Building by Baumschlager & Eberle

Dietmar EBERLE
Department of Architecture,
Swiss Federal Institute of Technology, Zurich

1. ACHSLENGUT

Achslengut Residential Project, Second Segment in St.Gallen, Switzerland
(Figure 1-6)

This project is characterised by a very specific history: B&E were asked to participate in the planning after the project had already been awarded to a Swiss architecture office. However, the construction plan for the entire project had been defined by this time. Therefore, the first construction segment was completed according to previously established wing depth and length parameters. Finally, a change in the construction plans was agreed on after all. Hence the second segment is a radically different, much more useful urban structure. They are housing “dots”, compact structures with interior access and projecting balcony zones. The placement of the buildings is important: it is a composition based on the view of Lake Constance.

Glass sliding elements are located in front of the apartments, some are transparent, some aren’t. This allows for ideal regulation of two things: spacing and interior view problems between the residential buildings. If, for example, someone slides two such panels in front of the bedroom, nobody can look inside, the tenant’s privacy is protected. On the other hand, the individual turbulences of use on the balconies that often disturb public spaces are concealed this way. Thus a clear separation between public and private interests was achieved with these simple means.

The residents make use of the possibilities this façade solution offers in a very matter-of-fact fashion. It should be noted that the specific geometric appearance of these residential buildings is not affected by the individual behavioural patterns of the tenants. They are never really closed nor ever really open. This was intended from the beginning and it is what makes this project's architectural design so special. Somehow, it stands up to everyday use with complete ease.

Figure 1

Figure 2
2. **MEGA HALL**

**Mega Hall for Beijing, China**
(Figure 7-10)

Bauherr | client Beijing Modern Hong Yun Real Estate Dev. Co, Ltd
Planung | planning Baumschlager Eberle Anstalt
Projektleitung | project architect Christian Tabernigg
Mitarbeiter | assistance Stefan Beck, Sabrina Contratto, Marc Fisler, Alexia Monauni, Marlies Sofia
Haustechnik Konzept | mechanical engineer KellerTechnologies
Grundstücksfläche | site area 10.240 m²
Bebaute Fläche | built up area 4.430 m²
Nutzfläche | floor area 100.000 m²
Umbauter Raum | building volume 260.000 m³
Planungsbeginn | commencement of planning Juli | July 2002
Baubeginn | commencement of work Juni | June 2003
Fertigstellung | completion Juni | June 2005

Program: three high-rise buildings providing great urban density are to be built for a new traffic hub at the edge of Beijing’s inner city. The space comprises a number of new buildings. The three B&E towers, of differing heights (approx 100 to 80 metres tall) offer horizontally layered shopping zones and service areas with apartments above these sections. Special attention was given to the building equipment and technology. Beijing is under a much greater environmental strain than any European city. This aspect was given particular importance during planning – this specific qualification was also presumably the reason for which B&E was hired.
3. MUNICH RE

Münchener Rück
(Figure 11-22)

"Building in the fabric" or "reconstruction" are inadequate to describe the complexity of the challenge faced here. After all, Süd 1 is likely to set a precedent in environmental and aesthetic terms as well logistically and conceptually. Baumschlager and Eberle have transformed fortress-like facades and a veritable fox’s den in the heart of Munich into a modern office building that blends in self-confident manner into the old neighbourhood that surrounds it. They have turned a monolithic late 1960s block that stood right next to Münchener Rück’s headquarters in Schwabing just a stone’s throw away from the English Garden into a finely structured ensemble. Hidden away behind the ingenious double façade are modern offices and a new space continuum, light and generous, which incites views and establishes a relationship with the environment.

