

STUDY TOUR SCHWEIZ + FR, D & AT 2011

P R O G R A M

SUNDAY MARCH 27:

16:00: CHECK-IN: LAUSANNE-JEUNOTEL, YOUTH HOSTEL *chemin du Bois-de-Vaux 36, CH-1007 Lausanne*
 24:00: www.youthhostel.ch/lausanne (+41 21 - 626 02 22)

MONDAY MARCH 28:

06:30: BREAKFAST START: LAUSANNE-JEUNOTEL, YOUTH HOSTEL
 07:00: BUSPACKING: LAUSANNE-JEUNOTEL, YOUTH HOSTEL
 07:30: BUS PICK UP: LAUSANNE-JEUNOTEL, YOUTH HOSTEL
 11:20: LUNCH: CAFETERIA CASINO *Saint-Etienne* (not included)
 12:00: BUS DROP OFF: MAISON DES JEUNES ET DE LA CULTURE *Route de Saint-Just Malmont, FR-42700 Firminy*
 13:30: GUIDED TOUR: EGLISE SAINT PIERRE *Place de Mail, FR-42700 Firminy* www.sitelecorbusier.com (+33 4 77 61 08 72)
 14:30: BUS PICK UP: EGLISE SAINT PIERRE
 16:00: BUS DROP OFF: LA TOURETTE *Route de la Tourette, FR-69210 Éveux* <http://www.dominicains.fr/fre/content/view/infocouvent/414> (+33 4 72 19 10 90)
 GUIDED TOUR: LA TOURETTE (2,5 hours, 2 groups)
 DINNER & ACCOMODATION: LA TOURETTE

TUESDAY MARCH 29:

BREAKFAST: LA TOURETTE
 08:30: BUSPACKING: LA TOURETTE
 09:00: BUS PICK UP: LA TOURETTE
 12:00: BUS DROP OFF: ROLEX LEARNING CENTER *CH-1015 Lausanne* www.rolexlearningcenter.ch (+41 (0)21 - 693 42 37)
 LUNCH: ROLEX LEARNING CENTER (not included)
 14:00: BUS PICK UP: ROLEX LEARNING CENTER
 15:00: BUS DROP OFF: VILLA LE LAC (LE PETIT MAISON) *ROUTE DE LAVAUX 21, CH-1802 CORSEAUX* www.villalelac.ch (+41 (0)79 - 829 63 08)
 GUIDED TOUR: VILLA LE LAC (1 hour, 3 groups)
 16:00: BUS PICK UP: VILLA LE LAC
 18:00: BUS DROP OFF: BASEL ST. ALBAN YOUTH HOSTEL *Sankt Alban-Kirchrain 10, CH-4052 Basel* www.youthhostel.ch/basel (+41 (0)61 - 272 08 33)
 ACCOMODATION: BASEL ST. ALBAN YOUTH HOSTEL

WEDNESDAY MARCH 30:

06:00: BREAKFAST START: BASEL ST. ALBAN YOUTH HOSTEL
 09:45: TAKE BUS 55 FROM: CLARAPLATZ
 10:05: BUS 55 ARRIVE AT: VITRA CAMPUS *Charles-Eames-Strasse 2, D-79576 Weil am Rhein* www.vitra.com/en-un/campus (+49 (0)7621 702 3500)
 10:30: GUIDED TOUR: VITRA CAMPUS (2 hours, 2 groups)
 LUNCH: VITRA CAMPUS (not included)
 FONDATION BEYELER *Baselstrasse 101, CH-4125 Riehen/Basel* www.fondationbeyeler.ch (+41 (0)61 - 645 97 00)
 SCHAULAGER *Ruchfeldstrasse 19, CH-4142 Münchenstein/Basel* not open!
 ACCOMODATION: BASEL ST. ALBAN YOUTH HOSTEL

THURSDAY MARCH 31:

06:00: BREAKFAST START: BASEL ST. ALBAN YOUTH HOSTEL *Sankt Alban-Kirchrain 10, CH-4052 Basel* www.youthhostel.ch/basel (+41 (0)61 - 272 08 33)
 09:00: BUS PICK UP: BASEL ST. ALBAN YOUTH HOSTEL

10:30: BUS DROP OFF: CHAPELLE NOTRE-DAME DU HAUT *F-70250 Ronchamp* http://s343802320.onlinehome.fr/_valide/chapelle (33 (0)3 84 20 65 13)
 12:30: BUS PICK UP: CHAPELLE NOTRE-DAME DU HAUT THEATRE GRANIT *1 faubourg de Montbéliard BP117, FR-90002 Belfort cedex.*
 THE LIGHTHOUSE SPORTS & EVENTS CENTRE *Fort Hatry, FR-90000 Belfort*
 RICOLA EUROPE MULHOUSE *Rue de L'ill, FR-68100 Mulhouse*
 ÉCLUSE DE KEMBS NIFFER *Rue des Romains (Canal de Neuf-Brisach, Embranchement de Huningue-Rhin, Haut Rhin), FR-68680 Kembs*
 BUS DROP OFF: BASEL ST. ALBAN YOUTH HOSTEL
 ACCOMODATION: BASEL ST. ALBAN YOUTH HOSTEL

FRIDAY APRIL 1:

06:00: BREAKFAST START: BASEL ST. ALBAN YOUTH HOSTEL
 08:00: BUSPACKING: BASEL ST. ALBAN YOUTH HOSTEL
 08:30: BUS PICK UP: BASEL ST. ALBAN YOUTH HOSTEL
 10:00: BUS DROP UP: MÜLLER SIGRIST ARCHITEKTEN AG *Hildastrasse 14a, CH8004 Z rich* www.muellersigrist.ch (+41 (0)44 - 201 91 09)
 15:00: BUS PICK UP: ZURICH
 18:00: BUS DROP UP: HOTEL THERME *CH-7132 Vals* www.therme-vals.ch/en/hotel (+41 (0)81 - 926 80 80) GASTHAUS EDELWEISS *CH-7132 Vals* www.edelweiss-vals.ch +41 (0)81 - 935 11 33 HOTEL GLENNER *CH-7132 Vals* www.glenner.ch (+41 (0)81 - 935 16 68)
 DINNER: RESTAURANT CHESSI HOTEL THERME (from 18:00 - 21:00. Bath until 20:00), HOTEL GLENNER & GASTHAUS EDELWEISS
 ACCOMODATION: HOTEL THERME, HOTEL GLENNER & GASTHAUS EDELWEISS

SATURDAY APRIL 2:

07:00: BATH OPENS FOR GUESTS FROM: HOTEL THERME
 BREAKFAST: HOTEL THERME, GASTHAUS EDELWEISS & HOTEL GLENNER
 11:00: BATH RESERVATION: GASTHAUS EDELWEISS & HOTEL GLENNER
 12:30: BUSPACKING: HOTEL THERME
 13:00: BUS PICK UP: HOTEL THERME
 16:00: BUS DROP OFF: KUNSTHAUS BREGENZ *Karl-Tizian-Platz, AT-6900 Bregenz* www.kunsthhaus-bregenz.at (+41 5574 48594-0)
 GUIDED TOUR: KUNSTHAUS BREGENZ
 18:00: BUS PICK UP: KUNSTHAUS BREGENZ
 20.30: BUS DROP OFF: LUZERN YOUTH HOSTEL *Sedelstrasse 12, CH-6004 Luzern* www.youthhostel.ch/luzern (+41 (0)41 - 420 88 00)
 EVENING TOUR: KKL LUZERN
 ACCOMODATION: LUZERN YOUTH HOSTEL

SUNDAY APRIL 3:

07:00: BREAKFAST START: LUZERN YOUTH HOSTEL
 10:00: BUS PICK UP: LUZERN YOUTH HOSTEL
 11:30: BUS DROP OFF: BSL *Aéroport de Bâle-Mulhouse, BP 60120, F-68304 Saint-Louis Cedex* www.euroairport.com

P A R T I C I P A N T S

FIRST YEAR:

01: ALEXANDER
 02: ANDERS
 03: ANNA
 04: CLARA
 05: DAVID
 06: EMIL
 07: IDA
 08: JAKOB
 09: JOAKIM
 10: JOHN
 11: LOU
 12: MICHALA D.
 13: NANNA
 14: NYNNE
 15: PETER
 16: PHILIP
 17: RASMUS
 18: SIMON
 19: SOPHIE
 20: THORBJØRN
 21: VICTOR
 22: ØYVIND

SECOND YEAR:

23: CAMILLA
 24: JEPPE
 25: LOUISE
 26: MARIUS
 27: MARTE
 28: MICHALA C.
 29: NIS
 30: PERNILLE
 31: TIM
 32: TORBEN

CANDIDATE PROGRAM:

33: ANDREA
 34: FELICIEN
 35: JÉROME
 36: REENA
 37: SHYEN

GUESTS:

38: GRACE
 39: MARK
 40: GUSTAVO
 31: GIUSEPPE
 42: SEBASTIAN

TEACHERS:

43: MICHAEL CEDERFELD DE SIMONSEN
 44: ARNE CERMAK NIELSEN
 45: MIKE W. MARTIN
 46: FINN SELMER
 47: TROELS RUGBJERG (+45 2279 0283)

INTERPRETERS:

48: ALESANDAR
 49: KRISIAN

LAUSANNE ACCOMODATION:

LA-01: TORBEN, JEPPE, NIS & TIM
 LA-02: JAKOB, PETER, PHILIP & EMIL
 LA-03: ALEXANDER, SEBASTIAN, SIMON & RASMUS
 LA-04: FELICIEN, MARK, GUSTAVO & GIUSEPPE
 LA-05: THORBJØRN, ANDERS, DAVID & JOAKIM
 LA-06: JOHN PHILIP, VICTOR, ØYVIND & MARIUS
 LA-07: IDA, SOPHIE, MICHALA D. & NYNNE
 LA-08: ANNA, NANNA, LOU & CLARA
 LA-09: CAMILLA, MICHALA C., LOUISE & MARTE
 LA-10: SHYEN, REENA, GRACE & PERNILLE
 LA-11: JÉROME & ANDREA

BASEL ACCOMODATION:

B-01: TORBEN, JEPPE, NIS & TIM
 B-02: JAKOB, PETER, PHILIP & EMIL
 B-03: FELICIEN, MARK, GUSTAVO & GIUSEPPE
 B-04: THORBJØRN, ANDERS, DAVID & JOAKIM
 B-05: ALEXANDER, SEBASTIAN, SIMON & RASMUS
 B-06: JOHN PHILIP, VICTOR, ØYVIND & MARIUS
 B-07: IDA, SOPHIE, MICHALA D. & NYNNE
 B-08: ANNA, NANNA, LOU & CLARA
 B-09: CAMILLA, MICHALA C., LOUISE & MARTE
 B-10: SHYEN, REENA, GRACE, PERNILLE, JÉROME & ANDREA

VALS ACCOMODATION (HOTEL THERME):

VT-01: MARTE & CAMILLA
 VT-02: MICHALA C. & LOUISE
 VT-03: TORBEN & JEPPE
 VT-04: IDA & NYNNE
 VT-05: SOPHIE & MICHALA D.
 VT-06: JÉROME & ANDREA
 VT-07: JAKOB & PETER
 VT-08: PHILIP & EMIL
 VT-09: FELICIEN & GRACE
 VT-10: ANNA & LOU
 VT-11: CLARA & NYNNE
 VT-12: ALEXANDER & MARIUS
 VT-13: SEBASTIAN & NIS
 VT-14: SIMON & RASMUS
 VT-15: THORBJØRN & ANDERS
 VT-16: GUSTAVO & GIUSEPPE
 VT-17: TIM & PERNILLE
 VT-18: MARK & ØYVIND
 VT-19: DAVID & JOAKIM
 VT-20: JOHN PHILIP & VICTOR
 (GASTHAUS EDELWEISS):
 VE-01: SHYEN & REENA

LUZERN ACCOMODATION:

LU-01: TORBEN, JEPPE, NIS & TIM
 LU-02: JAKOB, PETER, PHILIP & EMIL
 LU-03: FELICIEN, MARK, GUSTAVO & GIUSEPPE
 LU-04: ALEXANDER, SEBASTIAN, SIMON & RASMUS
 LU-05: THORBJØRN, ANDERS, DAVID & JOAKIM
 LU-06: JOHN PHILIP, VICTOR, ØYVIND & MARIUS
 LU-07: CAMILLA, MICHALA C., LOUISE, MARTE, CLARA & NANNA
 LU-08: IDA, SOPHIE, MICHALA D., NYNNE, LOU & ANNA
 LU-09: SHYEN, REENA, GRACE, PERNILLE, JÉROME & ANDREA

R O U T E

COPENHAGEN

Ronchamp by Le Corbusier

BASEL: Vitra by H & dM

BREGENZ: Kunsthaus by Zumthor

ZÜRICH: Heidi Weber by Le Corbusier

LUZERN

LAUSANNE: Rolex Learning Center by Sanaa

SCHWEIZ

Therme Valz by Zumthor

Villa le Lac by Le Corbusier

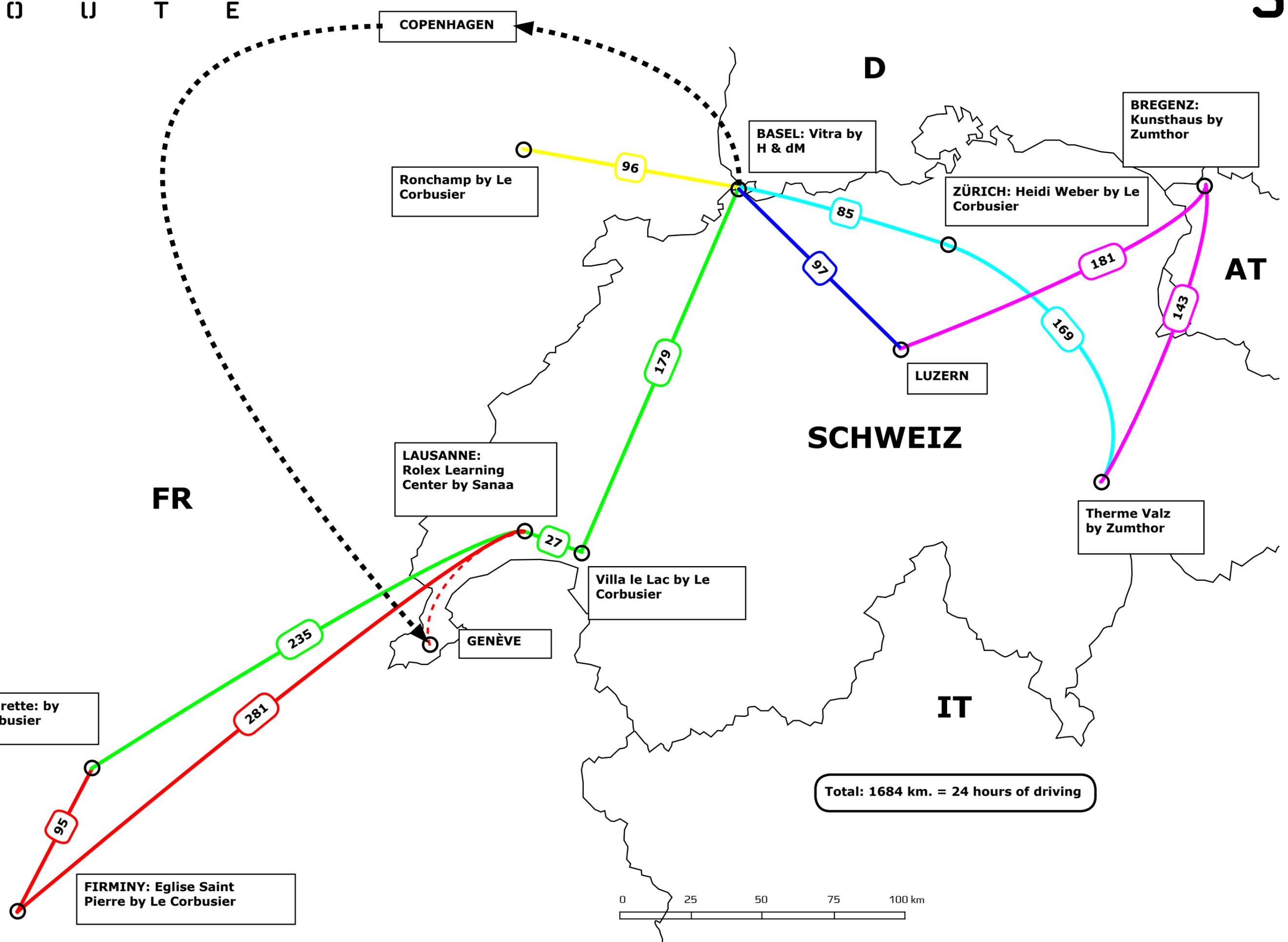
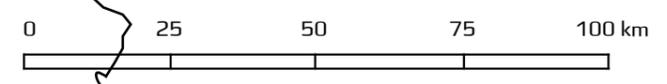
GENÈVE

