a major change to its configuration was for us absolutely out of the question.

**FH:** Is there something of a "new cautiousness" to be sensed in your treatment of the existing—a certain desire to discover, retain, and refine existing qualities?

**EL:** Exactly. It's hopefully an affectionate approach. We examine the strengths and attempt to elaborate upon them with present-day means. This results in layers of time that deny neither history nor the present. We think that's a sustainable approach.

# Volker Staab / Conditions



## Redesign

10

Muck Petzet: What was the condition of the building when you saw it for the first time?

Volker Staab: The first meeting took place in a room on the seventh floor. It was summer and felt like 38° C. That made the building's main problem immediately palpable to us. The façade from the 1960s was in very poor condition; the windows couldn't be opened and the exterior sun shading, which had long since ceased to operate, was unusable.

Florian Heilmeyer: So was demolition also discussed?

VS: Demolition was indeed also discussed in the preliminary stages, but a new high-rise on this site would not have been permitted. But, for the Darmstadt University of Applied Sciences, the high-rise was a symbol visible from afar and, as such, it not only acted as an important point of orientation on the campus, but also formed part of the institution's public identity.

FH: Where did you see spatial or urbanistic advantages or strengths that you could take advantage of as part of your renovation strategy?

VS: We found the organization of the interior to be convincing in its clarity and simplicity. Two spatial zones of different depths, and a middle zone for the ancillary spaces, with nice wide corridors. Hence we tied the extension, which enlarges the

associations with the modular façades of the 1960s. Is that a deliberate reference? Did you analyze façades from the time when C10 was constructed in order to come up with that design? In other words, should the new façade be understood as retro-chic, or as a conciliatory gesture between a brand-new outer skin and the old building underneath?

VS: Well, neither. Our starting points were really the analysis of the existing building, especially its inner structure, and the position relative to the cardinal points. Due to the precise north-south orientation, the two longitudinal façades each had completely different requirements. The goal was to develop façade geometries that allowed us to forego any external, operable sun shading, with its susceptibility to mechanical failure. As it turned out, there are naturally many geometries that facilitate shading. But with regard to the structural implications and the brightness inside, there were great differences. Our work was therefore to develop a form that provided an optimal result with respect to the shading, the brightness, and the forces acting on the existing building's structure. But there was still a certain range to work within, so we opted for varying elements. Instead of employing the same module around the entire building, the façades respond differently to the different conditions of the four cardinal points. The scale of the module is nevertheless entirely different than the one from the 1960s. The side effect that a recollection of that time will be awakened is, however, not entirely unwelcome.

MP: In the debate about this redesign, weren't there any misgivings that the building could become too "loud"? After all, it already dominates its surroundings solely due to its height.

VS: In this case, too, the building's orientation lent itself to our concept. The building presents its calm north façade to the city, and its more expressive south façade faces the campus. That's well-suited to the client's valued "symbolic character."

FH: How did you arrive at the idea of recycling the marble panels of the façade by using them inside? Should it be understood mostly as a gesture with a touch of humor, or were there practical reasons for recycling them?

VS: It was requested by the university.

**Our starting points were really the analysis of the existing building ... and the position relative to the cardinal points.**

building by two additional gridlines, exactly into the existing structure. The organization of the spaces was developed in close coordination with the users, and we also worked together to decide upon the color scheme for the rooms. With the design of the façades, aside from the fact that there was absolutely nothing we could preserve from the existing façades, the exact north-south orientation of the building was of crucial importance.

MP: What deficiencies needed to be eliminated?

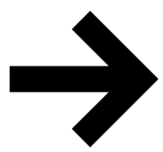
VS: Besides the climatic ones, there were also spatial deficiencies, most notably on the ground floor, which we opened up vertically to the floor above, also because of the public use. From a technical standpoint, in addition to the structural design, which had no reserve capacity, fire protection was a big issue.

FH: How did the idea of the four different sides arise, and to what degree did that relate to the existing characteristics of the existing conditions?

VS: After extensive internal discussions about the extent to which we should remain oriented on the existing building, in the course of the competitive peer review process we decided to develop a thoroughly new concept for the façade—one derived from both the existing inner structure of the building and its situation as viewed urbanistically.

FH: The new metal façade doesn't appear new at first glance because the design arouses strong

# Claudia Meixner, Florian Schlüter and Martin Wendt / The Right Size



## Subtraction



**Florian Heilmeyer:** What was the condition of the building when you saw it for the first time?

**Florian Schlüter:** At first glance, the Dornbusch Church was rather off-putting. It had practically no open space in front, and the atmosphere inside was rather gray and a bit dismal. The church's interior was enormous and undifferentiated in relation to the size. In the sanctuary there were plastic buckets and bowls because of the leaky roof.

**Martin Wendt:** Later we learned that in addition to roof repairs, the concrete structure was also in need of refurbishment. The church interior was cold

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and uncomfortable in the winter; the insulation was bad. The building offered space for approximately five hundred churchgoers, but only about fifty members of the congregation still came on Sundays. So to some extent it was understandable that the church building was not particularly loved by the community, as we learned.

**FH:** Even though you yourselves attested to the bad condition that the Dornbusch Church was in, your proposal averted complete demolition of the building. What were the advantages of partial demolition?

**Claudia Meixner:** The material advantage was that the remedial measures for the entire building would have been very expensive, and for a smaller building they could be reduced accordingly. In addition, the smaller church building we created this way is still larger than any new building that could have been built with the same money. Furthermore, for the same amount of money we used to preserve part of the original church, no new building could have been built in the same magnitude. The intangible advantage was that, in this way, part of the old church was able to survive in the new one.

**FS:** The previously existing ensemble of church space and community center worked very well. With our reconstruction, it was above all necessary to ensure that the steeple and what remained of the building continued to constitute a unity. At the same time, it was possible for us to enrich the existing ensemble with a new, large churchyard.

**FH:** What was the biggest challenge with the reconstruction?

**MW:** One challenge was the meager budget. All the reconstruction and rehabilitation measures had to be carried out for €800,000. There were structural difficulties because the new church façade had to replace the bracing of the nave's side walls even during the reconstruction phase itself.

**FS:** From the structural requirements and other issues, such as the new entrance, natural lighting, and access to the community center, an overall concept had to be developed that also had to do with the uniqueness of this church and its identity. That was actually the biggest challenge.

**FH:** What remains of the Dornbusch Church has become a new wall into which individual elements of the old building have been recessed, like imprints of a memory. That sounds quite nostalgic. Isn't it awful for the community, constantly to be reminded of the old building and thus, as it were, of its former "greatness"? How do the church members get along with their reduced-scale building?

**CM:** The congregation really doesn't mourn the larger church. They find the current size appropriate; the churchgoers no longer feel so lost. And we've also received many positive reactions for preserving the room-sized stained-glass window, which now has a much greater presence in the small church.

**MW:** Meanwhile the number of churchgoers has been rising again. We actually have the impression that the church community doesn't perceive the transformation of the old church and the memory of the deconstruction as a loss, but rather as an awakening in something new — without having lost the past.

**FH:** And how is the new outdoor space between the building and the tower used?

**MW:** In the mornings it's virtually an extension to the yard of a neighboring school. In the afternoons, it becomes more a kind of children's playground. The congregation is happy, and uses the space for bazaars, festivals, or in special cases even for outdoor religious services.

**FH:** To what extent would you describe your way of dealing with Dornbusch Church as "exemplary"?

**CM:** Perhaps it's exemplary because every project should begin without bias. Often, pragmatic use of what exists is a very inexpensive and ecologically sensible option. We always view the use and extension of existing buildings as offering a great opportunity for achieving a process-driven, eclectic result.

**FS:** Starting with the site and the task we're given, we seek in our projects to develop a new way of seeing the everyday situations that have evolved. We try to discover physical and social qualities in order to develop them further — especially when we encounter existing built elements with some sort of previous history.

# Sonja Nagel, Björn Martenson and Jan Theissen / Learning from the Inconspicuous



## Addition

12

Florian Heilmeyer: Sonja and Jan, you know each other from your time studying together at the Akademie der Bildenden Künste Stuttgart [the Stuttgart State Academy of Art and Design], and Jan and Björn met when you both worked with Arno Brandhuber and Bernd Knies in Cologne. But actually it was a slightly odd passion for collecting that brought you together: the photo collection “Bauten der Zwischenstadt” [*Buildings of the In-Between City*].

Jan Theissen: After graduating from college I worked briefly for a retail fit-out contractor. Back then I was driving a lot through the region surrounding Stuttgart. And I noticed these quirky commercial villas: strange hybrids—very sturdy and resilient buildings—which had often been altered and expanded several times. I started taking pictures of them; Sonja was enthralled by it, and we spent several weeks in the summer systematically traveling across the countryside. Later, we showed them to Björn, who was as fascinated with them as we were.

Björn Martenson: In 2006 I had a teaching position at the university in Aachen, and we created a design course about this building type.

FH: What kind of course was it?

BM: It was primarily an experiment. We were interested in whether a design strategy could be derived from the analysis of these buildings. Students were to design a commercial villa.

JT: However, hardly anyone was interested in that type of everyday architecture in 2006.

Sonja Nagel: Our colleagues at the university asked why we were interested in that—they said it was ugly! We quickly realized that it was better to talk with artists about it. They were much more interested in our findings.

FH: You speak of “types”. What were you looking for exactly?

SN: At first we were simply following our fascination. We took photographs mainly in industrial and commercial areas. What particularly attracted our attention there were the buildings where people worked and lived at the same time: an amalgam of living and working, like when you think of old farmhouses or the homes of craftsmen. People work downstairs and live upstairs. We were interested in both formal and conceptual aspects: for instance the roofer who covers his whole house with roof tiles, on one hand, to display his product and, on the other hand, also because it’s the material that he knows very well and can install himself. This particular building type was also interesting because it’s not part of a predefined collection of types; in architectural theory, such hybrid forms do not exist.

FH: Purely in visual terms, there’s a strong connection between this collection and your architecture. Your buildings—even the new buildings—always have something peculiar, something slightly tangled up and ambiguous. To what degree does your collection influence you in your architectural work?

SN: It’s never about copying something we’ve found or transferring it one-to-one onto one of our projects. The buildings that we photograph are seldom well done in terms of architecture or design. But there are certain aspects or details that fascinate us. Figuring out what interests us about these buildings sharpens our perception of everyday life and also expands our repertoire of possible forms, materials, and constructions.