The architects were obliged to meet a large number of specifications. Apart from the load-bearing structure they had to re-use 50% of the building mass and considerably reduce emissions in what is a residential neighbourhood. In the period from October 1999 to January 2001, when the new façade became visible, Baumschlager and Eberle reformulated the area as a sequence of staggered structures that pick up and re-conceptualise the street space. On the inside, Süd 1 opens up onto a courtyard with a shielded park, water and gravel paths beneath maple trees. Visitors enter the building through a spacious lobby that is 55 metres long, seven metres wide and six metres tall. It is fitted with Canadian maple like a precious intarsia, yet it is light and airy – a prelude that is followed by spacious corridors, light wells and long visual axes. In order to fit the cell offices into the rigid support grid pattern of the previous building Baumschlager and Eberle devised a flexible system of partition walls that can be adapted to cater for various specifications. Translucent when facing the corridor and in the form of integrated shear walls between the offices, they are characteristic of the open structures needed for modern office operations. Forming a counterpoint to them is the attic floor with its free geometry. The conference and meeting rooms here are largely invisible from the street and they afford views over Munich across to the headquarters of Münchener Rück and the English Garden, where the shimmering green façade finds its real counterpart.
4. SCHOOL MAEDER

ECOLOGICAL MIDDLE SCHOOL MÄDER, 1998
(Figure 23-30)

Since a couple of years Mäder, originally a poor village close to the border to Switzerland, is longing to achieve the status of an „ecological Community“. The urban planning concept comprises a sequence of public squares and connecting paths. This net, in favour of pedestrian traffic, becomes more dense around the new center, where one finds all scholastic and cultural amenities, among them, the community center designed by Baumschlager and Eberle in 1995. The new building of the „Eco-Middle-School“ upgraded the center of town tremendously. The
positioning of the two volumes, which are separated above ground, generated not only two new exterior spaces (public plaza and the school’s courtyard) but also defined clear edges.

Both volumes, the above ground four story school building and the flat double-gymnasium (lowered by one third into the ground), are compact and thus minimize the use of surfaces and energy. The design orients itself to the close relationships between form, function, economy and ecology. The on all sides double layer of the facade of the school building consists of a wood and glass construction, which is wrapped by ventilated, scaled glass panels. Depending upon the position of the sun, the various conditions of transparency change the appearance of the building: From dematerialization caused by raking light to becoming a mirror of the surroundings. Extensive glazing of the facades, in conjunction with a central light well and clerestory windows in the interior walls made of wood; enable natural lighting of the floors, despite the ground floor area of approximately 80 by 80 feet. On each regular floor, seven peripheral classrooms group around a generous, central recess space. Ecological approach, economy and quality of space formed a synthesis in this building.
5. WOHNEN AM LOHBACH

Lohbach Residential Project in Innsbruck, Austria
(Figure 31-35)

The first construction phase of a relatively densely set residential project disposed of a large green area. Next to it lie residential buildings that are heterogeneous in urban and formal terms and a university area dating back to the sixties.

Economically and ecologically optimised residential construction was required here. Thus the decision to build cube-like structures with interior access and a projecting balcony zone that can be closed off from the outside with copper sun protecting elements. The urban project that results from this concept and its cube-like shape looks similar to a random chess board pattern, seemingly. In reality the alignment of the individual structures, the views around and through the project were carefully composed. This was also the case with the spaces between the buildings: the open spaces – including small gardens in front of the ground level apartments – make it easy to forget the density of construction.

Figure 31

Figure 32

Figure 33

Figure 34

Figure 35
The apartments vary greatly. What is important is: the sun protection elements offered are used continuously by the residents. Hence the copper cubes envisioned by the architects are really there and the only openings are those created by residents who have their shutters open. This interplay between (primarily) closed and (partly) open surfaces is extremely appealing.

There is a second important element: the houses may have been optimised as much as possible on the outside, but the basic principles of residential construction were adhered to completely. This is especially the case in terms of access, which was made possible by a truly attractive hall featuring natural light and glass floor paneling that allows light to reach the lower level and the subterreanean garage.

Finally, there is a third element: all the ecological possibilities allowed by today’s technology were applied to these houses. These include solar energy panels, heat recovery plants and rain water use. Thus practically everything that can be achieved – without high tech – was achieved.

This solution won international awards. The price per square meter ratio is unique. The residents appreciate this fact.