La Tourette: by Le Corbusier

IT

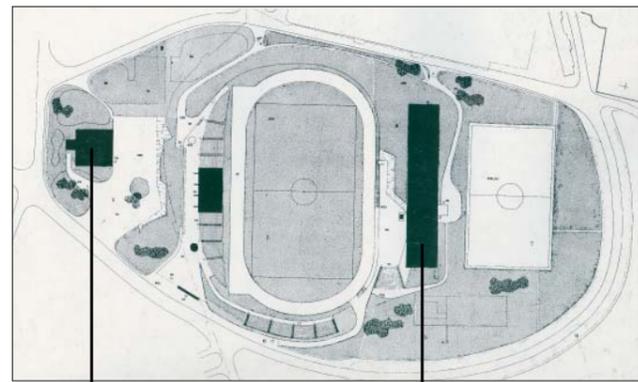
FIRMINY: Eglise Saint Pierre by Le Corbusier

Total: 1684 km. = 24 hours of driving



STUDY TOUR SCHWEIZ + FR, ID & AT 2011 MONDAY MARCH 28 (1)

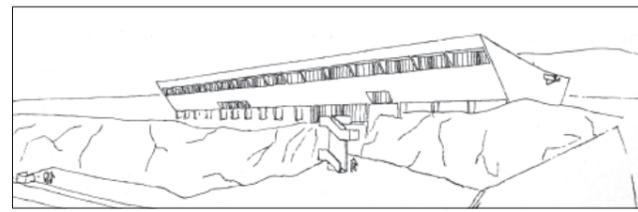
- 06:30: BREAKFAST START: LAUSANNE-JEUNOTEL, YOUTH HOSTEL
chemin du Bois-de-Vaux 36, CH-1007 Lausanne
www.youthhostel.ch/lausanne (+41 21 - 626 02 22)
- 07:00: BUSPACKING: LAUSANNE-JEUNOTEL, YOUTH HOSTEL
- 07:30: BUS PICK UP: LAUSANNE-JEUNOTEL, YOUTH HOSTEL
- 11:20: LUNCH: CAFETERIA CASINO *Saint-Etienne* (not included)
- 12:00: BUS DROP OFF: MAISON DES JEUNES ET DE LA CULTURE
Route de Saint-Just Malmont, FR-42700 Firminy
- 13:30: GUIDED TOUR: EGLISE SAINT PIERRE *Place de Mail, FR-42700 Firminy* www.sitelecorbusier.com
(+33 4 77 61 08 72)
- 14:30: BUS PICK UP: EGLISE SAINT PIERRE
- 16:00: BUS DROP OFF: LA TOURETTE *Route de la Tourette, FR-69210 Éveux* <http://www.dominicains.fr/fre/content/view/infocouvent/414> (+33 4 72 19 10 90)
- GUIDED TOUR: LA TOURETTE (2,5 hours, 2 groups)
- DINNER & ACCOMODATION: LA TOURETTE



EGLISE SAINT PIERRE
MAISON DES JEUNES ET DE LA CULTURE



UNITÉ D'HABITATION LIEU-DIT "LES BRUNEAUX" FR-42700 FIRMINY (1960) LE CORBUSIER



MAISON DES JEUNES ET DE LA CULTURE ROUTE DE SAINT-JUST MALMONT, FR-42700 FIRMINY (1956) LE CORBUSIER

Built between 1961 and 1965, the Maison de la Culture was the only building completed during the lifetime of the architect. His design stemmed from the programme of André Malraux, who was looking to make "works of human genius" that could be accessed by everyone.

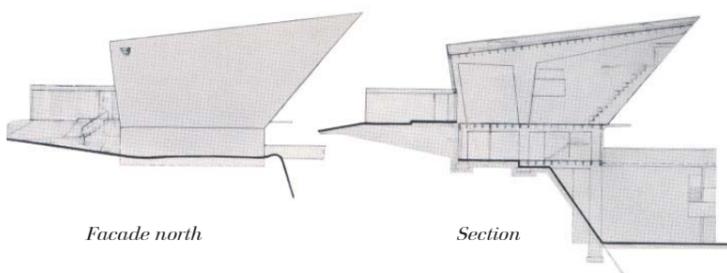
The building, 112 metres in length, was constructed on a former coal grit quarry, and has an unusual exterior profile: the roof rests on a system of cables giving the impression of an inverted arch. The audacious incline of its western façade is judiciously reused inside, since this enabled tiers to be incorporated.

The undulating window walls, which are all along the east and west façades, are the work of Le Corbusier and Iannis Xenakis (composer) who combined colours and sizes, which are as musical as they are architectural.

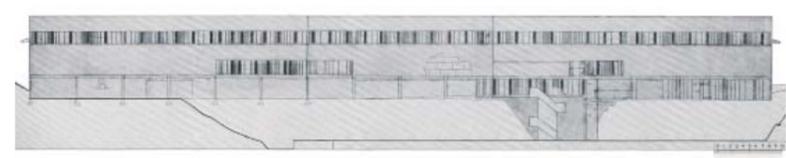
The furniture in the building was designed by Pierre Guariche, an architect and designer working with the "Modulor", the measuring unit established by Le Corbusier to create harmony and proportions adapted to the human scale.

The Maison de la Culture houses various rooms with different uses: an auditorium, a theatre, a fine arts room, a bodily expression room etc.

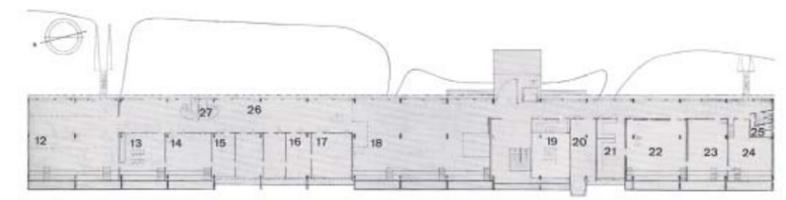
Having been awarded Historical Monument status in 1984, it is still being used for activities for which it was originally designed: a place for shows and artistic creation, an associated music school, an interpreting centre etc. (Text from: <http://www.sitelecorbusier.com/en/culture.php>)



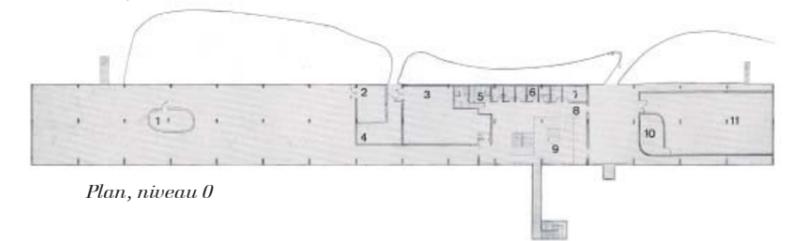
Facade north Section



Facade west

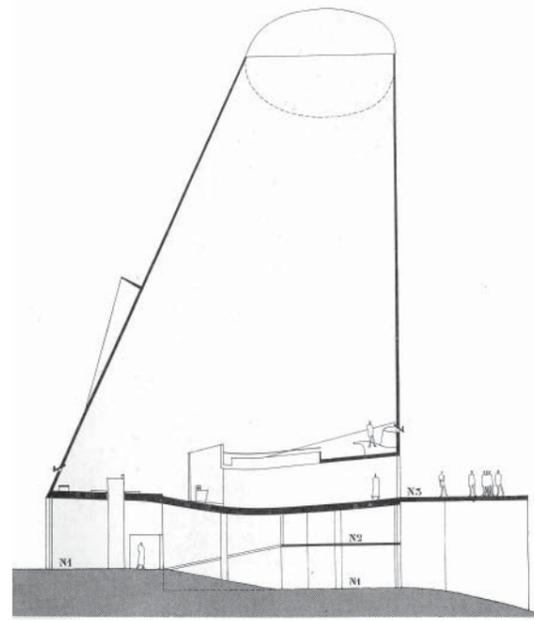


Plan, niveau 1

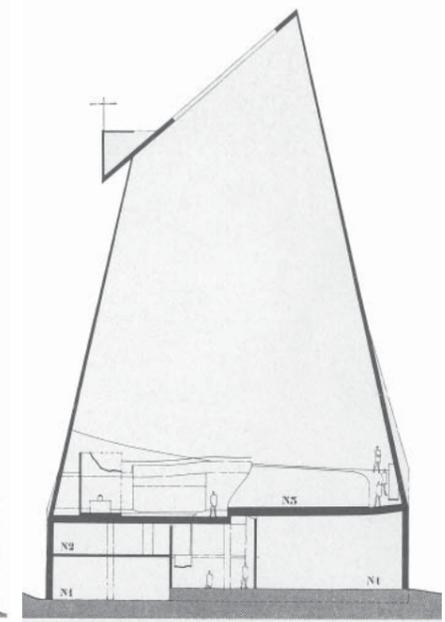


Plan, niveau 0

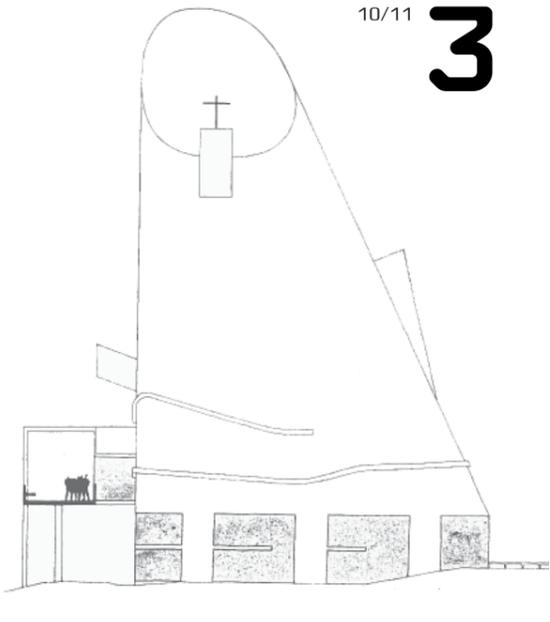
- 1: Storage, 2, 4: Electric Central, 3: Heating Plant, 5: Toilets, 6, 7: Boxes, 8: Small Foyer,
- 9: Fireplace, 10: Storage, 11: Studio, 12: Library, 13, 14: Classroom, 15: Club Room,
- 16: Management Office, 17: TV Room, 18: Foyer, 19: Air Space, 20: Cleaning Utensils,
- 21: Laboratory, 22: Music, 23: Painting, 24: Sculpture, 25: Toilets, 26: Exhibitions



Section east-west



Section south-north



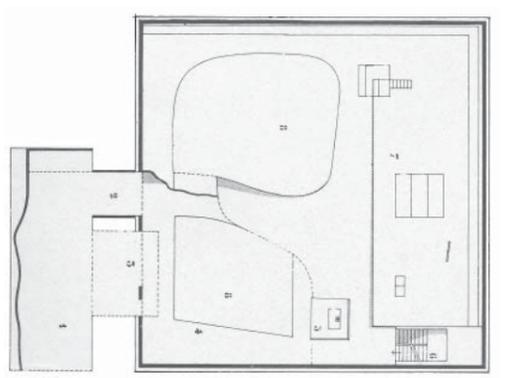
Facade south



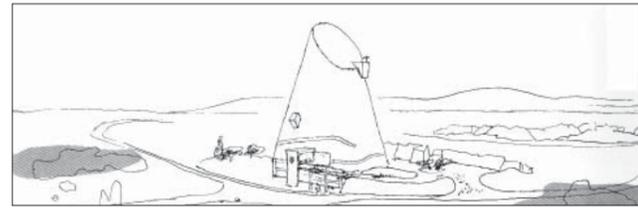
Plan niveau 1



Plan niveau 2



Plan niveau 3



EGLISE SAINT PIERRE PLACE DE MAIL, FR-42700 FIRMINY (1960-2006) LE CORBUSIER & JOSÉ OUBRERIE

"Anthony Eardly finds an antique source for the church in the Telesterion at Eleusis, a connection made more pronounced by its pseudo-ruined state.⁴² In accordance with the desires of the clergy, the church is located in the crater at the bottom of the hill, where Le Corbusier placed it to mark the major crossroads at the entrance to the site."

"The form of the church descends from a much earlier design of Le Corbusier's for the chapel of Gabrielle de Monzie at Tremblay (1929) in which a cubic tower rises from a ramped base. The hyperbolic conical section of Firminy and its construction of thin-shell concrete were inspired by nuclear cooling towers Le Corbusier saw in India and employed as the roof in the Assembly at Chandigarh. The cone evokes in turn the mountains of slag in mining regions of France which Le Corbusier drew to resemble the pyramids of Giza in *When the Cathedrals Were White*.⁴³ It becomes the vessel of the sanctuary supported on a base of vestries. An exterior ramp leads directly to the space and the seating suspended within.

In the later part of his life, Le Corbusier considered it his goal to restore the sacred to the every day. Reluctant to build for an orthodoxy other than his own, he agreed to the commission of the Church in 1960 under pressure from his friend Claudius-Petit because its congregants

were the working class of Firminy-Vert, the constituency and inhabitants of his other work there. Neither the plan nor the imagery of the church are strictly liturgical.⁴⁴ The eastern sun plays a determining role in the orientation of the light canon; and the geometry suggests the mystical transmutation of cube, pyramid, cylinder and cone. His late iconography based on a mythologically empowered nature appears elsewhere at Firminy, in the bas-relief on the youth center: a bull's head with the floating image of a feminine face, a human ear and a conch shell, four branches with leaves shaped like human heads."

42. Anthony Eardly, *Le Corbusier's Church at Firminy*, 5. Le Corbusier mentions Santa Sophia and Stonehenge as sources of the development of the design for Firminy Church.

43. *Ibid.*, 35.