BM: One develops an entirely different sensibility and suddenly discovers the qualities of places

and buildings that are far too often thoughtlessly disregarded by others.

FH: So you expand your design repertoire that way?

JT: Yes, because our consideration of simple types means we have a vocabulary of forms and types in mind that do not only come from modern architecture.

SN: Architects often preclude the entire pre-modern repertoire—roof forms, for example—for their work and thus restrict their means of expression. Why, for example, should we limit ourselves to flat roofs when our architectural language is actually more diverse? We’d like to rethink how modern construction might look once we’ve gone beyond the necessity of building flat roofs. We don’t want to rule out anything; the idea is to have as large a vocabulary of shapes and materials as possible.

JT: We want to develop an approach that’s as non-dogmatic as possible. And observing everyday buildings in our environment plays a major role.

FH: But how do you transfer the fascination for everyday architecture to your own designs? Could you perhaps explain that by using your latest project, Schreber House, as an example?

BM: I knew the clients, a family with three children, who were looking for a house. But they didn’t want to subordinate their lives to financing their new home, so the budget was relatively low. Above all they wanted a big garden. So the task was to find a suitable existing building with a large lot. We ultimately found this old brick house where an old lady had lived up until recently. The house was in poor condition. It was more of an “ugly duckling” in the way it perched above the large lot, separated from the garden by a one-and-a-half-meter-high base.

FH: Did the clients also immediately see the potential of the ugly duckling?

BM: No [laughs]. But we were able to show it to them.

FH: That links up directly with your photo collection: recognizing the qualities of an everyday condition.

SN: Our perception of seemingly everyday buildings is undoubtedly really well developed due to our passion for collecting. The spatial configuration of the old, small house was cramped and dark, but basically good. By building the addition, we were able to open the house to the garden, and with few new openings we were able to get more light into the existing building. The generosity that the house now has is something that surprised our clients very much.

FH: The building seems homogeneous in a strange way, even though it consists of entirely diverse parts.

JT: The house is actually a duplex. The other half of the house has also been altered and expanded with a winter garden and a terrace overlooking the garden. Our design relates to both the larger unit, that is to say the duplex house, and to the small unit. In that respect, the building is anything but an alien form, and that’s what gives you the impression of homogeneity.

BM: I believe it’s the contrast that accounts for the power of this architecture. The dark, old brick house with its small openings and then the addition with its full-height glazing. It was important to us to not didactically separate the old from the new, but to interweave both. The addition is meant to combine smoothly with the existing building and expand the old house toward the garden. The split is visible, but it’s not the central theme; it’s more a matter of visibly joining things together.

SN: We reused the old bricks that we got from razing the old shed and making the new openings.

BM: We take what exists and weave it into what we make.

FH: Isn’t that a contradiction: wanting, on the one hand, to “weave” the existing into the new and, on the other hand, to emphasize the dividing line between old and new?

JT: If someone performs surgery or knits something together, a seam or suture emerges that slowly disappears over the years as the façade develops a patina. It’s intentionally not a celebrated joint or a dividing line. It’s about the continuum—the weaving-in of the new that occurs here, for instance, by carrying forward with the same materials.

FH: Your newly constructed buildings—like the JustK single-family house or the cemetery pavilion, Fried—also look as if they have already undergone alterations.

SN: Really?

FH: I think so, but I don’t exactly know why. Maybe because the buildings simply don’t appear so “finished.” Maybe because they seem so eclectic, as if several designers had already worked on them. Or because they seem so solid, as if they are invitations to making additions or alterations.

SN: Architects often think that their buildings must be finished or perfect upon completion. But what does finished mean? In everyday life, at any rate, very often you see houses with seams, traces of alterations and additions that have been plainly left visible.

BM: Such seams, where they are left visible, spawn a depth of information in which the development of the architecture becomes more intelligible. Just as unfinished buildings are often more intelligible and sometimes even more stimulating than finished ones. That’s because you can still see the splits, the basic material, and the means of construction before it’s all concealed.

SN: Once buildings are gradually used and incur the first signs of wear, they become as exciting as the unfinished buildings.

JT: In the way it evolves, the process of constructing a building is actually like an inverse of the process of its falling into disrepair or being dismantled. Like the patina, the condition of “pre-finished” also documents the history of the object and makes it legible. With Schreber House, the rough materials, which have been left visible, emphasize the surfaces and establish—much like a patina that develops on surfaces and objects over the years—a lively texture. As a result, the surfaces appear less “new” and gain both plasticity and vitality. It’s much the same with JustK.

SN: This observation—that an almost finished building is similar to one that already has a slight patina—meant, for us, that buildings are actually at their least interesting just after they’ve been finished. This brand-newness, when everything sparkles; it only goes downhill from there. So we skip this lifeless, “finished” state and leave the buildings “almost finished.”

FH: So is it a matter of generating a certain accessibility, a familiarity, and in so doing, avoiding the aura of a finished, inapproachable product?

BM: Our buildings have an aura. But not an inapproachable one.

JT: It’s more about creating buildings or spaces with their own character. It’s okay for this character to seem a little weird—after all, people are often also somewhat peculiar, and

usually they’re interesting for that very reason. The ground floor and the upper floor of JustK are certainly not “neutral” spaces but very special ones. It’s the same with another one of our projects, a pavilion in one of the cemeteries in Düren: on the one hand, it seems like a classic modern building: flat, angular, and with lots of glass, very transparent. Inside, however, there are no neutral spaces, but three entirely different ones with archetypal roof forms: barrel, polygonal, and shed. We’ve made these inner spatial forms visible from outside, a little bit like the buildings in Bernard Rudofsky’s *Architecture Without Architects*—or like dug out caves. We’re interested in a mixture that’s capable of being read in multiple ways, a mixture that is allowed to appear contradictory and thus develops its own independence.

FH: Can your projects be read as tongue-in-cheek irony directed against contemporary architecture?

SN: No. It’s meant quite seriously [laughs].

BM: We have often been accused of that tongue-in-cheek attitude. But actually we aren’t being ironic at all.

SN: Not one of our projects has been about designing the flashiest house. On the contrary! Our buildings always relate very strongly to certain characteristics of their surroundings. It’s about understanding the natural and built environment as well as the social links in order to “weave in” the new. What is newly built should become a part of the context. JustK, for instance, is located in a neighborhood where there are many houses with pronounced roof forms. Our roof form resulted from the house’s internal organization, but viewed urbanistically, this form—which seems a little quirky and conspicuous in the photos—fits into the neighborhood very well. If it weren’t completely covered with gray roof tiles, it wouldn’t be particularly striking, and people would probably just drive past it.

BM: Our buildings respond to the requirements placed on them and to the aspects of the surroundings that we consider influential or important. What emerges is a special character that can perhaps seem quirky.

JT: The real question is, which elements are picked up from the context and what is derived from them? Or: what inspirations can be used again, and where? We also use our photo archive quite associatively, in order to reestablish certain images in an entirely different context. For the Schreber project, we had pictures of buildings from Greece and the Palatinate that also played a role.

BM: Perhaps pragmatism is married to the desire for complexity. Ultimately, it shouldn’t merely be simplified.

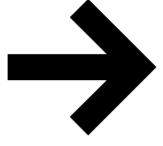
FH: Would you describe your architectural strategy as pragmatic?

JT: Pragmatism is not our central theme. The cheapest option is almost always a white plasterboard wall. But our buildings are intentionally unfinished and rough in many places. That’s not pragmatism due to a low budget; it’s intended precisely that way.

SN: Our architecture is more like gingerbread; it’s regarded as a fundamentally German product, but it’s a combination of German bread with exotic spices that came to Germany along the trade routes. In our architecture, something entirely independent is also meant to emerge from highly diverse ingredients, from local traditions and other influences.

JT: In the end, it can no longer be separated: From the mixture of totally diverse things, a new discrete entity emerges.

# Muck Petzet / Recycling Buildings Status Quo Germany 2012



## Material Recycling

13

The only economically significant form of recycling buildings in Germany is the processing of building rubble into gravel materials. The reuse of larger building components is problematic, especially with regard to logistics and transportation. It would be easy to reassemble redundant Plattenbau buildings elsewhere—were it not for the costs of

### The key to reducing the carbon footprint of our buildings lies in the extending their lifecycles

non-destructive disassembly, transport, storage, and reassembly. A few pilot projects—such as in the Cottbus slab housing block district of Saxony-Madlow, where in 2001 the architectural firm Zimmermann + Partner had the parts of a disassembled high-rise apartment building reassembled into new town houses on an adjacent site—point to ways in which, at least locally, large components can be sensibly reused, both economically and in terms of energy. However, this presupposes a need for new homes directly next to the “dismantled” areas, which is more likely the exception in shrinking cities.

On a smaller scale, marketplaces for used building components offer networks and structures for the regional use of “secondary” building materials. However, these exchanges only have a niche existence in the construction industry; they are primarily of interest to budget-conscious “do it yourself-builders” and aficionados of historical elements. In Germany, “professional” components must be certified through extensive testing in order to obtain building regulation approval. For used components this is possible to a very limited extent.

It follows that the status quo of recycling buildings is the use of the smallest fragments—rendering the process completely energy inefficient. According to statistics compiled by Initiative Kreislaufwirtschaft Bau [Society for the Recycling Economy in the Building Sector], between 1995 and 2009 an average of 210 million tons of mineral construction waste was incurred annually. This represents approximately sixty percent of the total waste volume in Germany. Of the construction waste, eighty million tons came from building demolition. Each year, nearly forty million tons of this is processed into recycled building materials.

The bulk of this recycled material is reused in Germany for road construction. The demolished housing estates of East Germany thus serve as important “urban mining grounds” for the country’s new infrastructure as slab buildings are converted into highways. But this is only economically and energetically sensible if the dismantling site, the processing plant, and the road construction site are close together; economic viability ends after about

twenty-five kilometers. It is also likely that at least in the eastern part of the country, the supply of recycled materials from demolitions in the near future will far exceed their demand.