44. Martin Purdy, "Le Corbusier and the Theological Program" in Walden, *The Open Hand*, 286-322.

(From: GANS, Deborah: *The Le Corbusier Guide* Princeton Architectural Press, New York, 1987)

"The work, which was finished in November 2006, was supervised by José Oubrière, and respected the original project design."

"The building has a square base with sides of 25.50 metres in length, which expands into a truncated cone 33 metres high."

"The church of Saint-Pierre de Firminy-Vert is a double building: a platform which is largely open to the light, which aims to give lightness to the building, contrasting with the shell made from solid concrete.

Le Corbusier had designed the lower part for parish activities (meetings, catechism) as well as for the priest's offices. Nowadays it is an interpreting centre dedicated to Le Corbusier's works.

The upper part was entirely taken up by the nave with two chapels: the one used during the week with a secondary altar (entering on the left) and the one used on Sundays with the main altar. The latter is connected to the ground via a white pillar, separate from the building's structure."

(Text from: <http://www.sitelecorbusier.com/en/eglise.php>)

STUDY TOUR SCHWEIZ + FR, ID & AT 2011 MONDAY MARCH 28 (2)



COUVENT DE LA TOURETTE ROUTE DE LA TOURETTE, FR-69210 ÉVEUX (1953-60) LE CORBUSIER

The commission for La Tourette, following soon after that for Ronchamp, was advocated by Father Alain Couturier, who considered Le Corbusier's avowed agnosticism secondary to the sacred value inherent in his architecture. For Le Corbusier, the commission was attractive as housing for a community for which he felt affinity. His initial statement of resistance toward the ecclesiastical commission, "I can't build churches for men who don't live there," was overcome by Couturier's brief "to house 100 hearts and 100 bodies in silence."²⁴ The cloister was to accommodate the intellectual and spiritual training of novice Dominicans near the cultural center of Lyon. As a consequence of Vatican II (1962-5), the original habitation of the convent was short-lived, and it continues today as a conference center for the order and the public.²⁵

The architect's affinity for the project of a monastery ran deep. Le Corbusier had long before formulated his own social ideal based on the monastic balance of the individual and collective. He was inspired by youthful encounters with the Charterhouses of Galuzzo (a.k.a. Ema) and of Athos, whose sheer cliff is recalled in La Tourette's north face. He found Couturier's suggested model for the project, the abbey of Le Thoronet, equally compelling; its influence can be seen most particularly in the oratory. Moreover, Le Corbusier personally aspired to certain monastic values, including material simplicity, self-discipline, and silence. That this monastery was for the Dominican order was fortuitous in that, as Colin Rowe elucidates, "an architectural dialectician, the greatest, was to service the archsophisticates of dialectics."²⁶ The dialectic of the architecture emerges in intense contrasts of form, challenging the strict rendition of monastery typology.

A confrontation of the ideal and the material played a continuing role in the building's realization. Le Corbusier entrusted the design development of the building to the musician-engineer Iannis Xenakis with the words "it is pure geometry-a Dominican monastery.... it must be geometric."²⁷ The geometric rule of the building encompasses the underlying forms of prismatic solids, the application of Modulor measurements to many aspects of the interior, and the mathematically and musically derived window patterns. As conceived by Xenakis,²⁸ the pinwheel fenestration of the common rooms and classrooms are permutations of the golden section that unfold along the facade, similar to the combinatorials of his musical composition *Metastasis*, which he composed at the same time. In the corridor *ondulatoire*, or undulating glazing, the Modulor spacing of the concrete vertical mullions creates a continuously modulated effect of surface and light, much as the increments of the tempered scale create a shifting density of sound.²⁹ The *ondulatoire* geometry attempts to reveal the dialectic present within mathematics itself, between the incremental and the continuous, the rational and the irrational.³⁰ Similarly, the apparently static, rectangular south side of the church actually tilts in all directions, countering Euclidean form with optical distortions of depth and rotation. The ear-shaped crypt has a constantly variable curvature constructed through incremental shifts of straight lines, which are visible in the concrete shuttering. As in the ruled surfaces of Ronchamp, the crypt reveals how the essentially two-dimensional Modulor and shuttered construction only approximate an algebraic curve.

Because Le Corbusier conceived the convent in steel which proved too expensive, and subsequently delegated the construction documents to Andre Wogenscky's office, the site supervision to Fernand Gardien, and the development of concrete technique to the contractors SET (Sud Est Travaux), some have concluded that he felt the material

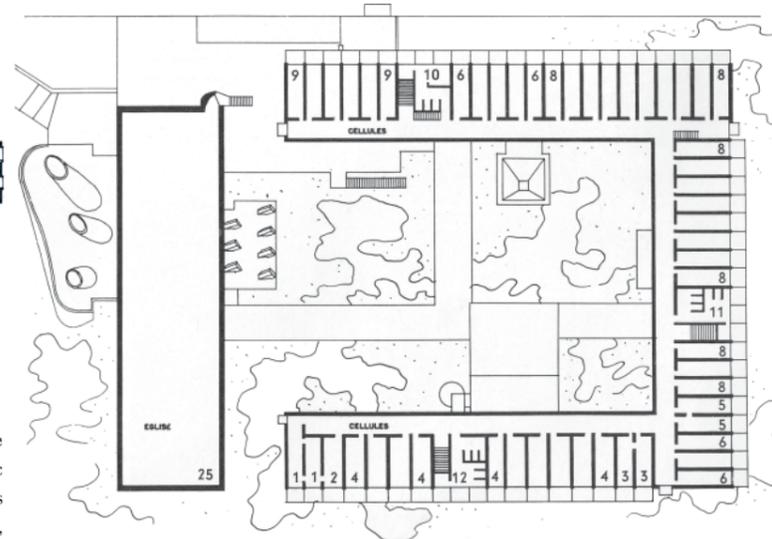


Section east-west through entrance

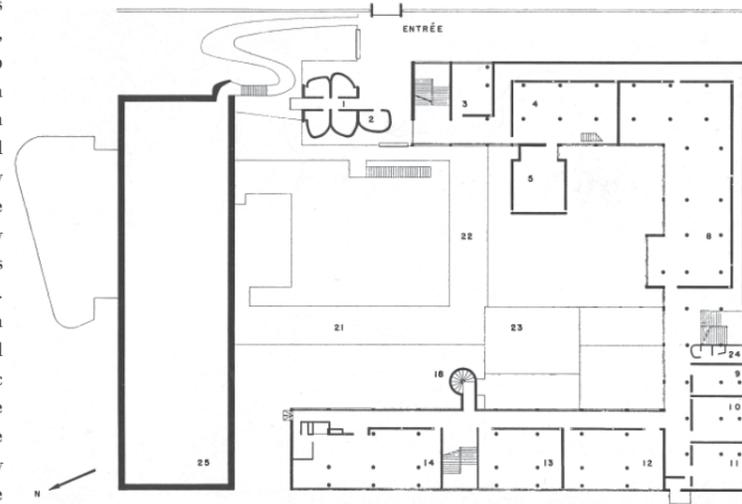
quality of secondary importance, "only ideas being transmissible."³¹ The contractors at La Tourette were expert in the use of concrete for public infrastructure, but not its architectural application. Le Corbusier's concurrent work on Chandigarh, which occupied most of his attention, was similarly constructed in concrete of variable finish under sporadic supervision by the architect. Le Corbusier even chose to employ some of the detailing of India at La Tourette, specifically, setting the glass panels directly in the concrete in combination with a shuttered opening for air, called an *aerateur*. Entrusting the physical expression of his design to those building it was at once a logical acceptance of circumstance and a romantic act based on a neo-Gothic trust in the relation of the workman to the work. Le Corbusier wanted the words "here has passed the hand of man"³² inscribed under a stairwell window made trapezoidal by mistake. The inconsistent rendering of abstract geometry through the individualized shuttering of rough concrete becomes a thematic duality of the building. Despite its aura of worn handwork, much of La Tourette is prefabricated concrete, including columns, beams, and balcony facings. In fact, the precast structural grid developed by SET proved essential, in that it made the building affordable. The detailing joins primitive and sophisticated means rather seamlessly, just as Le Corbusier's late rhetoric pairs the archetypal with the new. Some of the brutish exposure of the mechanical systems is the result of poor coordination, but most of the contrasts in levels of finish are intentional. The interior walls are masonry block finished with sprayed Gunité or plaster. The floors are cast in place over ribs of hollow masonry, a technique Le Corbusier used in the villas of the 1920s to give the appearance of the flat slab.³³ The candle-like step lights are bare bulbs set directly in the concrete. The door to the church borrows the metal skin and shape of airplanes and ships. The shutters on the *aerateurs* are bent metal with an airfoil profile but the simplest of carved wood handles.

Le Corbusier's view of monastic life, as an "indissoluble binomial of the individual-collective," was in itself dialectical. At La Tourette he addressed the design of a type that was already an essential part of his architecture, having influenced the early *immeuble-villa* and the *Unité d'habitation*. In a perhaps ironic, reverse transformation, the cloister-inspired apartments of the *Unité* become the individual cells of La Tourette, the *Unité* corridors become the passages cutting across the traditional cloister. The sacred space of the church has its own binary relation to collective spaces assembled around the courtyard. The architectural systems enhance this social logic. The columnar system of the *Dom-ino* and the free plan it generates occur in the collective spaces of refectory, library and offices. The individual cells are walled, "tunnel-like"³⁴ spaces derived from the Citrohan house. Their columns are buried within the walls, as can be read from the short beam ends exposed in the strip window. The courtyard complex raised above the earth on pilotis opposes the sanctuary, which descends with the land so that, as Le Corbusier observed, "the lowest place becomes the highest, the highest the lowest."³⁵

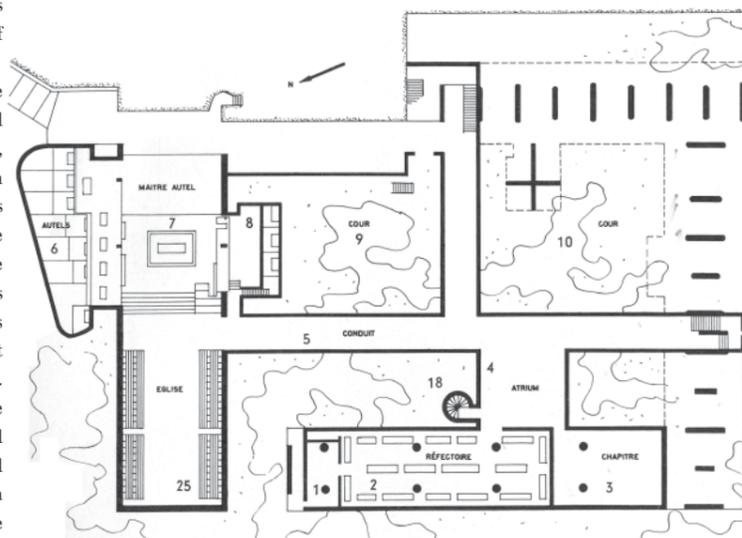
The canonical opposition of light and darkness appears here in the lucidity of secular space and the obscurity of places of faith. As Rowe suggests in a Hegelian vein, "negation becomes positive" in the darkness of the church.³⁶ Within this overarching structure of light are, however, a multiplicity of effects which resist easy categorization. Chapel and crypt have no less than five types of openings for light including the great "canons" which transmute light into floating discs of color. The fenestration of the secular spaces includes strip windows, the pinwheel



Plan, niveau 5



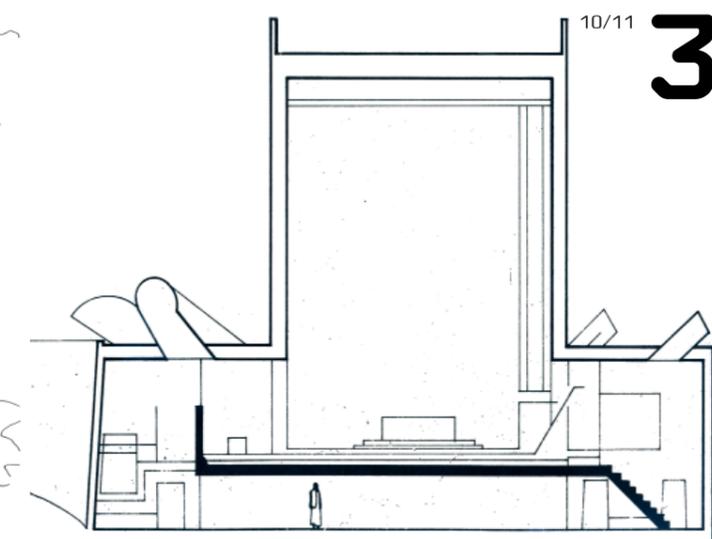
Plan, niveau 5



Plan, niveau 2

glass wall, and the *ondulatoire* with its conceptually infinite effects. On the loggia wall of each cell is a concrete square in high relief as a measure of light and shadow.

Another prominent duality is that between architecture and nature: monastery and hillside are almost independent of one another.³⁷ Asserting



Section north-south through the church

that the project budget left no choice, Le Corbusier struck a line in relation to the horizon, and "hung" the floors of dormitory and collective space from it, letting the pilotis hit the ground where they may so that the building projects above the untended landscape. Cloister pathways disrupt the traditional courtyard garden, which appears on the roof. Neither captured nor cultivated in a cloistered garden, nature remains a thing for contemplation beyond the refectory window. Yet even the view of nature is often denied. Despite their symmetrical positioning, the courtyard corridors have one blank and one glazed wall. The perimeter corridors end in a window blocked by a concrete panel, which Le Corbusier called a "flower of ventilation." The traditional perimeter cloister is displaced to the roof as a solitary walk, but the parapet is built so high as to eclipse the very panorama it might have offered.

Through an obstruction to a promised delight, the parapet presents in its place the power of a constructed horizon punctuated by the vertical forms of chimney and bell tower. This room, open only to the sky, appears in other projects but, in the context of La Tourette, becomes a vehicle of detachment from the worldly. In its fabricated boundary is the spirit of the temples of the Acropolis which "drew around them the desolate landscape, gathering it into the composition"³⁸ through the horizon. According to Le Corbusier, the horizon is the "line of transcendental immobility" where mathematical order and nature coincide. In conjunction with its opposite, the vertical force of gravity, it reveals "the full power of a synthesis," a right angle that is "the sum of forces which keep the world in equilibrium."³⁹ While this line binds reason and nature it does so at an unfathomable distance. It is always present, never reachable, perceptible but not palpable, single but infinite and represents the boundary of the human condition as Le Corbusier found it.

24. Father Alain Couturier in Sergio Ferro et al., *Le Couvent de La Tourette*, 12.

25. Antoine Lion "Continuité et Mutations au Couvent de La Tourette," in Prelenzo, *La Conservation de L'Oeuvre Construite de Le Corbusier*, 91-99.

26. Colin Rowe, *The Mathematics of the Ideal Villa*, 194.

27. Iannis Xenakis in Ferro, *Le Couvent*, 81.

28. Xenakis, "The Monastery of La Tourette," in Brooks, *Le Corbusier*, 143-163.

29. Xenakis in Le Corbusier, *Modulor* 2: 326.

30. Evans, *Projective Cast*, 296.

31. Le Corbusier, trans. Ivan Zaknic, *The Final Testament of Père Corbu*, 83.

32. Le Corbusier in Ferro, *Le Couvent*, ff. 81.

33. Ferro, *Le Couvent*, 98-103, 43-53; and Ford, *Details* 2: 211.

34. Rowe, *Ideal Villa*, 195 and Vincent Scully, *Modern Architecture*, 42.

35. Le Corbusier, *L'Art Sacré* 7.

36. Rowe, *Ideal Villa*, 197.

37. Le Corbusier, *Oeuvre Complète* 6: 42. "The convent is posed within the savage nature of the forest and the grasslands which is independent of the architecture."

38. Le Corbusier, *Towards*, 188.

39. Le Corbusier, *The City of Tomorrow*, 26-7.

(From: GANS, Deborah: *The Le Corbusier Guide* Princeton Architectural Press, New York, 1987)

STUDY TOUR SCHWEIZ + FR, D & AT 2011 TUESDAY MARCH 29 (1)

BREAKFAST: LA TOURETTE *Route de la Tourette, FR-69210 Éveux* <http://www.dominicains.fr/fre/content/view/infocouvent/414> (+33 4 72 19 10 90)

08:30 BUSPACKING: LA TOURETTE

09:00: BUS PICK UP: LA TOURETTE

12:00: BUS DROP OFF: ROLEX LEARNING CENTER *CH-1015 Lausanne* www.rolexlearningcenter.ch (+41 (0)21 - 693 42 37)

LUNCH: ROLEX LEARNING CENTER (not included)

14:00: BUS PICK UP: ROLEX LEARNING CENTER

15:00: BUS DROP OFF: VILLA LE LAC (LE PETIT MAISON) *ROUTE DE LA VAUX 21, CH-1802 CORSEAUX* www.villalelac.ch (+41 (0)79 - 829 63 08)

GUIDED TOUR: VILLA LE LAC (1 hour, 3 groups)

PLEASE NOTE: Spike or stiletto heels are prohibited as they damage the linoleum floor. It is not allowed to eat or smoke in the Villa neither in the garden. It is not allowed to walk on the roof - one can however climb the stairs to see it - but not more than 3 persons at a time. It is possible to go into the little room on the first floor - but not more than 3 persons at a time.

16:00: BUS PICK UP: VILLA LE LAC

18:00: BUS DROP OFF: BASEL ST. ALBAN YOUTH HOSTEL *Sankt Alban-Kirchrain 10, CH-4052 Basel* www.youthhostel.ch/basel (+41 (0)61 - 272 08 33)

ACCOMODATION: BASEL ST. ALBAN YOUTH HOSTEL



ROLEX LEARNING CENTER *CH-1015* (2004-10) SANAA

Since Gerrit Rietveld and Frank Lloyd Wright exploded the box, and Hans Scharoun and Le Corbusier orchestrated their architectural routes, there have been few major paradigm shifts in the spatial order of modern architecture. Some have come close. But as the image of buildings has become increasingly commodified, the virtuosity of spaces designed by architects such as Frank Gehry and Zaha Hadid is all too often smothered by disengaged forms that serve their own exuberant ends.

Japanese architectural duo SANAA, however, exercise greater restraint in pursuit of a new spatial order. Adopting a muted architectural language, they consistently focus on how to make people, places and programmes coalesce. Whether achieved individually or jointly, schemes such as Toledo Art Museum's glass pavilion in the US (AR November 2006), the 21st Century Museum of Contemporary Art at Kanazawa, Japan, and the Moriyama House in Tokyo (AR August 2007) demonstrate how Kazuyo Sejima and Ryue Nishizawa derive unique spatial arrangements, allowing fluency in plan to prevail over a more muted language of construction. When straying from this discipline, they too fall foul of formalism, as was the case with the New Museum in New York (AR April 2008) that failed to exhibit anything like the level of spatial sophistication we have come to expect. Fortunately, that building was an isolated low point and in this new work, SANAA has created a mesmerising space for Swiss university École Polytechnique Federale de Lausanne (EPFL).

The construction of this building does of course deserve detailed scrutiny, with its 20,000m² footprint defined by an incredible low-slung concrete shell, anchored to a single-storey basement by 70 pre-stressed cables, and poured as a single element in just two days. However, while

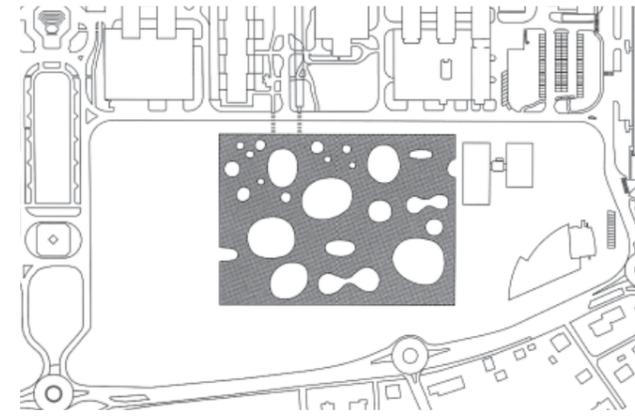
few other architects would resist celebrating the project's significant technical achievements, SANAA prefers to discuss the surface of the shell, providing as it does a clear uninterrupted terrain. "The concept of the building was to make one very big room, where people and programmes can meet together to have better communication," explains Nishizawa. "There are no walls to divide, so any programme can meet anywhere. It is more like a park."

It was the boundless nature of this single volume space that won SANAA the commission, as president of EPFL Patrick Aebischer recalls: "This new campus hub exemplifies our vision of a university where traditional boundaries between faculties are broken down, and where the public are inspired and made welcome. The SANAA scheme was something that we had never seen before: a building without doors." However, achieving this vision was a demanding process, as both client and local consultants paid close attention to the technical and financial challenges posed. "The price of the building did not include any hills," he continues, "so we sought sponsors to pay for the curvature, which cost about 50 million Swiss francs (£30.6 million) more." With this, the £65m Rolex Learning Centre was born, financed by 'curvature' contributions from Rolex, Logitech, Bouygues Construction, Credit Suisse, Nestle, Novartis and SICPA.

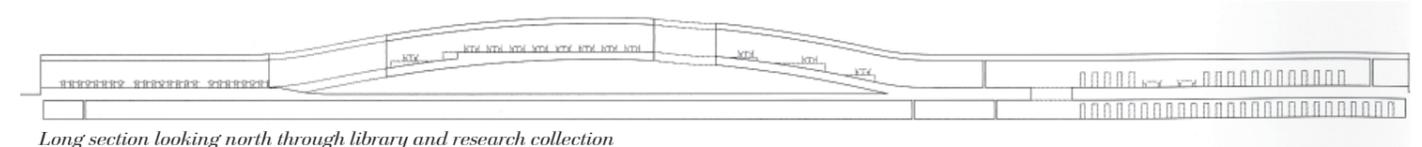
Grounded at all four corners, the building conforms to the regularity of EPFL's bland campus masterplan. With little spatial hierarchy and no communal space to speak of on site, the centre billows to create a new point of arrival for students and visitors. Beneath its shiny concrete underbelly, irregular patios conjoin to form a sheltered landscape, with routes across the site for passers-by and multiple points of entry for building users. The principal entrance lies at the centre of the plan, leading directly into a café and food court that occupy the lowest contour of the internal terrain. From here, two ridges rise up to cut across the space; one to the west that shields a 600-seat auditorium (which has its own entrance patio when screened off and used in isolation) and one to the east that bifurcates to form two peaks, one for the library to the north, the other for a formal restaurant to the south that occupies the highest point on plan from where the spectacular aspect across Lake Geneva gives views of Mont Blanc on a clear day.

Disconcerting at first, but with time inducing a relaxed and informal attitude to occupation and circulation, it is undeniable that for some people the contours may prove too steep - in places reaching a slip-inducing 30° pitch that cause most to shuffle down tentatively. This necessitated the provision of accessible ramps, steps and platform lifts that on the whole have been well integrated with terraces. These provide level places to study or meet. Other measures, such as the tactile floor track required to help those with impaired vision navigate the interior, also pale into insignificance when actually walking through the space. As intended, the strongest sensation that persists is the mesmerising effect of constantly shifting views, animated as horizons rise and fall in resonance with the mountainous landscape beyond.

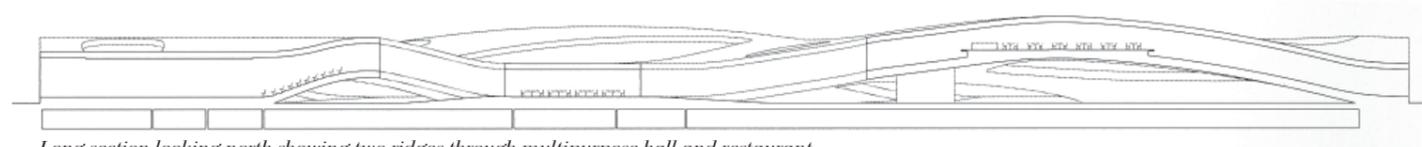
EPFL is an extremely serious and competitive scientific institution that would not be easily fooled by architectural showmanship or novelty. Pushing the boundaries of biological and technical research, it recognises the need to attract the very best scientists from around the world, and with the Rolex Learning Centre now complete, it is better equipped to attract potentially paradigm-shifting scientists into their own paradigm-shifting space. SANAA is without doubt a paradigm-shifting practice, and with its architects' contribution to this project extending their influence on contemporary architecture even further, Sejima and Nishizawa are extremely deserving and popular recipients of this year's coveted Pritzker Prize. (From: *The Architectural Review*, May 2010, 129)



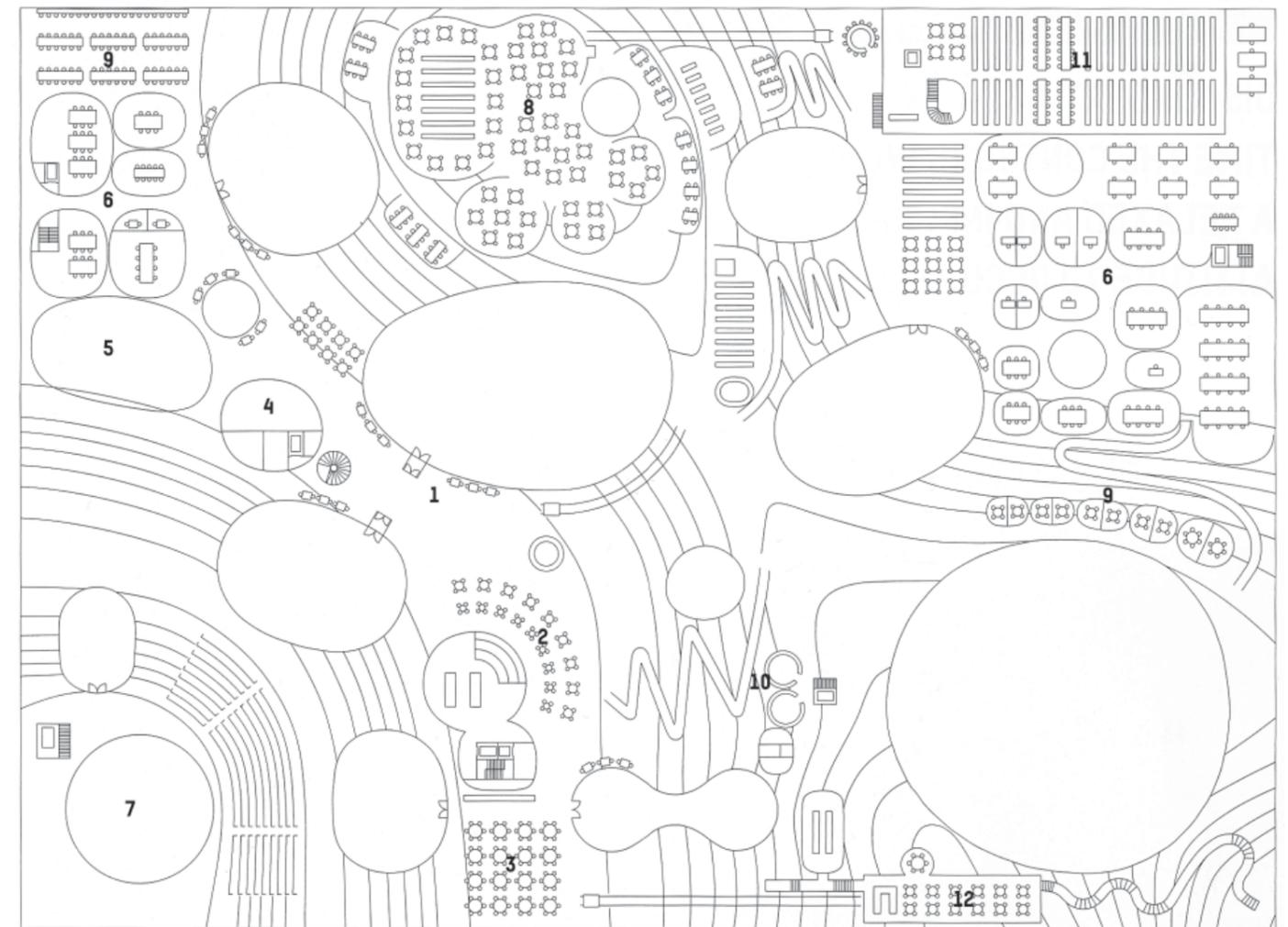
Siteplan



Long section looking north through library and research collection



Long section looking north showing two ridges through multipurpose hall and restaurant



Plan

1: Main Entrance, 2: Café, 3: Food Court, 4: Bank, 5: Bookshop, 6: Offices, 7: Multipurposes Hall, 8: Library, 9: Work Area, 10: Ancient Book Collection, 11: Resarch Collection, 12: Restaurant

0 10 20 meter



VILLA LE LAC (LE PETIT MAISON) ROUTE DE LAVAUX 21, CH-1802 CORSEAUX (1923-4) LE CORBUSIER & PIERRE JEANNERET

Le Corbusier designed this modest vacation house for his parents just before his father's death. His mother spent time there throughout her life as did his brother, Albert Jeanneret, a composer who used it as a studio. Many photographs survive of family gatherings in the garden. The house contains custom furnishings and also personal artifacts of the family such as Mediterranean pottery and an elaborate wood desk designed by the architect earlier in his career.

Despite its personal program and private demeanor, the house played a public role in the "controversy of the window" waged between Auguste Perret and Le Corbusier in Parisian journals of 1923.²¹ In brief, Le Corbusier asserted that the major positive consequence of Domino concrete frame construction was the strip window, which could continuously and conveniently distribute light within an interior where it was most needed, at eye level. At Vevey, this window is the rhetorical center piece of the house, "*Tacteur primordial*." In his book on the house, *Une Petite Maison*, Le Corbusier presents the window as the inevitable and scientific response to the first "given," the sun, its zenithal path, and its relation to "the horizontal eye."²² This resulting window is a south-facing, eleven-meter-long slash in the wall, which bears no strict relationship to the division of rooms.

Auguste Perret, a father of concrete construction and mentor to the young Le Corbusier, dismissed the strip window as decorative and contrary to use. For him, the horizontal window destroyed the definition of interior space by eliminating threshold and eclipsed the experience of exterior space by cropping the view of foreground and sky. It degraded all perspectives into cubist composition.