For several years, therefore, attempts have been made to use the recycled debris in higher-quality form, such as aggregate for recycling-concrete [“RC-concrete”]. In Germany, this is still in the testing phase, in contrast to Switzerland, where RC-concrete is already in use. Initial studies on the energy efficiency of RC-concrete versus conventional concrete, however, show only a slight advantage, which is not even gained from the material, but from the shorter transport distance between the crushing facility and the concrete plant. In contrast to gravel pits, both are usually located relatively close to urban centers. This advantage accounts for only a few percentage points in the overall energy balance: the production process comprises eighty to ninety percent of the primary energy used for ready mixed concrete. Cement plants account for the world’s third largest source of annual CO<sub>2</sub> emissions, just below power plants and vehicles.

The key to reducing the carbon footprint of our buildings thus does not lie in building component recycling, but by extending the life cycles of buildings, for example through the use of existing shells or parts of buildings rather than demolitions and new constructions. In order to achieve a general change in mindset, energy balances must consider a building’s entire life cycle. Here, too, Switzerland is a pioneer, where the energy efficiency rating takes into account the “gray energy” used for the manufacture of the building materials that are used and thus stored in the buildings themselves. A building in which preexisting elements are used has a significantly better energy balance than a new building. Buildings are too valuable to merely reduce them to piles of rubble and road gravel.



# Andreas Hild / Continuation



## Material Recycling

14

Muck Petzet: With your Klostergarten St. Anna residential complex in Munich's Lehel district, part of the old monastery had to be demolished because it couldn't be converted for the new function. It was important to you, as you write, to not allow the entire ensemble to degrade into a new and an old part, which would thus obscure the new building's legibility. The courtyard façade in particular makes a strong reference to the existing building: window forms, dormers, tiled roof, and the color and articulation of the façade. The most striking elements, however, are the neo-Romanesque round, arch windows that you've integrated into the new building. You're recycling building elements from what existed....

Andreas Hild: We have never spoken about recycling, but always about *spolia*.

MP: ... and in this context we want to speak of material recycling, even when it's certainly more of an emotional recycling than one that is justified economically or ecologically. What do you expect from this reuse, from these *spolia*? Is it primarily about not being able to distinguish what is old and what is new?

AH: No, it's certainly more than that. By using *spolia*, we are seeking to establish a certain iconographic continuity between the old building that was lost and the new building. You take a piece from the whole, preserve it, and use it again; the hope is to be able, so to speak, to transfer some of the magic to the new. In that sense, maybe it's like a fetish. A connection is kept between the old and the new part, and there was a resolute decision against allowing any explicit difference in design to emerge. So we use the *spolia* for this urbanistic, or as we say, atmospheric idea.

MP: Is it a way of making amends for the demolition—almost a kind of reconstruction?

AH: Let's just say, it also helped us to get everyone on board. The building conservation authorities were naturally against demolition, the client said if he has to preserve the old building, then he can only pay half as much because the alterations would be so expensive, and the people from the monastery said if they get less money, they would have to move out completely. Then the rest of the cloister would also have been empty. As the architects, we suddenly had the role of finding a solution for all that; of bringing everyone to the table. The key to this was actually reusing and reinterpreting the window arches.

Florian Heilmeyer: So was it just a design compromise for you, a political solution?

AH: It was a way to unite various interests. Like an equalization of potential, without which the project would never have been built. In German, the word "compromise" has a negative connotation. But with alterations, it's part of the job to find compromises and to give them a good form. If "political" in this case means that a solution is negotiated and the project is realized, then I can't see anything bad in it.

FH: Doesn't the window arch motif become pure decoration; just ornamentation? Didn't the reuse of the five-meter-high window arches lead to substantial problems in working out the layout plan?

AH: Yes, but it also led to new spatial qualities. Now there are apartments with five-meter-high rooms, and altogether there's a very complex interplay of high and low spaces. So the arches are more a catalyst than ornamentation—if we hadn't used them, we would never have been able to push through the idea of such high spaces. The reuse of what's on hand has led to more, on many levels.

MP: Since you reinsert the existing elements as if they were prefabricated units, is it possible to speak here of form recycling—or, more likely, material recycling?

AH: As a classically trained architect, the alarm bells immediately go off when the concept of form is raised. We're not interested in the reuse of the form itself. It merely serves as an instrument for us, in order to convey an atmosphere or a meaning. But in the way we employ these arches, we avert an affinity with pure, seemingly faithful reconstruction. We've inserted the arches diagonally across the new

façade, in five different positions. Such a strong disassociation developed that we suddenly had immense freedom in designing all the other things. We used the same broom-finish stucco, the window surrounds in the new building are exactly the same width as in the old building, and nevertheless there's absolutely no danger that it might seem like an attempt at reconstruction.

MP: I would like to discuss with you these parallels to waste management, especially regarding the difficult issue of recycling. Up to now it has gained virtually no acceptance in architecture; usually there are just small art projects, which are very difficult to transfer to a larger scale. On the other hand, there's industrial recycling, where the concrete is shredded and used in road surfacing. Why aren't there any more daring architectural approaches?

AH: I really like the idea of the construction industry looking over to waste management. But then we have to talk about something other than just the design aspects. We'd have to talk about legislation and the economy. Waste management didn't become worthwhile and economically viable until there were legal changes. In the construction industry, recycling will remain unattractive until there are similar provisions. Let's imagine, for instance, there was an amortization for gray energy that wouldn't reach zero until after seventy-five years. If a company wants to demolish a building before the time period ends, then they would have to pay into a "gray energy fund" or the like. In other words, people would have to pay for the energy that was rendered by society and exists in every building. Such a measure would fundamentally shift the calculation of whether to alter something or build it anew, in favor of the alteration. I'm all for discussing that. But that's much more than a few architects who say we're changing our attitude.

MP: If we stay with that idea, that the reuse of building elements like the *spolia* in the cloister garden is a form of recycling: So how important is it still for you as an architect, whether you're dealing with new construction or an alteration?

AH: The fact is, I'm not particularly interested in the question of whether it's an alteration, a rehabilitation, or a new building. I also don't find it particularly interesting to consider whether something is old or new. This distinction surely comes from the conservation doctrine of the joint and its didactic concept, which insists that a

## The reuse of what's on hand has led to more, on many levels.

clearly formulated difference between the old and the new always needs to be established. A difference that, wherever possible, can be understood by any layperson. As architects, we would like to free ourselves from that, or at least ask if that's the only way. We would like to reverse the reflex toward the recognizable. It's not the difference that should be in the foreground, but the totality. Whoever seeks the difference between old and new will also find it in our work, only that it's more hidden and can only be seen upon a second, third, or maybe fourth glance. That's what we also do when we build from scratch. Because the existing fabric comprises not only the individual building, but also the neighbors or a certain era. Seen in this light, we always build within the existing context.

FH: Can you give an example?

AH: With Schloss Hohenkammer, we made that the dominant theme of our entire design. There's really nothing inside that's as it was before. But you only see that when you look very closely, or have profound expert knowledge. We've inserted a

staircase that seems at first to be original, but previously there were no stairs at all on that spot. So we decided to convey exactly that. There are no drawings and no photos that show the before and after. We only show pictures of how it is now. Ultimately it's about: do you like it or not? No matter what was there before. Whoever wants to know can still find that out; I have no doubt about that. But above all, the old and the new form a whole, an atmospheric unity.

FH: The question of visibility relates to alterations as a whole: How do I convey what has happened? What was added, what taken away? Or is it really only about the current condition?

AH: We called our approach for Schloss Hohenkammer "architecture as time exposure." Like with a photographic time exposure, the boundaries defining layers of time are blurred; a new whole emerges. Especially in this castle—which was rebuilt perhaps thirty times in four hundred years—the question of what is original is completely irrelevant and cannot even be answered clearly and unambiguously. The question that concerns us instead is whether, in the end, an atmospherically harmonious construct has been created. In this particular case, I also don't care about the Venice Charter, which stipulates, of course, that the difference between old and new must be clearly legible at every point.

MP: I agree with you entirely; I think this dogma of portraying distinctions is wrong.

AH: But I always have a certain reluctance to say, "that's wrong." After all, it is a possibility, and for us as architects, it's one of the last bastions of safety.

MP: What do you mean by that?

AH: Well, the idea of clearly separating old and new is probably the last point of general consensus among architects as well as between architects and society. We never have to argue about it. These ideas of authenticity and honesty are very widespread. There are still many people who like the story of the joint. The good thing about it is that we can use the argument over and over again. Only with great reluctance would I really want to give that up completely, and in any case not prematurely.

MP: But in your work, you yourself repeatedly forsake this ability to make distinctions, and, in effect, you also forsake this desire for "honesty" and "authenticity"!

AH: That's right, our designs are always on the cutting edge. We've been working on this dogma for twenty years. But imagine we now officially say: this dogma no longer interests us. That would be something we'd have to think about very carefully. With many of our projects, we have appropriated these arguments and, as a result, we were able to push through parts of our designs, or at least make them clearer to understand. The "tradition" of the joint has power, and I won't give that up so easily...

MP: Of course these arguments can also be important. But it would still be interesting if we would get so far into the discussion that both are possible. Not every alteration can be compared with every other alteration or be placed on the same level. Consequently, a multitude of different strategies must therefore be possible. That would, in my opinion, strengthen the architect's position. When we say, "only we can unravel this multitude of possibilities." After all, according to what criteria can one still define what should be preserved and what should be torn down? Especially with the everyday structures that surround us, those beyond any categorization related to historic preservation, only a well-educated architect who is receptive to the existing fabric can figure out what is right and wrong.

AH: That's right, and that is the problem. Alterations are extremely irrational. That's what's interesting, exciting, complicated, and miserable about alterations. And that's exactly what prevents architects from willingly dealing with it. We come from a rational world; in college we learn to explain our designs rationally. The irrational, the felt and indeterminate, the contradictory—all these have no

place there. It begins in architecture with the way commissions are awarded in competitions. The ones who always get the job are those who draw a bright blue flash above the existing building, ostensibly giving order to everything. That picture is easy to decipher and hence it's accepted. But what should we draw? In our images it's not clear what's the preexisting condition and what is new; our interventions are often minimal. In our drawings, what you see is first of all an old building. That doesn't excite anyone, so there's no hope for success. With an alteration strategy like what we have in mind, we won't win any traditional architectural competitions.

FH: In an article, you once wrote that a notion is creeping very slowly into the architectural discussion, one you call *Weiterschreiben* [continuation]. Instead of demolition or the joint, that would be a third position—one that places no value on recognizing the layers of time; one that leads to a "historical vagueness." Do you also see this notion with other architects—is the idea of the auteur architect with a recognizable signature losing currency?