The house at Vevey follows directly from this argument of the horizontal window. Le Corbusier described its plan in similarly mechanistic terms as a "dwelling machine." He claimed that the precise functioning and dimensioning of its parts resulted in efficiency and spatial economy. A gear of form at the center generates the uses along the box. Many of the elements operate like machine parts. The bedroom wall opens to reveal storage cabinets built below the floor. The table and lamps are instrumental extensions of the window that slide along the south wall.

The structural and material system which allows for both the window and the dwelling machine is predictably a version of the Domino. Driven in part by budgetary constraints, the system has a homely translation: supports are metal pipe columns filled with cement; the roof is concrete made by the lost tile process; the walls are hollow concrete block plastered. While the primitive rendering of the rhetorically high-tech system was intentional, the primitive detailing was not. Several seasons after its completion, all-too human cracks in the stucco skin arose, probably from the detailing of the parapet without metal coping. In generous self-defense, Le Corbusier treated the occurrence as a scientific study in aging and nature. He covered the south wall in a corrugated metal, which likewise combined allusions to high and low technologies, vernacular farm buildings, and airplane cockpits. In a restoration of 1945, the south wall was also covered, because of cracks from hydrostatic movement beneath the basement.²³

The shock of the little house is in its siting, which makes the argument for Perret as strongly as the strip window argues against him. A masonry wall wraps the site along the edge of the road and the edge of the lake, and creates an outdoor room mediating between the house proper and the landscape at large. Into the south portion of this rough wall is cut a "square window" providing a controlled view of the lake "which will not

overpower the senses." This of course is Perret's window, reframing the lake which is first seen through the strip. The entire promenade as drawn by Le Corbusier culminates in the distant view of the lake through this window and the foreground still-life of dining table and pottery vessel set before it. The last room of the house is darkly painted and lit only from above as a caesura from the view and the garden scene.

The idea of foreground and distant views pertains also to the house's real and imagined sites: the foreground garden whose plantings Le Corbusier describes at length, the middle ground map which he draws showing the lake at the center of train routes to all European capitals, and the distant Mediterranean which was his obsession. The remote site of the Mediterranean becomes apparent in the low-slung, perimeter rubble wall with picture window. Together they give the house a vernacular villa aura.

Le Corbusier wrote that he and Pierre Jeanneret went in search of the "perfect site" for this house with the completed plans in their pocket, and that they found at Vevey a piece of land "which fit it like a glove." The generative plan contained the idea of a dwelling that could fully express itself only in relation to its desired landscape. The strip window of the house needed the aedicule in the rough stone wall, the machine its garden.

LOCALE

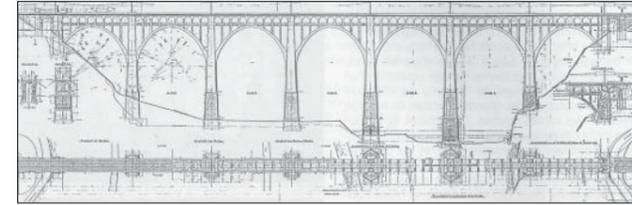
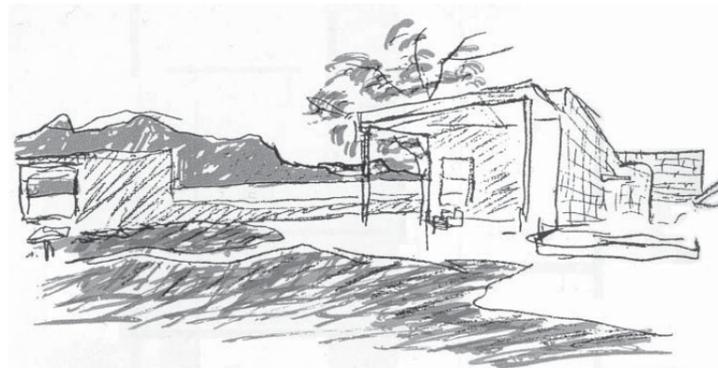
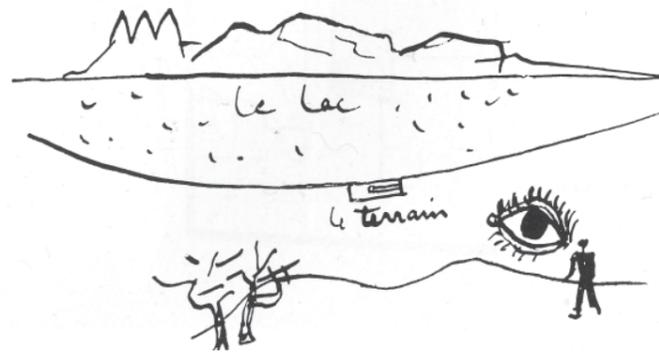
Vevey is a resort town on the shores of Lake Geneva (Lac Lemman). When Le Corbusier built his little house, only an old Roman road connected it to the sleepy village. Today the major thoroughfare to Lausanne runs right through the town and in front of the house. Still, the terraced vineyards that spill down the Alps to the lake are spectacular; you can view them from the funicular that runs from the town center.

21. Bruno Reichlin, "Une Petite Maison on Lake Leman," *Lotus* 60. 59-75.

22. Le Corbusier, *Une Petite Maison*, 5. All entry quotes by Le Corbusier are from this book.

23. Edward Ford, *The Details of Modern Architecture* 1: 235

(From: GANS, Deborah: *The Le Corbusier Guide* Princeton Architectural Press, New York, 1987)



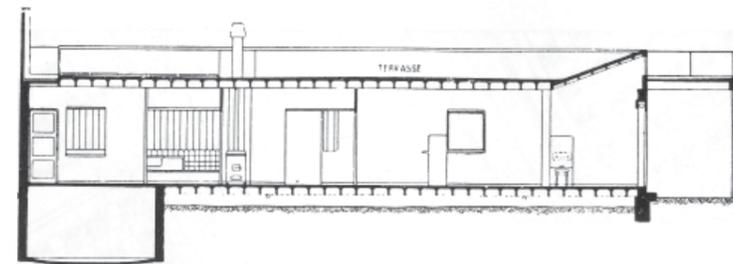
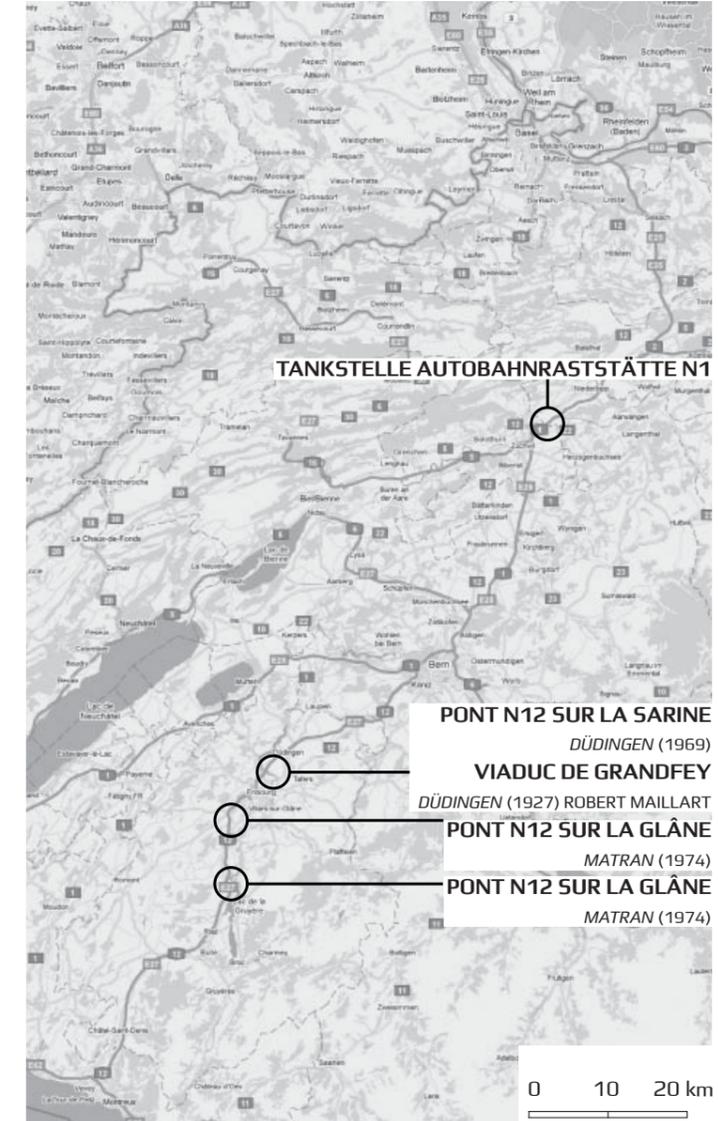
PONTS DANS LE CANTON DE FRIBOURG

The Grandfey viaduct, one of the longest and most impressive railway bridges in Switzerland, owes its appearance to the rebuilding of its former steel girder construction. The engineers adopted a concrete reinforcement system developed by the Prague professor Joseph Melan which utilizes a self-supporting, riveted framework instead of steel rods. It was thus possible to incorporate the old trussed piers into the new concrete construction. The new arches were built beneath the existing track; the height of the former lattice frame is discernible at the crown of the arch. A pedestrian route below the rail track provides an unusual opportunity to observe the structural system.

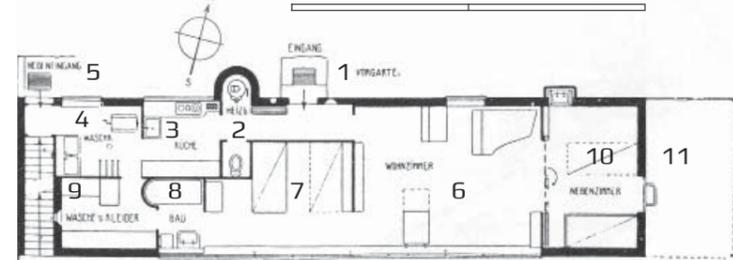
The construction of the N12 motorway provided the Fribourg landscape with a distinctive series of new bridges. Parallel to the Grandfey viaduct, a wide span, three-section concrete and steel composite construction crosses the Saane. As in the twin bridges over the Glare near Matran, it was shown to be more efficient to slide a relatively light steel framework from the end of the bridge onto the awaiting supports and to locate the prefabricated concrete roadway sections later.

The largest motorway bridge in the region is the 2km long viaduct of Lake Gruyere. Its design was also determined by the most economic constructional method. A complex sliding scaffold (100m long and weighing 353t) allowed the 34 section bridge to be constructed in 3-week stages without additional supports and regardless of the terrain. The sliding scaffold was initially used to cast the main central core, which reduced the loading on the temporary frame. Subsequent cantilevered scaffolding was then used to construct the projecting cross-ribs as well as the road slabs at both sides. The elegant cross-section of the structure with its single line of rhythmic supports, is a perfect example for an aesthetically satisfying resolution of purely technical and economic constraints.

(From: ZELLER, Christa (ed.): *Schweizer Architekturführer 2* Werk Verlag 1994)



Section 0 10 20 meter



Plan
1: Entrance, 2: Wardrobe, heating, 3: Kitchen, 4: Wash-room and stairs to cellar, 5: Exit to court, 6: Living-room, 7: Bedroom, 8: Bath, 9: Linen, clothes, 10: Guest-room, 11: Garden-terrace, 12: Facade with window of 33 ft., 13: Stairs to the roof



TANKSTELLE AUTOBAHNRASTSTÄTTE N1 DEITINGEN-SÜD (1964-6) HEINZ ISLER

Beginning in the 1950s, Heinz Isler developed 3 new methods of forming concrete shells based on he inflatable membrane, the fluid mass which becomes rigid, and hanging fabric which, stiffened and reversed, defines the form of the shell roofs. The roof of this petrol station, which consists of 2 wing-shaped shells supported at three points, is an example of this simple, statically balanced and formally attractive style of construction.

(From: ZELLER, Christa (ed.): *Schweizer Architekturführer 2* Werk Verlag 1994)

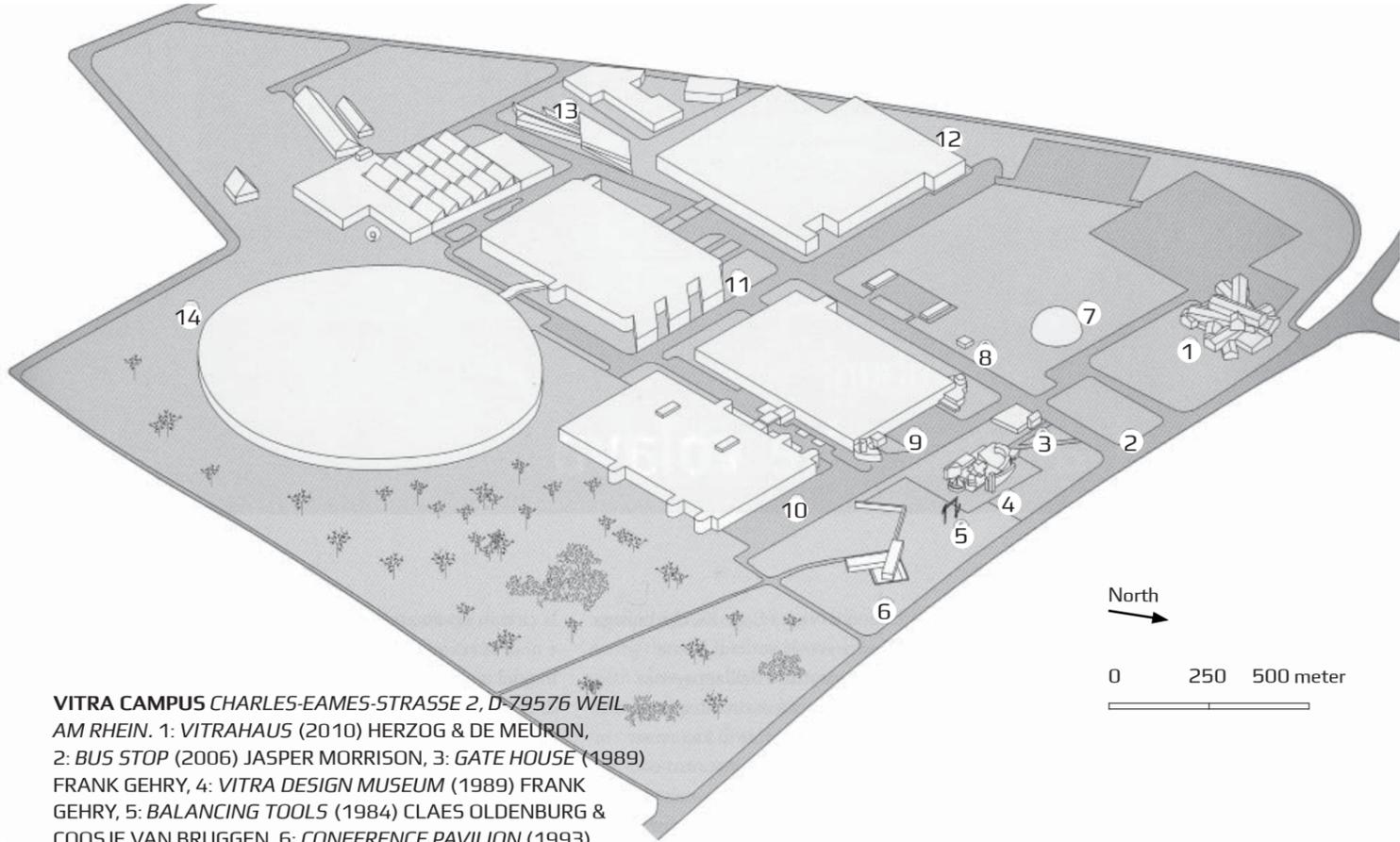
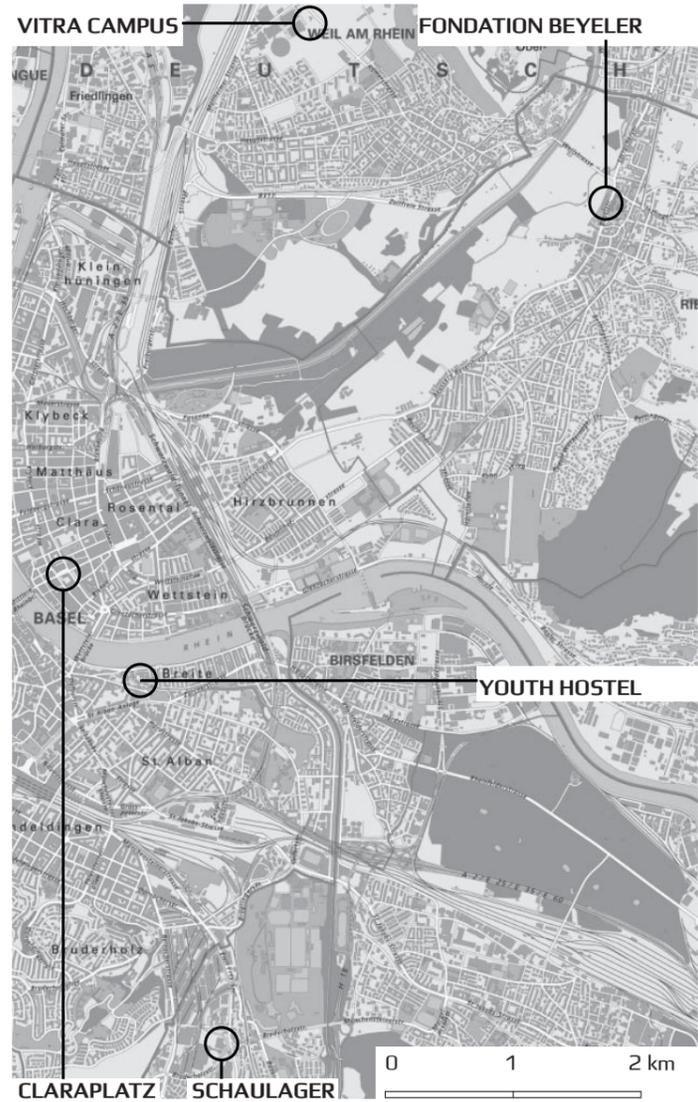
STUDY TOUR SCHWEIZ + FR, D & AT 2011 WEDNESDAY MARCH 30 (1)

06:00: BREAKFAST START: BASEL ST. ALBAN YOUTH HOSTEL
Sankt Alban-Kirchrain 10, CH-4052 Basel www.youthhostel.ch/basel (+41 (0)61 - 272 08 33)

09:45: TAKE BUS 55 FROM: CLARAPLATZ

10:05: BUS 55 ARRIVE AT: VITRA CAMPUS Charles-Eames-Strasse 2, D-79576 Weil am Rhein www.vitra.com/en-un/campus (+49 (0)7621 702 3500)

10:30: GUIDED TOUR: VITRA CAMPUS (2 hours, 2 groups)
Vitra Campus Architectural Tour: This comprehensive tour of the entire campus gives visitors the opportunity to learn about the history of the Vitra company and the evolution of the Vitra Campus, while placing special emphasis on the Fire Station designed by Zaha Hadid and the Conference Pavilion by Tadao Ando. On the way, tour guides provide information about the factory buildings designed by Frank Gehry, Nicholas Grimshaw and Álvaro Siza, as well as the dome by Buckminster Fuller, Jean Prouvé's petrol station and the exterior of the VitraHaus by Herzog & de Meuron.
LUNCH: VITRA CAMPUS (not included)
FOUNDATION BEYELER Baselstrasse 101, CH-4125 Riehen/
Basel www.fondationbeyeler.ch (+41 (0)61 - 645 97 00)
open: 10-18
SCHAULAGER Ruchfeldstrasse 19, CH-4142
Münchenstein/Basel not open!
ACCOMODATION: BASEL ST. ALBAN YOUTH HOSTEL



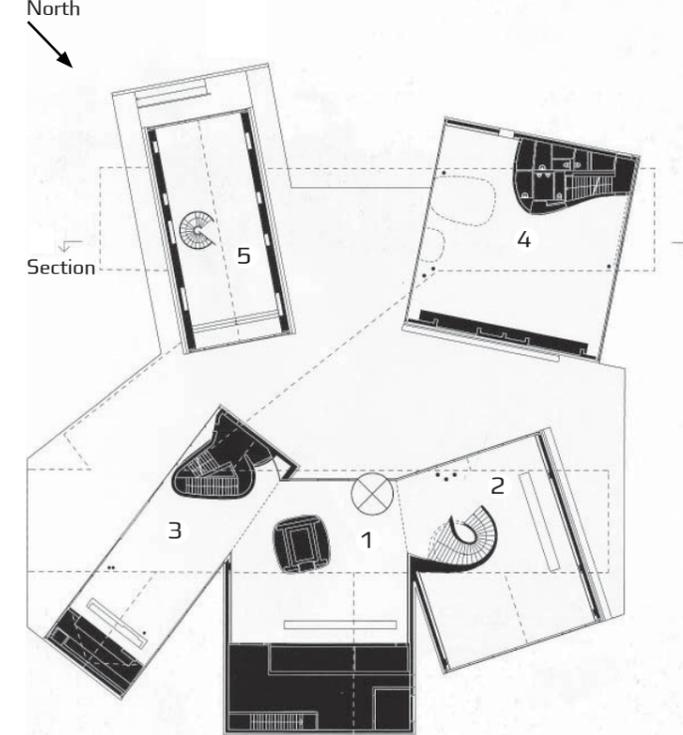
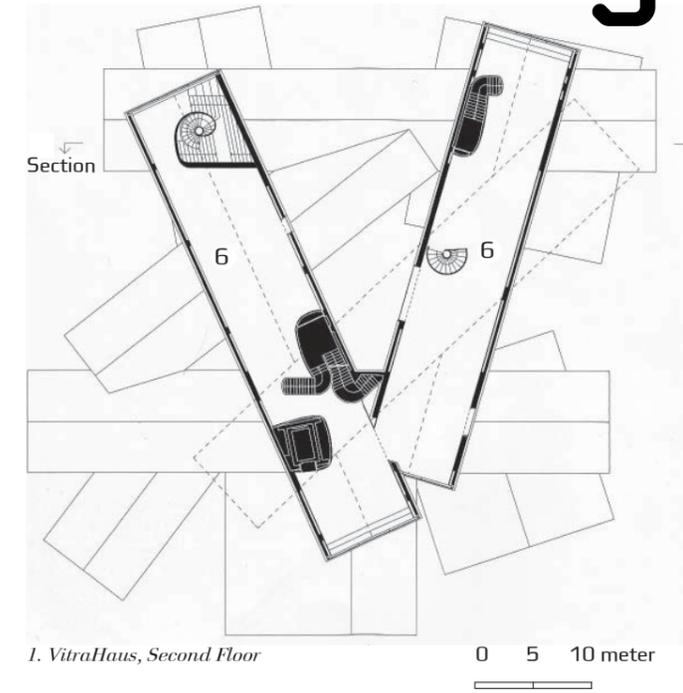
VITRA CAMPUS CHARLES-EAMES-STRASSE 2, D-79576 WEIL AM RHEIN. 1: VITRAHAUS (2010) HERZOG & DE MEURON, 2: BUS STOP (2006) JASPER MORRISON, 3: GATE HOUSE (1989) FRANK GEHRY, 4: VITRA DESIGN MUSEUM (1989) FRANK GEHRY, 5: BALANCING TOOLS (1984) CLAES OLDENBURG & COOSJE VAN BRUGGEN, 6: CONFERENCE PAVILION (1993) TADAO ANDO, 7: GEODESIC DOME (1978/2000) RICHARD BUCKMINSTER FULLER, 8: PETROL STATION (1953/2003) JEAN PROUVÉ, 9: FACTORY BUILDING (1989) FRANK GEHRY, 10, 11: FACTORY BUILDINGS (1981/1986) NICHOLAS GRIMSHAW, 12: FACTORY BUILDING (1994) ALVARO SIZA, 10: FIRE STATION (1993) ZAHA HADID, 11: FACTORY BUILDING (2010) SANAA,

The VitraHaus by Herzog & de Meuron is the latest addition to the Vitro campus after the factories designed by Nicolas Grimshaw, Frank O. Gehry and Alvaro Siza and the recently completed warehouse by SANAA, as well as a fire station, the first building by Zaha Hadid, a conference pavilion by Tadao Ando, a bus stop by Jasper Morrison and historical buildings such as the petrol station by Jean Prouvé and a dome by Richard Buckminster Fuller.

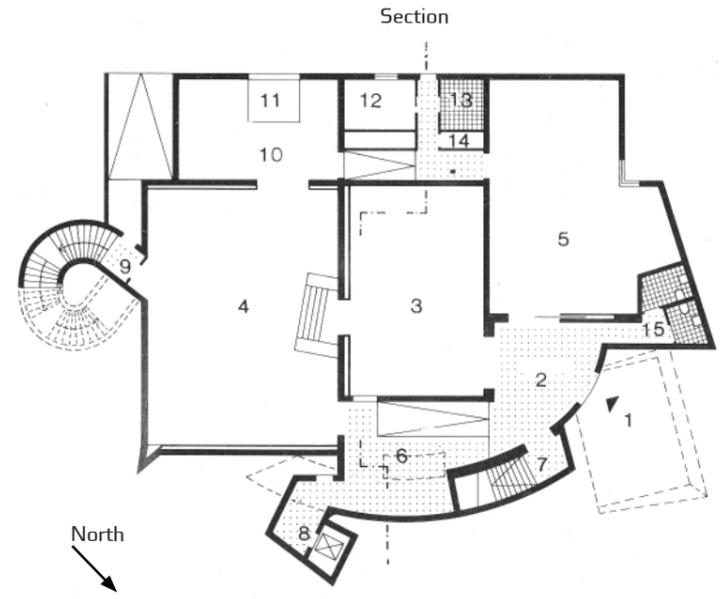
Opposite the 1989 Design Museum by Frank O. Gehry - the only other public building on the site - the VitraHaus is located close to the entrance to the furniture manufacturer's headquarters. This tall signature building, which is surrounded by cherry trees, links up with the landscape of the idyllic Tullinger Hills and forms a counterweight to the mainly horizontal buildings on the site.

Pressed, extruded and stacked, the concrete-structured VitraHaus is the multiplication of a ur-type of a house. Its anthracite bitumen facade creates an abstract and unified image, yet also allows us to distinguish the simple shapes of traditional gabled houses, which are piled up to this 4-storey high building. "House-high" section windows open up views to the landscape and towards the nearby city of Basel.

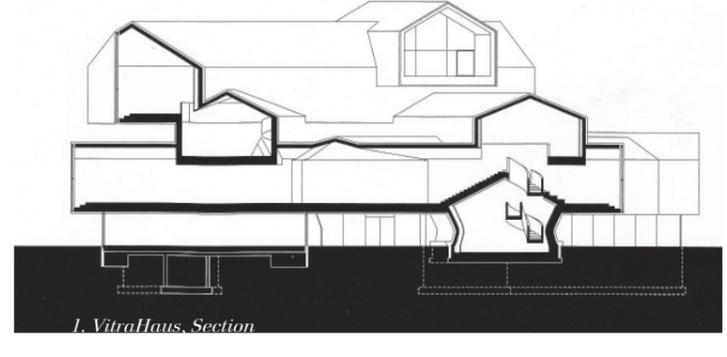
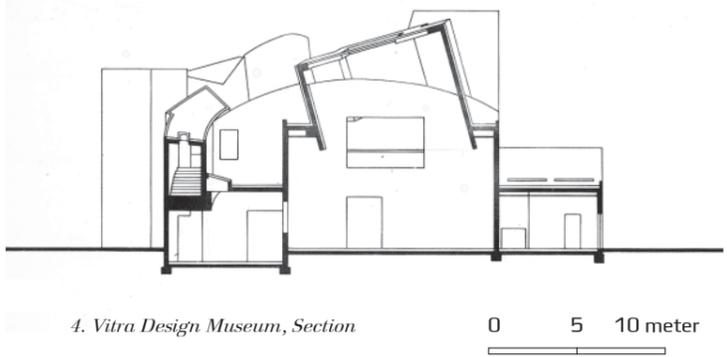
The central courtyard functions as an entrance to the building. Besides the reception area, museum shop and a 80-seat café with a terrace, an additional business lounge is to be found on the ground floor. The upper four floors contain the showrooms of the Vitra Home Collection. As a spatial sequence of surprising and varying interiors, which adapt to the domestic scale of the furniture pieces on display, the showrooms are connected by lifts and a sculptured central twisting staircase. A special exhibition area, a "Wunderkammer" of selected design classics, is hidden at the end of this walkway. The inclined walls of this space, which seems to be collapsing from the weight of the building, allow for better display of the objects on show. On the outside the buckling walls become a wooden bench to sit on. (From: Abitare, March 2010, 500)



1. VitraHaus, Ground Floor
1: Entrance Hall/Reception, 2: Vitra Design Museum Shop, 3: Cafe, 4: Business Lounge, 5: "vitrine" of the historic collection, 6: Exhibit

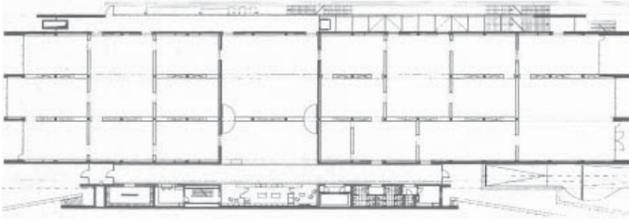


4. Vitra Design Museum, Ground Floor
1: Entrance, 2: Foyer, 3: Two-story central exhibition space, 4: Large Exhibition Space, 5: Exhibition/Conference Room, 6: Cafeteria, 7: Access to upper story, 8: Elevator, 9: Spiral Staircase, 10: Storeroom, 11: Hydraulic Ramp, 12: Office, 13: Kitchen, 14: Service facilities, 15: Bathroom