AH: What exactly has changed? I see a series of narratives with which the issue of building in the existing fabric is discussed. The first one is still the narrative of the *tabula rasa*—the idea of being able to replace one history with another, or even: having to replace it. Then there's the narrative of the joint, which says that alongside the one history another must be placed, and that the contrast is what first enables both to fully unfold. Third, there's the narrative of the reconstruction, which believes to be able to restore history, at least in some aspects. I don't want to be misunderstood: I don't want to do without any of these narratives. There's no reason to demonize one or the other. These narratives are already very old and have been applied differently at different times. I'm merely pleading for adding another narrative, namely that of continuation. Continuation dispenses entirely with the direct recognizability of the layers of time. It relies on a kind of cross-fade, through which the edges of history become blurry and a kind of fusion results, which neither negates the old history nor makes it a part of something new. That's not even a new narrative. Before modernism, and for practically the entire history of architecture, alterations were almost always practiced exactly in that way.

MP: Why is the strategy used so seldom today?

AH: Because continuation brings foes from all camps onto the scene. Some reject it as immoral because they don't find the didactic model of direct recognizability within. The others reject it because they lose their authorship therein—originality and the resulting benefit of distinction are lost. With continuation, the interventions are usually almost invisible.

FH: How do you deal with that, especially with the invisibility or the vagueness you engender?

AH: The fears are probably unfounded. Continuation leads neither to an ahistorical architecture nor does the author become unimportant or invisible. On the contrary: a barely ordered field opens up for architects, provided that they have the ability to take all the loose ends and links that are to be found in the existing fabric and join them into a coherent narrative. And what emerges? An integral architecture in the proper sense. That seems to us to be highly desirable.

# Martin and Sven Fröhlich / One Word Leads to the Next



## Gestalt Recycling

15

**Florian Heilmeyer:** Your project with the cabin in the Fichtelgebirge came about almost accidentally. You noticed that a small mountain shelter was being put up for sale on the edge of Tellerhäuser [a small village in Sachsen]. What were your impressions as you saw the building for the very first time?

**Martin Fröhlich:** If we're talking about a coincidence, it had already happened during childhood: we were often in the region on vacation. In 2005, we saw an advertisement for the sale of a bungalow; the cabin was more of a garden shed. In the 1970s in the GDR, you could get one as a prefab building. This one was used by a ski club as a warm-up room and storage shed. A silent servant to the East German elites of competitive sports.

**FH:** You actually bought the shed, even though it was almost completely dilapidated. When you bought it, had you already checked into the possibility of erecting a new building in place of the old one, or did the possibility arise later?

**Sven Fröhlich:** As already said, we knew the place and the natural landscape. And we thought the history of the sports bungalow was interesting. The cabin was located in an area on the outskirts of the village—where new construction is prohibited—but it enjoyed grandfathering protection; demolition would have resulted in losing the status quo protection, so preservation of the building became a mandatory requirement. It was only a question of how.

**Muck Petzet:** How did you come up with the idea of using the old walls as “formwork”—as molds for casting the new concrete elements?

**SF:** We considered a thousand different possibilities. The idea of using the old wall as formwork is what remained after a process of elimination. Then we started working on it and sketched out how to build it.

**FH:** Did architecture or art provide you with any models for your approach?

**MF:** In this case, it's the theme of copies and the mask, which is an old part of our cultural language. In the classical era, death masks of the deceased were often made to help remember those dear to one's heart. Their opposite was the dream of eternal life. But as everyone knows, originals don't last forever. Or as we say: the dream of eternal life has a dark side, since it changes our character. A good example of this is the story “Do You Exist, Mr. Jones?” by Stanislaw Lem.

**SF:** With regard to the bungalow, we decided to make castings because the cabin's original parts could have only been retained with considerable cost and effort. And then they would not even have been authentic any more...

**FH:** You use the cabin as a weekend and vacation house, inviting friends and acquaintances. What reactions do you get?

**MF:** The aesthetics play a secondary role. The use and the reduced convenience are what people usually focus on. We arrive as a group and allocate the work—such as chopping wood, heating, cooking. By the time it gradually starts getting warm and the food and drink are on the table, everyone has had the small luxury of contributing to the warmth and the food. The cabin provides a reason for having to become fully involved in this reduction: prescribed elementary existence under one roof.

**MP:** To what extent can your treatment of this building be viewed as “exemplary” in regard to dealing with what already exists?

**SF:** We wouldn't describe retaining the existing condition by creating a cast replica of it as being an exemplary solution. This method doesn't appear to us to be generalizable or transferable. But it is a potential form of continuity.

**FH:** You often work with what exists. In your best-known project, Schloss Freudenstein, or with the locomotive shed at Wriezener Bahnhof in Berlin. Although you've encountered a wide variety of existing buildings, do you nevertheless see similarities in these alterations?

**MF:** We like working with existing buildings. It's like a good conversation: one word leads to the next. It's the same with construction. Maybe the similarities are in taking pleasure in the imagery, the

sought-after dialogue between that which is there and that which we add to it. Or finding pleasure in looking at old technologies and spaces from today's perspective, and accordingly developing them further.

**FH:** Yet your projects are usually quite striking, object-like sculptures that are likely to establish a contrast with the existing condition, as at Schloss Freudenstein. At the same time, you emphasize the “joy of observation,” and that you find it important to sift out unique characteristics and traditions. How does that fit together?

**SF:** If you extend something or reuse it, then you shouldn't make an exact copy of what exists; you should search for the idea behind it. That's the first building block. The others come from us. The object-like quality that you mention is our way of describing space. Spaces emerge between the objects, or they're inscribed within them. Effects explode, make lots of smoke, and then disappear. You can kick our buildings and they remain standing.

**MF:** We're not seeking to add a signature or demonstrate authorship. We combine our perception with what exists, the found with the new, and the traditional with the unusual. It can also be highly restrained, as with the locomotive shed. There we restored the building faithfully, using masonry infill that was plastered over, and single-pane windows glazed with putty. The new part is a container next to it.

**FH:** In your office you collect strange but everyday things, which you also like to show in exhibitions of your work: old irons, plastic buckets, wood planes, and machine parts. What fascinates you about them? Is there a connection to your architecture?

**MF:** The collection surrounds us; it's part of our database—of our source code for the programming.

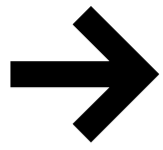
## If you extend something or reuse it, then you shouldn't make an exact copy of what exists.

Sometimes the fascination outweighs the form, the material, or the function. The things can be style templates for new things, or simply sparring partners for design jogging.

**MP:** Is the observation of everyday life a skill that architects definitely should develop because it helps them to deal more carefully with what already exists—to become more engaged with it?

**MF:** Yes, absolutely. Training your perception—following trails—is extremely important. Our profession is supported by such an enormous amount of superficial knowledge from so many disciplines that our powers of observation are virtually a fundamental component. When we teach, we place great value on it.

# Roger Diener / Layers



## Gestalt Recycling

16

Muck Petzet: Your reconstruction of the east wing of Berlin's Museum für Naturkunde [Museum of Natural History] is already well-known—I would almost like to say, famous. In the *German Architecture Annual 2011–12*, the jury selected your project as the best, and elsewhere you have also been inundated with praise by friends and foes of reconstruction. Especially in Berlin, it's something quite rare to see new architecture that does not divide but unites. The photos of your fascinating, old-new façade of the east wing are well-known, but as I was there for the first time, I couldn't initially find the façade at all. You need to go past the door staff and a barrier

**We were interested in a convergence of old and new parts, an overall version that challenges and breaks with traditional viewing habits.**

and then you find it, far from the main entrance, in a kind of maintenance court, in a very quiet place—not at all visible from the street. How were you able to justify applying so much devotion to detail in such an ordinary place?

Roger Diener: That didn't influence us. It's also not true that the place is shielded completely from the public—the students of nearby institutes, for example, regularly come by here. The task was not to design a striking public façade but to complete the wing, which had been destroyed in World War II, as part of the overall ensemble—without covering up or negating the traces of history or the sophisticated form. We were interested in a convergence of old and new parts, an overall version that challenges and breaks with traditional viewing habits: here, the parts you would expect to see in wood or glass are cast in concrete, producing an almost surrealist effect. Our work is designed so that it only reveals itself at second glance. I'm certain there are people who walk past without noticing it. Nothing seems out of the ordinary until you cast your gaze precisely at it.

MP: Why this distancing effect?

RD: It developed directly from the project requirements. The collection of animal specimens preserved in alcohol that is stored and displayed here precludes any daylight and any influx of outside air. On that account, and because of the explosive properties of the alcohol, these collections are accommodated underground with good reason in most museums. In other words, being able to reconstruct the original façade was out of the question; hanging curtains in front of windows wasn't even an option.

MP: Nevertheless it's a contribution to reconstruction.

RD: We don't balk at the term "reconstruction" as long as it's used in a differentiated way. We've made a number of small interventions in the old halls of the museum. When dealing with the preservation authorities, we identified these as repairs, but actually they're many small reconstructions—completely

invisible. Despite the new requirements, we didn't want to create something entirely new for the façade of the east wing. So yes, the project is a contribution to the reconstruction debate. The proponents now say, look here, it works—and the critics say that's the way it has to be. Because we simply don't try to desperately apply the original condition to today's circumstances. With David Chipperfield's Neues Museum there was a similar response. I think that shows above all that the acrimonious debate in Berlin has long since arrived at a deadlock. The question of whether one should reconstruct cannot be answered in general terms with yes or no. With such a polarized attitude we won't make any progress. In dealing with what already exists, so many diverse and beguiling opportunities arise. Why should we limit ourselves to a yes or a no?

Florian Heilmeyer: Part of this distancing effect is that you have bricked up the open windows that had remained in the extant parts of the façade. The windows in the reconstructed bays of the façade, by contrast, have window frames and glass panes.

RD: In the replicated part—in other words, the fictional façade—we're dealing with a replica. With the well-preserved façade, on the other hand, it was a matter of rehabilitation, of making modifications to meet the new requirements. So there we had the windows bricked up.

MP: At the same time, it's no longer possible to be sure whether the bricked-up windows were already closed off before your alterations.  
RD: Exactly. There's no right or wrong; no yes or no. In the end, you stand in front of it—and then the only question is whether it pans out atmospherically. The new parts already formulate a distance from the existing, but it's a very "faint" distance, I think—almost subtle. There's no emphasis on the joint. The dividing line is as inconspicuous as possible.

MP: With the construction of the Swiss Embassy in Berlin, you had already accomplished a similar distancing. As with the east wing, the relief in the pale concrete also engenders the allure of a black and white photo. Like preserving a memory of something that used to be there, even if you no longer know exactly what it was. An artistic strategy?

RD: Yes, I think that's the case. But you can't always be absolutely sure what makes you do things.

MP: At the embassy, however, there's a much stronger separation from the existing building.

RD: There's something else at play there, because the relief makes reference to the missing neighboring building. That's how Helmut Federle and I designed it back then; there are no references to the inside of the embassy. It isn't even a constructive part of the building, it's completely separate. As if it were leaning on the embassy building.

MP: We've discussed that both projects are actually a kind of recycling. Not in a technical sense, because indeed no materials are recycled. But certain images and certain motifs are reused—a kind of form recycling, if you will.

RD: It's not about the form in the narrow sense; it's more about the idea of deposits, of layers. You would have to speak more of gestalt than form: we wanted the history of the ensemble as a whole to be expressed in the new parts. In a very precise reconstruction, there's always the frustrating experience that the age value is lost. At the natural history museum, I have the feeling that we succeeded in expressing the time in another, compressed form. Old and new can surprisingly and naturally stand side by side, and suddenly it's no longer certain if the colorful part is what's old, because the achromatic part looks almost like an even older layer. In the reconstruction of the Alte Pinakothek in Munich right after World War II, Hans Döllgast had already achieved a similar abstract effect with his newly added parts. In their simplification, something emerges that seems like a raw version of the building's historical elements. There's no competition between old and new, even though there are two clearly distinguishable layers of time. But they can't be arranged in a clear order. The convincing and suggestive power of the building comes about because Döllgast places the new parts like archetypes next to the old parts.

MP: Where do you see the difference to the Venice Charter?

RD: I believe the Venice Charter has been greatly misunderstood, especially by architects. It's nearly just half a sentence in the Charter saying that what's newly added should be configured in such a way that it's recognizable as new vis-à-vis the existing condition. But if you read the original text in the Charter, then the rest of the paragraph before that half sentence actually says that, as a basic principle, the new may not diminish the effect of the existing. The sentence about distinction doesn't come until after that. Unfortunately, most people know only this last part but not what is written before that. This has triggered devastating developments, because architects have interpreted it as a license granting them unbridled permission to establish contrasts with respect to what exists.

MP: Just like Karl Josef Schattner and Carlo Scarpa later demanded.

RD: Schattner and Scarpa have decisively influenced this development. My problem with this attitude is that it's simply not a continued development of the existing condition, but more of a final accounting. It's a quasi-ahistorical attitude, because they're looking for a final state. Here the old, there the new. How can you build on that? How can you perpetuate that? I think the main difference to our approach is that we proceed with the awareness that, as architects, we work on a project at a certain point in time which won't be the last. There have been others there before us, and there will be others who will follow us. We're responsible for ensuring that others can build upon our work, if necessary.

FH: But as an architect, you still leave behind visible traces.

RD: Of course our work doesn't come without its traces. These traces may even be very personal aspects pertaining to one's own interests as the architect responsible. But they must be integrated into the basic conditions. By this, we mean first and foremost the social mandate of architecture: making space available in a decisively qualified form. Secondly, the local context, in other words the existing condition. My notion of the city is an experience of the concurrence of older and newer parts. It presents itself with a limitless collection of means to fashion the distance or proximity between old and new. As architects we've never had any trepidation. We've never worried about whether our contribution can assert itself when viewed in isolation. Even with freestanding buildings, we expect them to develop a relationship with their surroundings, integrate themselves, and enhance the effect of what already exists rather than reduce it.

**ARCH+ features 14:  
Reduce/Reuse/Recycle  
Muck Petzet,  
Konstantin Grcic,  
Erica Overmeer,  
and Florian Heilmeyer  
in Conversation  
with Nikolaus Kuhnert  
and Anh-Linh Ngo**

The German original version of this interview appears unabridged in: *ARCH+ 208*, "Tokio: Die Stadt bewohnen," September 2012. Supplement "ARCH+ features 14: Reduce/Reuse/Recycle." Reprinted here with the kind permission of *ARCH+*.

**ARCH+:** To open the discussion, we propose that you briefly outline your concept for the German contribution to the 13th Architecture Biennale.

**Muck Petzet:** At its core, the concept basically seeks to raise an awareness of the entirety of existing buildings and infrastructures as a central architectural resource for the design of our future. We want to promote an affirmative attitude toward the existing, and achieve a revaluation through a change in perspective. We apply the viewpoint of waste avoidance to ways of dealing with existing buildings. The exhibition's title refers to a successful example of a fundamental change in attitude that we have all witnessed in recent decades: the revaluation of garbage as a valuable resource. The environmental movement's slogan "Reduce/Reuse/Recycle" constitutes the so-called "waste hierarchy": Reduce signifies the top priority of reducing waste volume—it's waste avoidance. This is followed by reuse—the most direct reutilization possible. And only in third place do we have the material transformation through recycling. By transferring this logic of avoidance to an architectural context, we can obtain a new value system for dealing with the existing fabric. This results in a clear demand for reducing the means to that which is absolutely necessary. The fewer changes that are made and the less energy that is required to make them, the more effective a rebuilding strategy will be. An architectural value system that promotes minimal intervention, or even its avoidance, is however in opposition to the self-image of many architects, who have internalized the autonomous creator of new worlds as an ideal and the ultimate goal of their profession. But we invite architects to fully engage with the existing, to comprehend architecture as a resource, and to understand their role as a developer—energetically, aesthetically, culturally, and socially.

**ARCH+:** The last three aspects have time and again renewed the European architectural discourse, above all the social question. Thus in the 1950s and '60s, criticism of the functional city begins to become manifest in questions of everyday life, the mundane, and the existing. What that meant was a demand to recognize reality rather than subordinate it under utopian promises of salvation. This transformation of the architectural discourse begins on the eve of the marginalization of the

## By transferring this logic of avoidance to an architectural context, we can obtain a new value system for dealing with the existing fabric.

European working class. And so it is not surprising that the rehabilitation of two working-class neighborhoods in London and Paris—Bethnal Green and La Villette—is not only the opportunity for continued debate, but also becomes the starting-point for a sharpened view of the social reality. In London, the Independent Group surrounding Alison and Peter Smithson and Nigel Henderson worked simultaneously on similar issues to Candilis-Josic-Woods, and especially Shadrach Woods through his collaboration with Henri Lefebvre, in Paris. The Smithsons and Candilis-Josic-Woods were members of CIAM and later Team X. Thus they formed the core of a discourse about overcoming the functional city. And even though a change of direction in architecture was founded that would later cause a furor under the name of postmodernism, in the 1950s and '60s one was undauntedly modern. In this sense, the Smithsons and Shadrach Woods were traditionalists on the one hand, and renovators of modernism on the other. This raises what might be the provocative question of whether you are not in essence also interested in establishing a different concept of tradition that reflects these forgotten developments. In this context it's interesting that you make reference to Miroslav Šik, who describes himself as a traditionalist and who sees both modernism and postmodernism as the two radical, conflicting ideologies of the present. What role does the notion of energy, which you introduce as a fourth aspect, play in your reasoning?

**MP:** With the notion of energy, we are seeking to remove ideology from the architectural discourse. *Reduce/Reuse/Recycle* makes it possible to categorize architectural strategies differently and to make assessments according to objective criteria. The basic assertion is that the less energy I use to change or preserve buildings, the better it is for the environment. This objective is at the core of our approach. It calls for an entirely different perspective on architecture and the city, which we define as an "energetic" resource. That corresponds to a politically correct or, one might say, catch-all formula like, "We should consume as little energy as possible."

What energy is, however, is something we see much more broadly. The "gray energy" stored in what exists and the consumption of heat and energy sources are the physical-energetic side. But in addition to the physical and economic components, the value of a building also results from immaterial aspects, such as the social context it's a part of, the history that the existing conveys, or the feelings it triggers. All these aspects should play a role in evaluating architecture. In this spirit, we also include traditionalism in our examination. We could, for instance, say that it's a kind of recycling when cities or buildings are rebuilt in historical form. Nevertheless, our overriding interest was the treatment of everyday architecture. We have only marginally dealt with the fundamental principles and problems of historic preservation, however, because in our society there is meanwhile a solid consensus on preservation, a discussion conducted at a high level, and also an independent language.

**ARCH+:** Historic preservation was one of the first attempts to deal with existing buildings, but under inverted conditions. People initially concentrated on the monuments and, to their benefit, neglected not only the surrounding fabric, but literally cleared away the latter in order to make a feature of the former. You, on the contrary, no longer want to pose questions about the existing fabric in terms of historic preservation, building typology, or urban morphology, but with regard to stored energy.

**MP:** We can look at all these issues under the broader notion of stored energy—even the issues of context and architectural quality. Yet the physical energy is ostensibly the strongest argument. If the climate goals are really taken seriously, that must ultimately also lead to legal changes in the construction sector. Just as the new thinking in waste management only gained general acceptance because deposit systems or similar incentives had been developed, in architecture similar incentives must exist—to not demolish something, but to leave it standing and reuse it intelligently.

**ARCH+:** Let's put it to the test. For the exhibition you have also selected examples of large-scale housing settlements from the postwar era and determine that the mass production of postwar buildings has a massive image problem. These are commonly regarded as instances of poor planning.

**Florian Heilmeyer:** I think we shouldn't focus too much on any one time span. It's not just about the buildings of the 1960s or '70s. They just comprise one part of that which we view as the "everyday existing fabric." It's much more about an architectural, perhaps even a social approach to that which is there. And of course it's also about the question of what criteria are used to evaluate the existing and how to recognize worthwhile qualities in it. Even if someone is not, let's say, a devotee of the mass production of the 1970s, it would nevertheless be an interesting approach, architecturally and/or politically, to principally first appraise it, to examine its individual strengths and weaknesses, and to not recklessly advocate its demolition. In these cases, it's almost a matter of a reversal of proof. Put another way, which advantages speak for the existing building, and which speak against it? These are questions that must be posed before you start thinking about demolishing this building or that housing complex.