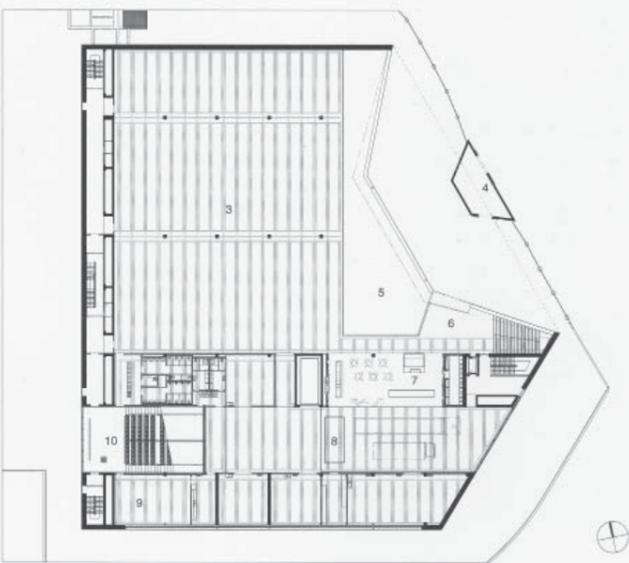
FONDATION BEYELER BASELSTRASSE 101, CH-4125 RIEHEN/
 BASEL (1997) RENZO PIANO



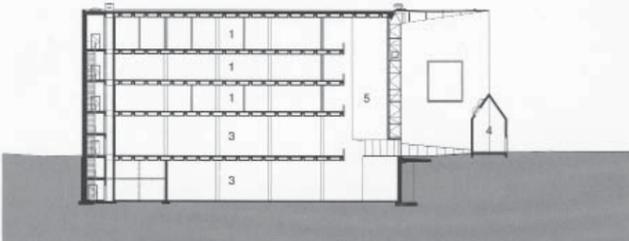
Plan of Fondation Beyeler



SCHAULAGER RUCHFELDSTRASSE 19, CH-4142 MÜNCHEN-
 STEIN/BASEL (2000-3) HERZOG & DE MEURON



Plan of Schaulager



Section of Schaulager



STUDY TOUR SCHWEIZ + FR, ID & AT 2011 THURSDAY MARCH 31 (1)

- 06:00:** BREAKFAST START: **BASEL ST. ALBAN YOUTH HOSTEL**
Sankt Alban-Kirchrain 10, CH-4052 Basel www.youthhostel.ch/basel (+41 (0)61 - 272 08 33)
- 09:00:** BUS PICK UP: **BASEL ST. ALBAN YOUTH HOSTEL**
- 10:30:** BUS DROP OF: **CHAPELLE NOTRE-DAME DU HAUT F-70250 Ronchamp** <http://s343802320.onlinehome.fr/~valide/chapelle> (33 (0)3 84 20 65 13)
- 12:30:** BUS PICK UP: **CHAPELLE NOTRE-DAME DU HAUT THEATRE GRANIT 1 faubourg de Montbéliard BP117, FR-90002 Belfort cedex.**
THE LIGHTHOUSE SPORTS & EVENTS CENTRE Fort Hatry, FR-90000 Belfort
RICOLA EUROPE MULHOUSE Rue de L'ill, FR-68100 Mulhouse
ÉCLUSE DE KEMBS NIFFER Rue des Romains (Canal de Neuf-Brisach, Embranchement de Huningue-Rhin, Haut Rhin), FR-68680 Kembs
BUS DROP OF: **BASEL ST. ALBAN YOUTH HOSTEL**
ACCOMODATION: **BASEL ST. ALBAN YOUTH HOSTEL**



CHAPELLE NOTRE-DAME DU HAUT F-70250 RONCHAMP (1950-4) LE CORBUSIER WITH ANDRÉ MAISONNIER

Le Corbusier at first rebuffed the invitation to design the chapel at Ronchamp, which came soon after Church authorities had rejected his project for the shrine of Saint Mary Magdalene at La Sainte-Baume. But believing that modern art could rejuvenate the Church, Canon Lucien Ledeur of Besancon and Father Alain Couturier, who would also be instrumental in the commission for La Tourette, prevailed on him to accept the job by promising him design freedom.

Dissent from within the Church was to be expected, but the completed chapel shocked the architectural world as well. Those who revered Le Corbusier as champion of reason saw the “freedom” of the chapel as an expressionist, irrational aberration.⁸ The chapel is unique if not anti-typological within the work of an architect known for his typologies. Others saw its organic form as a humanistic enrichment of modern architecture and its Modulor proportions as evidence of its underlying rationality. From a current perspective, it appears an exploration of reason’s limits and excesses. Supporting this are Le Corbusier’s own impassioned equivocations in *The Modulor*. “It was a pleasure here [at Ronchamp] to allow free play to the resources of the Modulor, keeping a corner of one’s eye on the game to avoid blunders. For blunders lie in wait for you, beckon you on, tug at your sleeve, drag you down into the abyss.”⁹ He challenged: “The Modulor everywhere. I defy the visitor to give the dimensions of the different parts of the building.”¹⁰ Taking the challenge in a brilliant analysis, Robin Evans has found Modulor measurements alternately displayed as ornamental lines on the floor and furnishings or buried as the structural armature within canted walls, whose curved surfaces exceed the Modulor’s logic.¹¹

The great source of inspiration for Ronchamp other than the Modulor was the landscape. The generalized terms Le Corbusier used to describe his work often overshadow the complexity of its site-specific response; in this case, he acknowledged the dominant role of the hillside from the first. The plan is four curved lines, an “acoustical” response to the four horizons viewed from the hilltop: the valley of the Saône to the west, the chain of the Vosges to the east, a small valley to the south, and a northern valley beyond which rise the Jura mountains and the landscape of Le Corbusier’s youth. By “acoustic”—a term he had employed in the earlier

Swiss Pavilion—he meant to describe “how the curved walls simultaneously gather and open to the landscape... to give a suggestion of the great extent of the landscape, far beyond the building’s boundary”¹² and beyond the boundary of optical experience.

The site’s history as a sacred place also entered into the design. The chapel stands on the foundation of a church dating from the twelfth century, which had been rebuilt several times before its total destruction in World War II. Worship on the hilltop dates back to a megalithic cult of the sun, continuing through Roman times until it became associated with an effigy of the Virgin with mystical powers. The coupling of sun and Virgin resonated with Le Corbusier’s personal cosmology of masculine and feminine powers. Whereas his male principle is “strong objectivity of form against the light of the Mediterranean sun,” the feminine is “limitless subjectivity rising against a clouded sky.”¹³ The site’s associations with the Virgin led Le Corbusier to use the sensual forms of the rolling landscape and the female body found in his paintings. The feminine is explicitly named in the three light canons of Ronchamp, two white and one red, which Le Corbusier dedicated to the Virgin, his mother and, his wife Yvonne. Embodied in the singular site of Ronchamp, the uncontrolled subjectivity of the feminine is kept safely distinct from the rational program of modern architecture.

The inscription on a stained glass window, ends recalls the connection of mother and sea imbedded in the French language.¹⁴ At Ronchamp, the absent sea and missing well spring are made present in the exterior water basin. Le Corbusier likened the roof form to a crab shell found on a Long Island beach. In the dim chapel, the roof swells up, the floor dips down, and the western wall ripples as if the space were somehow fluid.

Le Corbusier saw mountain and sea as opposite but complimentary poles of the natural world. The reference to water and sea is an effort to imaginatively complete the landscape of Ronchamp through architecture. Such an ideal landscape in its complete form existed for Le Corbusier at the Acropolis which extends “from the Pentelicus to the Piraeus, the mountains to the sea.”¹⁵ Based on the qualities of the site and his own sense of the sacred, Le Corbusier fashioned a personal acropolis at Ronchamp with a Panathenaic procession and an ontogeny of religious forms. The sequence starts at the bottom of the hill and the beginning of time with an artificial hillock like a dolmen or burial mound, before reaching the propylaeum of the youth hostel and parish house. The chapel rises out of the hill like a Greek temple in three-quarter view. To the east is a ziggyurat, officially a monument to the dead of World War II but also an ancient altar, a sacred mountain, a necropolis. In Le Corbusier’s own work it had appeared in the Mundaneum project (1929) as a museum of complete knowledge. To the west is a bell tower, the essential fragment of the Gothic cathedral that once stood here. file Corbusier intended that the bells be electronically programmed to play modern music by Edgar Varese so that the site would have a “structural link between time and sound” and a “limitless voice coming from the most distant ages and reaching the most modern hours of the day.”¹⁶

A sequence of axial perspectives defined but not enclosed by these built outcroppings draws the pilgrim around the chapel counterclockwise and past the available entrances in a procession most critics describe as magnetic. The path comes to rest at the open-air altar in nature, the primary place of worship according to the architect: “inside a little talk with oneself Outside, To,ooo pilgrims before the altar.”¹⁷

The iconography of Ronchamp exceeds a cohesive summation. Part of the mystique of the chapel is the process by which its roving array of inspirations culled from Le Corbusier’s memory joined with his immediate responses to produce its form. Some have used the text of Le Corbusier’s *Poème de l’angle droit*, which is steeped in mythology and alchemy, to unlock an allegory based on the figure of the bull-minotaur, whose profile might appear on the western wall.¹⁸ Le Corbusier gives an array of disparate architectural sources: the stone storage chambers of the Serapeum of Hadrian’s villa for the light canons, industrial dams for the battered walls, the mosques of M’zàb. He remarked that Ronchamp “was not a matter of pillars but of plastic event... ruled not by scholarly or academic formulae but free and innumerable.”¹⁹

Underlying the sacred space is a tectonic argument between the pillar and plastic event. Ironically, after a lifetime asserting the primacy of the column and its pedigree in the Greek temple, the chapel appears constructed of

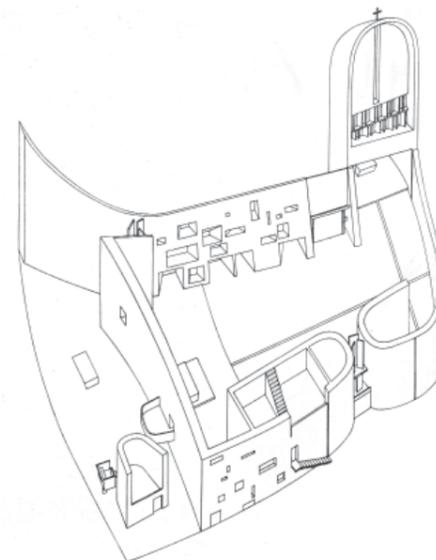
battered walls evoking a sacred cave such as the one Le Corbusier drew for La Sainte-Baume. In contrast, the open-air altar beneath the draped concrete roof appears like the fabric tent of the Hebrew tabernacle²⁰ which Le Corbusier considered the origin of architecture, and repeatedly interpreted in the Pavillon de Temps Nouveau (1937) and the hyperbolic curves of the Phillips Pavilion (1958). The roof closely resembles the stressed skin membranes of tents and aircraft.²¹ It has two thin concrete shells (6 cm each) held 2 meters apart by internal concrete girders and pre-cast beams. The originally intended structure of a metal truss with aluminum sheathing made the aerodynamic inspiration explicit. The great pivoting door retains this metal structure. Much of the drama of the building comes from this explosion into membranes and suspended planes of what first seems a solid mass of a building.

While buried beneath the illusion of tent and cave, the column is still of primary importance. Three walls have concrete columns imbedded in the rubble from the destroyed church. The southern wall is a concrete armature (of Modular proportions) sprayed with Gunite. Both the slot of space below the roof and the single, exposed post by the outdoor altar make the columnar presence quite clear.

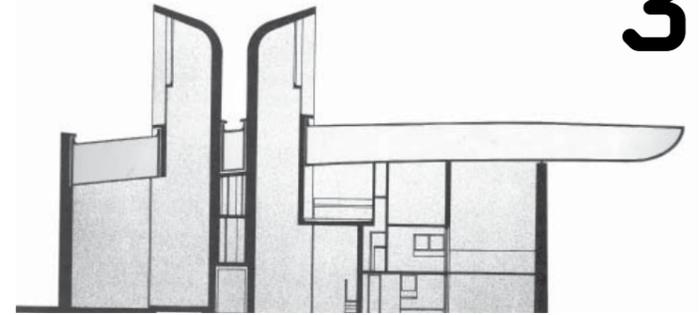
Given the activity of form, the wealth of imagery, and the complexity of structure, the interior of the chapel is striking in its subdued and empty quality. The ancillary chapels with their dramatic lighting are hidden. The floor slopes away, as does the roof. In the words of Tafuri, “a programmatic loss of center... [reveals] his art in search of its own origins.”²² The point of arrival is a point of departure.

8. James Stirling, “Ronchamp and the Crisis of Rationalism,” *Architectural review* 119: 155-61.
9. Le Corbusier, *Modulor* 2:254.
10. Le Corbusier, *Text and Sketches from Ronchamp*, unpaginated.
11. Robin Evans, The Projective cast, 272-320.
12. Le Corbusier, *The Chapel at Ronchamp*, 110. Also, Jean Petit, *Le Livre de Ronchamp*, 35.
13. Le Corbusier *Modulor* 1: 224.
14. The words “mère” (mother) and “mer” (sea), are homonyms. For iconography at Ronchamp see the authoritative work of Danièle Pauly, *Lecture d’une architecture*, 347. Also see Danièle Pauly, “The Chapel of Ronchamp as an example of Le Corbusier’s Creative Process,” Brooks ed., *Le Corbusier*. For a discussion of the feminine see also Evans, *Projective Cast*, 287.
15. Le Corbusier, *Towards*, 187.
16. Le Corbusier, *Ronchamp*, unpaginated.
17. Ibid. Also, for the procession see, Stuart Cohen and Steven Hurr, “The Pilgrimage Chapel at Ronchamp,” *Oppositions* 19/20: 142-57.
18. For iconographic interpretation see Richard Moore, “Alchemical Symbolism in the Poem of the Right Angle,” *Oppositions* 19/20; also Richard Moore *Le Corbusier Myth and Meta Architecture: The Late Period*.
19. Le Corbusier, *Modulor* 2: 253.
20. Kenneth Frampton, *Modern Architecture*, 228-9.
21. For airplane technology see Ford, *Details* 2: 189-95.
22. Manfredo Tafuri, *Modern Architecture*: 2, 319

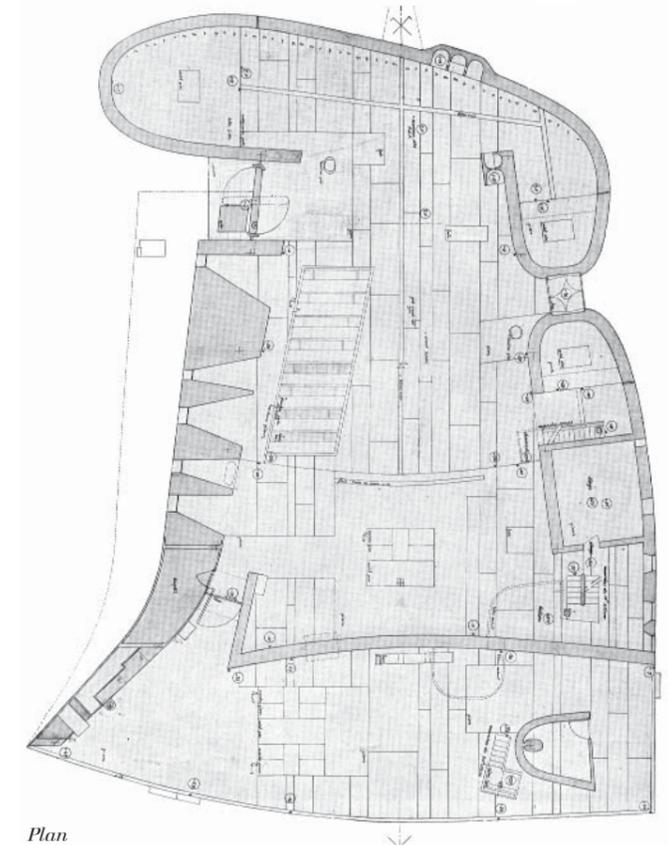
(From: GANS, Deborah: *The Le Corbusier Guide* Princeton Architectural Press, New York, 1987)