**ARCH+:** A strategy of the As Found was developed as early as the 1960s by the Smithsons. They sought to view the existing—the found—in terms of the ordinary, and to introduce it as a source of inspiration for the further development of architecture and art. Along with them, the photographer Nigel Henderson and the painter Eduardo Paolozzi belonged to the Independent Group, who worked in Bethnal Green in London's East End and are generally regarded as the forerunners to Pop Art. Bethnal Green later falls victim to the practice of urban renewal. Nevertheless it was one of the places where a decision leading to a new realism was taken.

**MP:** For me, the term "as found" is contradictory to what we intend. Naturally we have also dealt with issues of terminology, especially with such terms as *weiter schreiben* [continued writing], *weiterbauen* [continued building] and *weiterstricken* [continued knitting]. The term "as found" literally means "exactly as I found it." But it's not only interesting to find something, but also to make something new out of it. For us it's not at all about taking a conservative approach, or saying "everything that's there is good as it is." Rather, it's about dealing with what exists and seeing the creative potential in doing so. And this potential emerges in the quasi partner-like engagement with the existing, with the goal of thereby allowing things to occur that would absolutely not come to be in that way with a new building. The *weiter schreiben* form of continuation yields density and deeper layers, a friction that can enrich the existing.

**ARCH+:** Then the difference to the aforementioned postwar approaches does not lie in the method, but rather in the relation to modernity, because even the As Found principle aims to change the level of perception in order to root out additional layers of meaning behind the seemingly familiar surface. The merit of the Independent Group lay in asserting the positive in the ordinary, in what already exists, and thereby expanding the horizons, because the As Found approach deals with the existing in order to arrive at new insights and forms. While the Independent Group showed interest in social conditions, they did not yet begin to fundamentally question modernism as such and therefore also didn't question the distance between old and new, the break with history, or tabula rasa planning. That's the difference between 1960 and today—a difference we have already touched upon with the example of the concept of tradition. Perhaps we can expand this theme to include the aspect of design, for which the Independent Group also showed great interest. Mr. Grcic, how do you as a designer deal conceptually with this approach? How did you integrate what we have discussed here into your thoughts on the design of the pavilion?

**Konstantin Grcic:** As a designer, I am of course very familiar with the concept of *recycling*. But in contrast to the architects, for us it's usually purely a matter of material recycling. The question of dealing

with a specific, physical existing condition is less common for us. I've actually only become conscious of it through Muck Petzet and his concept for the Biennale. We have discussed it a lot, also in regard to the exhibition concept. Another aspect of recycling has been freshly discussed in recent years using the term "super normal," which was coined by Jasper Morrison. Super normal is a quality of the ordinary things that are part of our everyday life. Morrison says that a range of basic forms already exists for certain objects and he is firmly convinced that design is therefore not about repeatedly reinventing things, but about cultivating the qualities of already existing and functioning things and developing them further.

**ARCH+:** Erica Overmeer, that also pertains to the issue we got into before using the example of historic preservation, namely that monuments were uncovered and then viewed as cultural assets while the surrounding fabric fell under the spell of disregard. Your work currently deals precisely with these dismissed parts of the city, so it's about capturing something that is not at all noticeable at first. How do you deal with this challenge as a photographer?

**Erica Overmeer:** I think that I myself do not capture anything, I formulate images out of existing situations. I spend lots of time in the places where I make photographs, and in so doing I try to develop a feeling for the place or the object. Only then do I seek out a position that, on a visual and above all a visually effective plane, records exactly that which I feel is the essential message of the whole. For me it's fundamentally a matter of allowing oneself to become engaged, of looking at the broader context, of an expanded perception. And I sense that this is exactly Muck Petzet's approach: becoming engaged with the existing.

**KG:** That's exactly why we wanted to work with Erica Overmeer. Her subjective point of view stands in deliberate contrast to conventional architectural photography, which tends to seek a cool, clear, and objective portrayal—although I don't mean at all to be judgmental. However, the photographic view that Erica Overmeer was supposed to contribute to the exhibition was always conceived as larger and more open.

**EO:** My pictures are intended to show more than individual buildings. They should also expose, on an everyday level, the reciprocal effects of intrusions in the existing fabric and its surroundings, and together in the exhibition they should also establish a context for the theme.

**ARCH+:** This feature is published in our current issue where we deal with the latest Japanese architectural trends. One contribution to this issue also relates to the tradition of so-called street observation, which dates back to the 1920s. Back then, architect Wajiro Kon invented "modernology" to record modern everyday life in its absurdity—also in its humorous or foolish aspects—and to collect everyday things such as cigarette butts, which he then categorized by brand, length, etc. Later, in the 1970s and '80s, it was the Architecture Detective League and the Street Observation Society who devoted themselves to the As Found. Since the 1990s, the Atelier Bow-Wow continues this tradition and derives very specific architectural strategies from it. The question now is how to open up the existing as a resource in order to continue working on it productively.

**MP:** The example of Atelier Bow-Wow provides a good means to examine this. They have conducted a number of studies, such as *Made in Tokyo* and *Pet Architecture*, and I think they have learned much from the precise documentation of these equally commonplace and exceptional situations, which is obviously also now reflected in the complexity of their designs. If you develop the ability to give subtle attention to buildings and the city, you can go about doing your own work more freely. You no longer have to tediously derive everything—you find it.

**ARCH+:** Alongside Miroslav Šik and Jasper Morrison, you also make reference in your catalogue to Lacaton & Vassal. In 2011, Anne Lacaton and Philippe Vassal completed the renovation of the Tour Bois-le-Prêtre in Paris. This residential tower was designed in 1961 by Raymond Lopez and Eugène Beaudouin, who, among other buildings, also contributed an identical tower to the 1957 International Bauausstellung in Berlin's Hansaviertel district. With that project, the work of Lacaton & Vassal is representative of a new and exemplary way of dealing

## You no longer have to tediously derive everything—you find it.

with this unloved architecture of the postwar era.

**MP:** These housing complexes have an extremely negative image in France—just think of the images of burning cars that the word *banlieue* immediately triggers. As such, in France there was no question that these housing complexes should best be demolished and replaced by something new—which, regrettably, is usually worse than what was previously there. Lacaton & Vassal have sought to engage themselves—almost politically—in this situation and have compiled the study *Plus* on the basis of specific case studies. With the Tour Bois-le-Prêtre, they have now realized a showcase project that upgrades the existing with simple means, and in so doing, can also completely change its image. And yet their architectural strategies always remain very pragmatic. They start with the qualities of the built substance and only add what's missing: an opening and relationship to the outside via an extra space—a new quality of use that they call *surplus*.

**ARCH+:** The potential of this building lies in the economical but well-considered organization of the apartments. In social housing, the economical implementation of this arrangement is of course contradicted by the spatial constraints, which only permitted the minimum amount of space for each room. Lacaton & Vassal now intervene precisely

## You can change something without necessarily requiring a major intervention.

at this point in the existing spatial disposition and expand the apartments with an additional layer to the outside. On the one hand, that has energy-related benefits. On the other hand, in so doing they break open the spatial limitations of social housing.

The result is that one now has the feeling of living in a spacious, well-organized apartment—one which is barely reminiscent of the restricted spatial conditions of social housing. Through skillful continued building, they use the potential available in the existing spatial disposition. That would be a striking example of your concept.

**MP:** Yes, that is an important example. But the renovation reveals even more. In addition to the functional aspect and issues of spatial organization—if you like, the view from the inside to the outside—there is of course also the view from the outside to the inside. And that has also changed. It is no longer the social housing as we know it, run-down and neglected, but a new architecture. And so the image that the people have of their building and their surroundings—and ultimately also of themselves—changes.

**EO:** In the *banlieues* around Paris and also in the stigmatized *Plattenbau* housing estates in what was East Germany, I have experienced how much the self-esteem of the residents is also determined by the external perception of their housing environment. That is to say, the reversal of the view that you just described is evidence of a deep respect and love for the social fabric, the one that goes beyond architecture and simultaneously embraces it. That makes Lacaton & Vassal's approach so exemplary and interesting.

**ARCH+:** We also see that as being the decisive point. Lacaton & Vassal tried studying the social structure through discussions with the residents at the beginning of the project, in order to keep the construction measures, whatever their form—whether just a matter of repairs or something more—from destroying the tower's social fabric. Of course, the built form also changes, and with that its perception, but the intrinsic resource is the social fabric of the Tour Bois-le-Prêtre.

**EO:** Lacaton & Vassal have addressed this issue on many levels and are always trying to understand what factors play a role in a project, and what social consequences they have. Because even when thinking through the problem, you can change something without necessarily requiring a major intervention. Sometimes a few actions are sufficient, sometimes more extensive changes are needed, but they always remain very close to what is there; what exists is neither ignored nor denied or hidden.

**FH:** It's about making a precise analysis of what's there. Erica has just mentioned the two most important prerequisites for this: love and respect. But it's important to not wind up in a purely conservative corner because of this fundamental stance. From an examination of what exists, there might be a strategy of doing nothing or very little; with architectural strategies, we do not always need to reflexively think of building something—changes can also be achieved with entirely different measures. But one consequence of a precise analysis can also be to stipulate that a great deal needs to be changed. It is in any case certainly not the intention to say that as much as possible must be preserved, but rather that the weaknesses are also clearly identified and remedied. In the exhibition we have a couple of very interesting examples for this, in which the analysis of an everyday situation led to the development of architectural strategies for renovation, reinterpretation, or conversion that were much more complex than what could have been achieved with any new building.

**ARCH+:** In your view, the architect should seek to understand an existing structure and to comprehend and continue the ideas of his predecessor. But doing so means he loses his status as a "creator of worlds" and becomes an interpreter and developer. Mr. Grcic, as a designer what's your position on this?

**KG:** I think that in this context, there are lots of overlaps and similarities between architecture and design, but of course the difference remains that the existing means something different in architecture than in design. When we designers refer to the existing, then it's more in the sense of drawing upon particularly outstanding examples—references from which we learn, which we develop further, or that we at least want to preserve. Naoto Fukasawa, Jasper Morrison's partner for the exhibition *Super Normal*, likes to use a radius of 2 mm in his products, for example. That is exactly the radius, he claims, that results from normal wear and tear on a piece of wood. For him it is not only the perfect radius for wood, but also for a plastic housing. In this case, questions of ordinary usage and the observation of everyday life play an important role. For the English manufacturer of furniture, Established & Sons, Jasper Morrison developed a simple wooden box, *Crate*, which matches, down to the smallest detail,

the appearance of a wine-bottle crate and even has a slight crack in the back panel. Jasper Morrison wanted to accurately reproduce such an ordinary object because in it he saw a special quality that he wanted to apply to a newly manufactured product.

ARCH+: Where in this case is the borderline with nostalgia? Can it be defined? This pertains to architecture to no small degree. In recent years, a tendency toward retro architecture has prevailed that now dominates more than just the reconstruction of entire historic centers. Here we must not at all think solely about Berlin.

KG: That's a difficult question. I find the borderline is very difficult to define.

FH: The question is what is meant by nostalgia. For me, it only becomes nostalgic when an attempt is made to faithfully reconstruct something old and lost, even though there's really no need for

# Questions of ordinary usage and the observation of everyday life play an important role.

it. Reconstruction in the spirit of retro architecture points the way here. When the building is transformed and translated into a different context, however, then I see nothing wrong in the hints of nostalgia. Just think of the east wing of Diener & Diener's Naturkundemuseum [Museum of Natural History] in Berlin. Something is reused, but it is developed further, put into a new context, and refurbished for a new function. I find the notion of complexity and density more suitable in this context.

ARCH+: Let's move on to discussing the exhibition. Mr. Grcic, how do you translate the normal as an idea in this context? What objective does the exhibition have in your view?

KG: The exhibition design and the decision to present the projects only through Erica Overmeer's subjective photography reproduce a dimension of reality that is crucial for our concept. The idea is to develop a strong awareness of what tangibly exists, and to recognize the beauty found in the things that surround us every day. The large photos serve to make the theme immediately tangible. The images are not displayed on panels, but wallpapered directly onto the walls of the pavilion. This way they lose their objecthood. The picture is not an exhibit, it is a view of the exhibit—of the architectural project. The photographer's perspective determines the location from which exhibition visitors perceive the project. The life-size format of the images draws the viewer directly into the pictorial space of the photos.

EO: My pictures are intended to give the visitors the feeling of looking into a real space, and not of standing in front of a picture. The reaction at the press conference was interesting. One journalist asked, obviously horrified, "What is that ugly image of Germany you're depicting with this exhibition?" That effectively illustrates a certain perception of our approach that doesn't concern me at all. Because I don't show how ugly Germany is; I am trying to open up a broad and unbiased view into everyday life. These views are certainly perceived very differently; it can even go so far that someone might not really want to see it at all. But from my side there is no assessment—not even for a second—as to whether something is ugly, strange, weird, or funny. I strive to do my work with documentary commitment, without exaggerating, alienating, or assessing what I see.

MP: With the exhibition and in our treatment of the German pavilion, we are seeking congruence between content and presentation. If we achieve that, the exhibition will also manage without lengthy explanations. We have simply started with what's there: the pavilion in Venice—in the park, its presence, the solid walls, the floors, the light... The papering of the walls represents that. It sets an example: we take the pavilion and its interior space just as they are and don't introduce any exhibition architecture.

KG: We need no additional support; the architecture itself is the carrier. Again, the concept of *reduce* comes to bear. The German pavilion is in this sense its own content carrier. It is intended to call the attention of visitors to the project, to keep them in the pavilion, draw them into the theme, and establish vantage points for the various projects.

ARCH+: In other words you are designing a course with vantage points and vistas?

KG: Each image is in itself a vantage point, although the ordering of the projects is rather intuitive. There are no categories. There is a substantive order for the projects, but this is not reflected in the navigation through the exhibition. The navigation is left entirely to the visitors themselves. Muck Petzet's idea of closing the main entrance to the pavilion and leading the visitors into the exhibition through the side wing made it possible for us to dissolve the hierarchy and also the symmetry of the spatial layout. The large photos papered onto the walls are the dominant feature of the exhibition. An additional text layer is limited to a general introduction that is also papered to the wall, as well as individual image captions that consist of a purely technical label with the most important information about the respective project and a short descriptive text. There will be an important element in the exhibition that is actually reused in the sense of the *reuse* in the exhibition's title. I am referring to the so-called *passarelle*, the wooden gangways that are set up during the *acqua alta*—the flooding in the streets and narrow alleyways of Venice. With just the pictures, the pavilion would be a pure *white cube*,

which would falsely overemphasize the photos. I had the clear idea that a form of furniture would be needed in the pavilion in order to counteract the tendency toward artificiality of the exhibition concept. The gangways were the perfect find for this purpose—not only due to their size, which is commensurate with the museum-like proportions of the space. They also fit into our concept because we can borrow them from the city and return them after the exhibition. In other words, they will be merely be temporarily removed from their everyday existence and then returned afterwards.

MP: The pavilion, with all of its Nazi connotations, is consequently not the only existing element. The gangways bring yet another, local narrative into the exhibition. And I hope that as a result, the pavilion is also seen differently.

KG: That's only one detail, but it demonstrates very well how we have translated the concept of thinking further [*weiterdenken*] into the design, in order to receive a *surplus*. Apart from the fact that we use the gangways as furniture for the pavilion, they also serve as carriers for the individual captions. The project labels are sprayed directly on them; in this form they are in turn the carrier of new messages.

ARCH+: It is to a certain extent a "heuristic," situational use; a concept that is evoked time and again in this issue by the Japanese architects.

KG: Exactly. You can walk on it or use it as a bench. Their varying materiality and signs of wear also play an important role. The metal frames of some gangways are completely rusted, although some are newly galvanized and others are painted orange. The 4 x 1 meter planks are worn to different degrees, but the rough and very physical appearance of the gangways serves the important role of counteracting the rigorous perfection of the pavilion.

MP: We deal with the pavilion as *found*. What's special about it is that it has no infrastructure whatsoever. It's a noble temple to art, where profane things have no place. With this type of furnishing and through this kind of temporary use, it will also be profaned in a sense. What's even more interesting, and what is also triggered by the gangways, is a subliminal local reference, which is also continued in the graphic design by Thomas Mayfried and Swantje Grundler. It's consciously inspired by the

# To engage completely with the existing repeatedly demands new, individualized solutions, materials, and specific strategies.

corporate design of the *vaporetto* (waterbus) lines from the 1970s.

ARCH+: Apropos local reference. Miroslav Šik is simultaneously presenting his work and that of his surroundings in the Swiss pavilion, which is a wonderful combination. But it's a bit puzzling that the concept of analogy, of analog design or analog architecture, is not mentioned at all, even though this approach certainly contributed beneath the surface to your thoughts. Two former students of Miroslav Šik are represented with projects in your exhibition: Andreas Hild and Urs Füssler. Both studied with Šik.

MP: With his ideas of analogy and "old-new," Šik plays a fundamentally important role for our concept. The analogy is about the strong relationship to what exists—even for new buildings—and with "old-new" it's also about the indistinguishability of old and new. Our exhibition is also about fitting-in and taking the strengthening of the whole being more important than the individual object. This fundamental stance is also the one that interests us here. On this point we're in agreement.

ARCH+: Šik's title for his exhibition even includes a reference to what you call fitting-in or the whole, namely the "ensemble." Another aspect where we discern a strong congruence to Šik is that he has established a school for visual training that seeks to reverse that which was perceived as ugly on the periphery. It's an affirmative fundamental stance that says, "That's our home."

MP: ...which however must be transformed. Šik speaks in this regard of poetic alienation. The interesting thing about him is his attitude, which also allowed him to become so influential. The result of this attitude, however, can be completely open. ARCH+: Are you using the exhibition to establish opposition—comparable to Šik's—to iconic star architecture, labels, and recognizability, as we know it from the 1990s and later? And are you thereby trying to focus attention on things that are not very conspicuous and are not likely to be noticed until the second glance? Doesn't this change the role of the architect?

MP: I presume so. Andreas Hild speaks of "narratives" that play an important role in the background of architectural activity, such as the narrative of the *tabula rasa*, or the gap between old and new. He believes these narratives are super-

imposed by new ones that can ultimately replace them—such a future narrative is *weilerschreiben*. I, too, feel such traditional roles within me—even the tradition of the architect as an autonomous creator of new worlds is still deep-seated in me. When you realize that the largest portion of the contract volume of architect's commissions lies in renovation work—with a strong upward trend—then this slaving away and thinking about the existing and developing it further must in fact gradually cause the idea of the creator god and inventor of worlds to slowly fade from being the predominant ideal. The point is not to believe precisely one of these narratives, but to select the one that is relevant and appropriate for the respective task from a broader range of options. A new generation seems to deal with that much more freely now. Alterations represent a very challenging, very exciting, and very rewarding task, from which a new understanding of the role of the architect almost inevitably emerges. You can then no longer only be reflected in that which you yourself have created. Instead, you must also recognize the value in what was already there, in what you have consciously preserved or even enhanced.

ARCH+: Nevertheless, the architect will remain under the pressure of having to create something new, as you yourself expect: develop further, continue building...

KG: Even as designers we are seldom the inventors of anything new. It is an evolutionary process. We are still designing chairs like the ancient Egyptians once did, only we design them to be appropriate in today's world. To wit, there are technologies that have changed, but also the culture of sitting has changed: how we are sitting on a chair, why we use it, etc. All of that alters the demands placed on the things and hence they must be repeatedly revised and reconsidered. But the model remains important.

MP: By no means did I want to say that there should no longer be anything new. It's wonderful to experience a successful new building. Architecture will and should continue to develop. Even in every new building, incidentally, there are factors of the "existing" that can be negated or meaningfully developed further—with alterations these factors are simply much stronger. For me it's about the insight that the new can also be created very well together with the existing—and that the potential lies precisely in the simultaneity of old and new, in the friction and densification of the process of alteration and reconstruction.

FH: The architects with whom we have spoken in preparing for the exhibition have a commitment and a strong interest in the existing fabric. They take the time to study it, to explore it, and to develop a relationship with it that naturally has substantially different manifestations. For example, Arno Brandhuber is concerned with the fundamentals of building law and what advantages can emerge from its exploitation. Robertneun Architects are concerned with preserving the complex diversity of the existing urban landscape and, at the same time, with developing it further. Amunt Architects seek, above all, to create ambiguous, robust, and especially well-suited multipurpose rooms. And still others are primarily interested in energy-related issues. As a basic principle, however, all the projects break with the dogma of the 2000s, which was expressed by a general disgust along the lines of the motto, "If it's ugly, we'll remove it." Often without taking a closer look at which energetic, cultural, social, or emotional value the existing possessed. We were fortunate that for the exhibition we were able to speak with many architects who look more closely and who use imagination and pleasure in dealing with existing situations. Because, to me, that's still one of the most important points—to engage completely with the existing repeatedly demands new, individualized solutions, materials, and specific strategies. It's super-easy to design a new building with standard industrial solutions, but they're only of limited use for altering something that already exists. Thus, what emerges from the combination of old and new is something highly complex that's fun to explore. By contrast, much of what arises from the strategy of complete demolition and subsequent new construction seems altogether too simple.

## Projects

The Flower Shop in Oberbarmen:  
The Wuppertal Studio and Seminar  
Urs Füssler, Berlin  
www.fuessler.net  
Jörg Leeser, BeL Associates, Cologne  
www.bel.cx

College Buildings I and II, Universität Stuttgart  
Heinle, Wischer und Partner,  
Stuttgart, Berlin, Cologne, Dresden, Wrocław  
www.heinlewischerpartner.de

Antivilla, Krampnitz  
Brandhuber+ Emde, Schneider, Berlin  
www.brandhuber.com

Urban Renewal Europarei, Uithoorn, NL  
Atelier Kempe Thill Architects and Planners,  
Rotterdam  
www.atelierkempethill.com

Gallery Giti Nourbakhsh, Berlin  
Robertneun™, Berlin  
www.robertneun.de

Cultural Center Alvéole 14, Saint-Nazaire, FR  
LIN Architects Urbanists, Berlin  
www.lin-a.com

Lecture Hall, Universität Erlangen-Nürnberg  
Schulz & Schulz, Leipzig  
www.schulz-und-schulz.com

Brunnenstrasse, Berlin  
Brandhuber+ ERA, Emde, Schneider, Berlin  
www.brandhuber.com

High-Rise Student Housing, Munich  
knerer und lang Architekten GmbH, Dresden  
www.knererlang.de

Tower Building C10, Hochschule Darmstadt  
Staab Architekten, Berlin  
www.staab-architekten.com

Dornbusch Church, Frankfurt am Main  
Meixner Schlüter Wendt Architekten,  
Frankfurt am Main  
www.meixner-schlueter-wendt.de

Schreber Residence, Aachen  
AMUNT Architekten Martenson und  
Nagel Theissen, Aachen / Stuttgart  
www.amunt.info

Building Recycling Status Quo, Germany  
Johann Ettengruber GmbH,  
Kirchheim bei München

Residential Complex Kloostergarten Lehel,  
Munich  
Hild und K Architekten, Munich  
www.hildundk.de

Fichtelberg Mountain Hut, Tellerhäuser /  
Erzgebirge  
AFF Architekten, Berlin  
www.aff-architekten.com

East Wing of the Museum of Natural History,  
Berlin  
Diener & Diener Architekten, Basel / Berlin  
www.dienerdiener.ch

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Ishbel Flett, Catherine Shelbert

Commissioned by  
Bundesinstitut für Bau-, Stadt- und Raumforschung  
(BBSR)  
im Bundesamt für Bauwesen und Raumordnung  
(BBR)

The German contribution to the  
13th International Architecture Exhibition  
is supported by



and sponsored by



Media partner



## Catalogue

*Reduce / Reuse / Recycle.*  
*Architecture as Resource*  
Edited by Muck Petzet, Florian Heilmeyer

Published by  
Hatje Cantz Verlag, Ostfildern / Germany

ISBN 978-3-7757-3424-0  
(German edition)  
ISBN 978-3-7757-3425-7  
(English edition)

## Colophon

This paper is published in conjunction  
with the German contribution  
*Reduce / Reuse / Recycle.*  
*Architecture as Resource*  
to the  
13th International Architecture Exhibition,  
*Common Ground*,  
that will run from August 29 to November 25, 2012,  
in Venice, Italy.



Edited by  
Muck Petzet, Florian Heilmeyer

Editorial board:  
Sally Below, Simone Bogner,  
sally below cultural affairs

Texts and Interviews:  
Muck Petzet and Florian Heilmeyer

Translations:  
Ishbel Flett, David Koralek

Candide Interview:  
Axel Sowa and Susanne Schindler  
Translation: Luise Mahler, David Hecht and  
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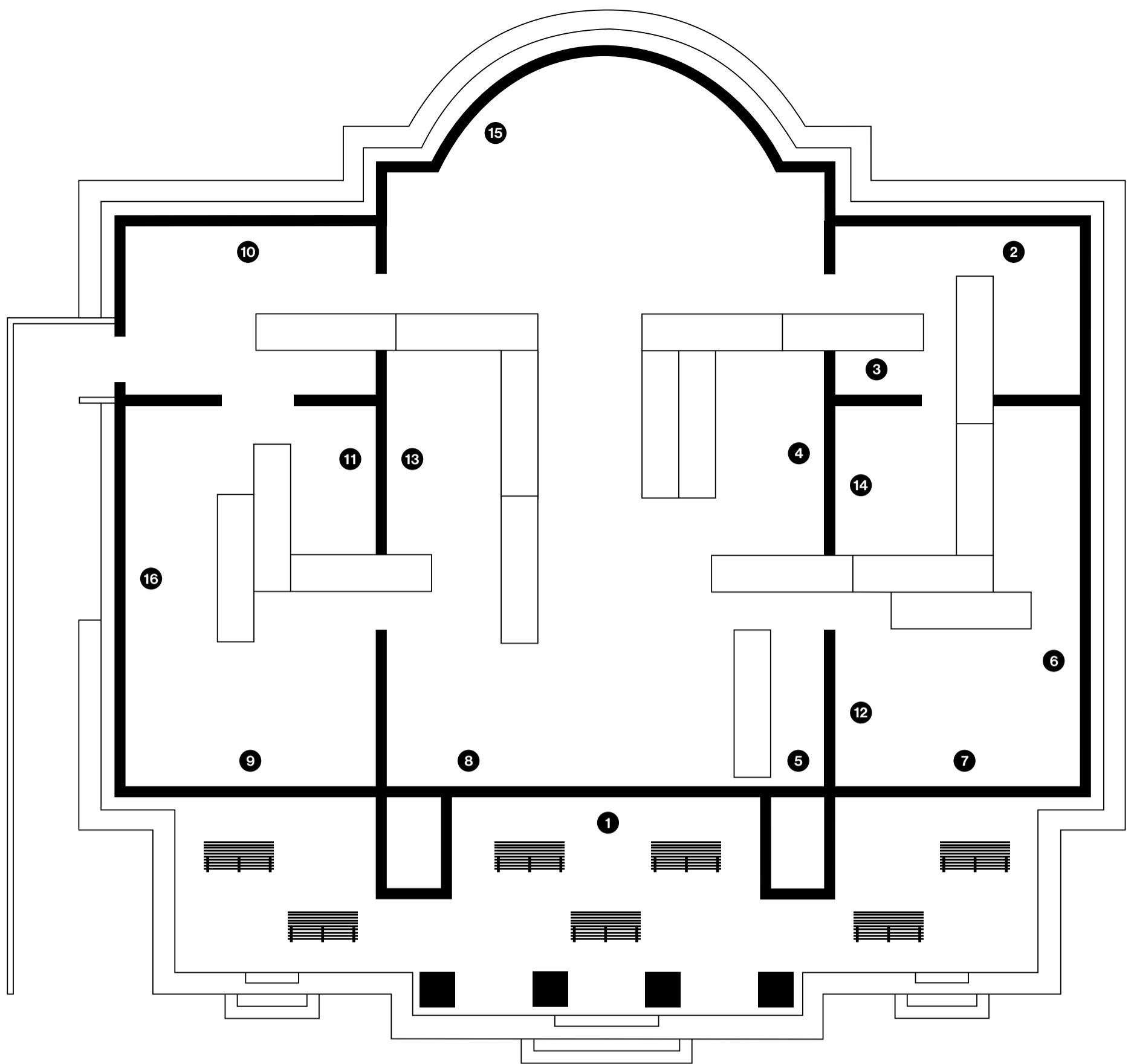
ARCH+ Interview:  
Anh-Linh Ngo and Nikolaus Kuhnert  
Translation: David Koralek

Copyediting:  
Sandra-Jo Huber, Hatje Cantz  
David Rimmer

Graphic design:  
Thomas Mayfried, Swantje Grundler,  
with Matthias Friederich

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the authors, ARCH+, Candide

Printed in Germany



1

The Flower Shop in Oberbarmen:  
The Wuppertal Studio and Seminar  
Urs Füssler, Berlin / Jörg Leeser, Cologne  
2008–2009

2

College Buildings I and II, Universität Stuttgart  
Heinle, Wischer und Partner, Stuttgart  
2000–2009

3

Antivilla, Krampnitz  
Brandlhuber+ Emde, Schneider, Berlin  
2012

4

Urban Renewal Europarei, Uithoorn  
Atelier Kempe Thill Architects and Planners,  
Rotterdam  
2004–2010

5

Gallery Giti Nourbakhsh, Berlin  
Robertneun™, Berlin  
2006

6

Cultural Center Alvéole 14, Saint Nazaire  
LIN Architects Urbanists, Berlin  
2005–2007

7

Lecture Hall, Universität Erlangen-Nürnberg  
Schulz & Schulz, Leipzig  
2010–2011

8

Brunnenstrasse, Berlin  
Brandlhuber+ ERA, Emde, Schneider, Berlin  
2007–2010

9

High-Rise Student Housing, Munich  
Knerer und Lang Architekten, Dresden  
2010–2012

10

Tower Building C10, Hochschule Darmstadt  
Staab Architekten, Berlin  
2009–2011

11

Dornbusch Church, Frankfurt am Main  
Meixner Schlüter Wendt Architekten,  
Frankfurt am Main  
2003–2005

12

Schreber Residence, Aachen  
AMUNT Architekten Martenson und Nagel Theissen,  
Aachen / Stuttgart  
2010–2011

13

Building Recycling  
Status Quo, Germany  
2012

14

Residential Complex Kloostergarten Lehel, Munich  
Hild und K Architekten, Munich  
2007–2009

15

Fichtelberg Mountain Hut, Tellerhäuser / Erzgebirge  
AFF Architekten, Berlin  
2009–2010

16

East Wing of the Museum of Natural History, Berlin  
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