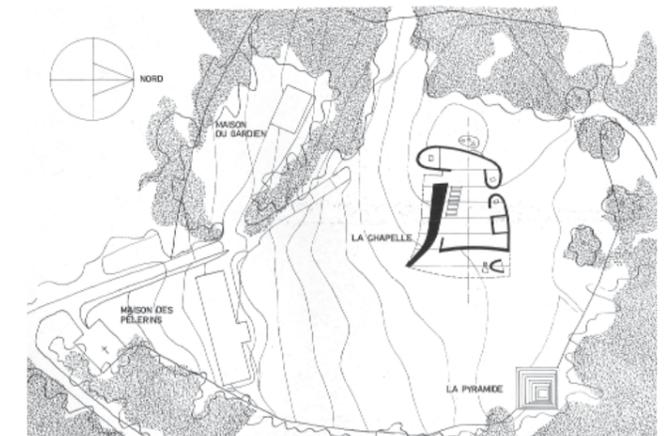
Axonometric view from north



Section from west to east looking north



Plan



Site Plan

STUDY TOUR SCHWEIZ + FR, D & AT 2011 THURSDAY MARCH 31 (2)



THEATRE GRANIT 1 FAUBOURG DE MONTBÉLIARD BP117, FR-90002 BELFORT CEDEX (1983) JEAN NOUVEL

The renovation of a 19th century theater gave Jean Nouvel an opportunity to demonstrate the validity of principles set out in previous designs with Jaques Le Marquet. The ideal approach is to highlight the characteristic features of the building's architecture. The original Belfort building had undergone a haphazard series of alterations and additions. Nouvel mitigates the effect of these bush-hammering hatching into the shoddy plasterwork thus exposing the brick. An opening onto town was hewn out of the blind façade perched over the river. This new opening was an architectural section in a very literal sense and it revealed the life of the building, its rehearsal rooms, brasserie and bar. The interior treatment combines two contrasting aesthetic approaches: The first, conceived by Gary J. Glaser, tends to recreate and enhance the pomp and finery of former periods by highlighting the mannered gilding, moldings and frescos, reinterpreting the auditorium's color scheme; while the other transfixing the dilapidated spaces, illuminating them subtle motifs-punk dignified by an unexpected touch of sophistication. With its electronic bulletin boards and flashing neon lights, the theatre proclaims its revamped past and its new vocation. (Text: www.jeannouvel.com)



THE LIGHTHOUSE SPORTS & EVENTS CENTRE FORT HATRY, FR-90000 BELFORT (2008) ARCHI5

The city of Belfort was planned to control the pass between the Jura and the Vosges. It's pentagonal plan, was designed in 1687 by Vauban, completed and reorganised by the General Haxo from 1817 and on. The Fort Hatry where the sports and events arena of Belfort is located was one of the exterior bastions of this defence device.

The fortifications have a geometry not derived from the urban orthogonal grid but with multiple directions designed to control movement, conceived to obtain clear sight lines, designed for the art of war, with an aesthetic of edges and folded walls.

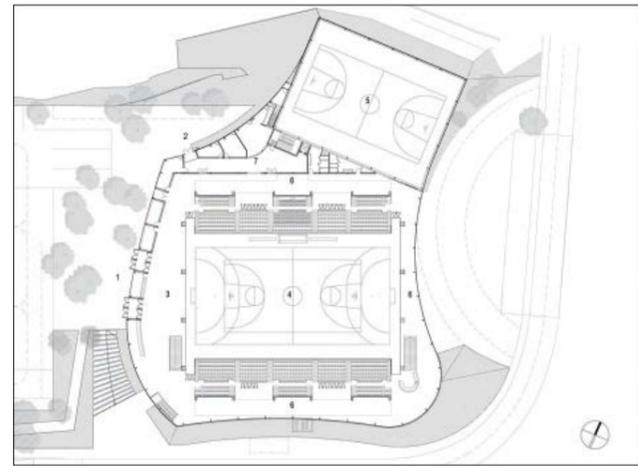
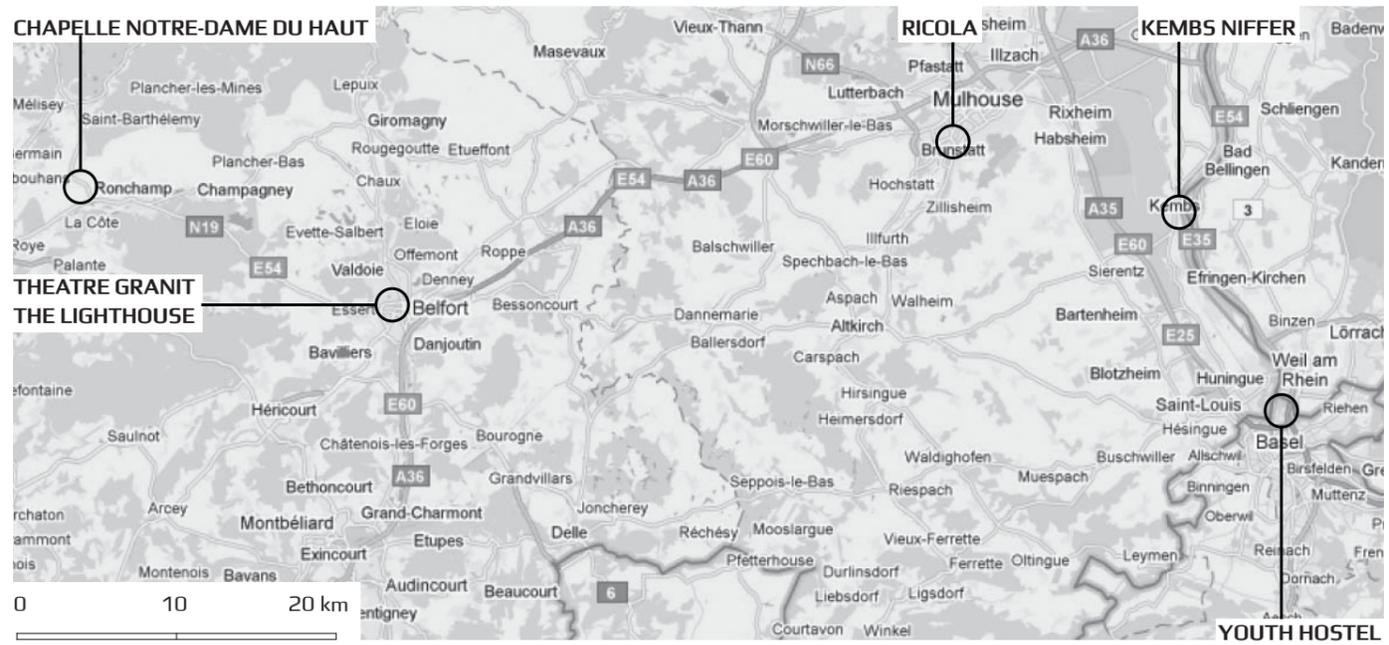
Since it's dismissal as a defence device the Fort Hatry has become an informal park used for open air activities, leisure and events, giving place for ephemeral structures such as luna park's and circuses.

It is today a transitional space, an infrastructural knot where roads and railways cross at different levels and at different speeds.

Conceived as a powerful landmark, the new building establishes a strong relationship with the majestic skyline of the nearby Vosges mountains and the Belfort Castel."...

"Recalling the fluidity and the dynamic of sports activities, the façade of the sports arena makes a flexible and generous movement through the landscape. Convex and concave folds react to the existing straight lines.

The envelope of the building, realised in translucent glass with a smooth and crystalline quality picks up the subtle colouring of the natural light, the sky and the landscape. At night the building is transformed into a bright lighthouse, fully expressing the events taking place inside. (Text: www.openbuildings.com/buildings/the-lighthouse-sports-and-events-arena-profile-3443.html)



Plan of the Lighthouse Sports & Events Centre

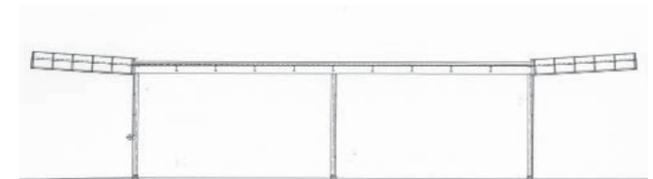


RICOLA EUROPE MULHOUSE RUE DE L'ILL, FR-68100 MULHOUSE (1992-3) HERZOG & DE MEURON

The new building is situated on an idyllic wooded property between the Rhine-Rhone Canal and the Ill river on the southern periphery of Mulhouse. It is to be used for both a storage building and a production site; a simple hall with a flexible layout provides the perfect solution. The shape of the building reminds one of a box lying on the ground, the flaps opened up; the parapets cantilevering on both longitudinal sides open up towards the landscape on one side, and towards the entrance and loading area of the forklifts and transportation vehicles on the other. They also provide shade and protection from the weather.

The narrow sides of the factory building are terminated by a black concrete wall. The drainage water from the roof runs down these walls: it forms a thin algae film on the wall as a kind of natural drawing. The two longitudinal sides are designed as lightwalls, providing the work area with regular, comfortably filtered daylight. This filtering of the light is effected through the imprinted translucent facade panels made of polycarbonate, a common industrial building material. On the inside of the plastic panels, a plant motif based on a photograph by Karl Blossfeldt was added in a repetitive silk-screen procedure.

The effect of the interior space can be compared to that of a curtain, creating a relationship with the foliage of the surrounding area. Seen from the outside, the translucent imprinted surfaces of the facade and parapet have a textile-like character as well, comparable to the lining of a skirt or of a tin can. When the angle of the light changes, the imprint is hardly visible from the outside, and the facade panels' material quality comes to the foreground: the surfaces are then quite dosed-up and flat in appearance, and their expression approaches that of the lateral concrete walls. (Text: WANG, Wilfried: *Herzog & de Meuron*, Birkhäuser Verlag, Basel, 1992)



Section of Ricola Europe Mulhouse



ÉCLUSE DE KEMBS NIFFER RUE DES ROMAINS (CANAL DE NEUF-BRISACH, EMBRANCHEMENT DE HUNINGUE-RHIN, HAUT RHIN), FR-68680 KEMBS (1960-2) LE CORBUSIER & ALAIN TAVÈS

At the initiative of M. Bouchet, the regional director for roads and bridges, Le Corbusier designed the customs house and watchtower for this lock on a branch of the Rhône-Rhine Canal.²³ The modest program on an extended site offered him an opportunity to elaborate on some favored landscape themes. As in many late works, Le Corbusier treated the flow of water as a significant if not mythic power. Here, the architecture dramatizes the level changes of the lock, the fall of the water, and the branching of the canal.

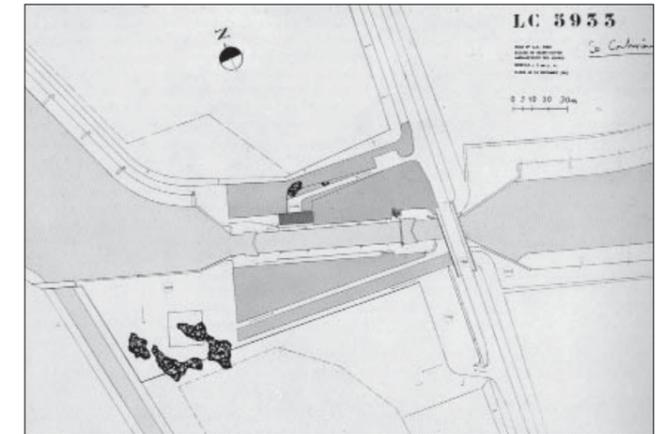
The vertical section of the structures and the designated path through them are mimetic of the site. The entry sequence first descends a flight of steps built into the hillside and then, from the machine room, ascends a stair case to the main floor at the level of the lock. The machine room chimney extends through the sod-covered roof to the height of the customs house as a vertical complement to the horizontal water and as a totem denoting the levels of the site. The watchtower is an enclosed fragment of a much larger vertical axis connecting the levels of the sluiceway. Its stairs continue down along the natural cliff to the lowest level of water.

The architecture also narrates the parting of the canal water. The watchtower establishes two distinct views from the two stairway flights on either side of the central concrete support, one toward the Rhine, the other toward the main canal. The views are joined in a continuous panorama from the lookout station, which is twisted off the orthogonal of the tower. Similarly, in the customs house, the twist of the roof and placement of the end columns create the impression that the building has been laterally pulled in two, creating a path between. The "columns" are actually drainpipes fed by the angles of the roof. The continuous rain water, divided into two streams by the roof, recapitulates the embranchment of the canal. From a distance, the V-shape of the roof engages a broad section of sky, drawing it deep into the crux of the building. This figure appears in other of Le Corbusier's work, most notably his project for the Errazuris house (1930). Here on the flat Alsatian plane, the diagonals also appear perspective lines lead-ing to opposite horizons at either end of the canal.

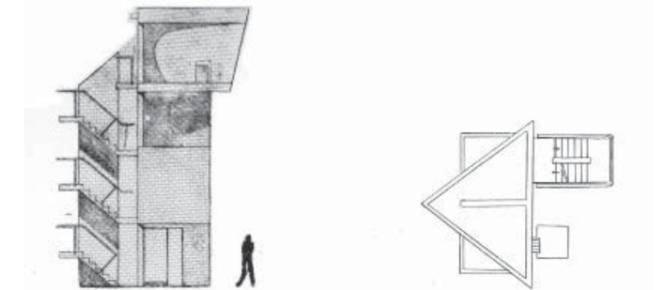
As a water machine, the lock is intrinsically connected to the work of Le Corbusier, whose obsession with nature also extended to refashioning it as "machines for living." He was fascinated by water, its horizontal leveling, and the natural cycles to which it belongs. His oeuvre is filled with buildings on the edge of bodies of water, either manmade or suitably framed, the Heidi Weber Pavilion, the Unite at Nantes, the Assembly at Chandigarh, la Petite Maison at Vevey among them. The lock afforded an already complex situation to which Le Corbusier responded by reiterating its play between natural and constructed boundaries.

23. Bagot and Dion, *Le Corbusier en France*, 185.

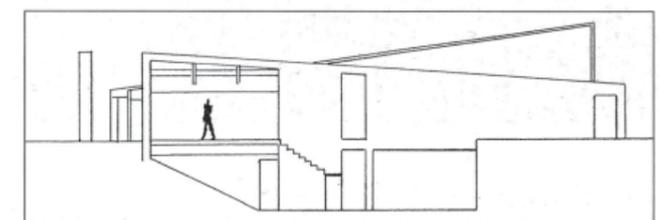
(From: GANS, Deborah: *The Le Corbusier Guide* Princeton Architectural Press, New York, 1987)



Siteplan of Écluse de Kembs Niffer



Elevation view and roof plan of the control tower



Sections of the Custom House

06:00: BREAKFAST START: BASEL ST. ALBAN YOUTH HOSTEL
Sankt Alban-Kirchrain 10, CH-4052 Basel www.youthhostel.ch/basel (+41 (0)61 - 272 08 33)

08:00: BUS PACKING: BASEL ST. ALBAN YOUTH HOSTEL

08:30: BUS PICK UP: BASEL ST. ALBAN YOUTH HOSTEL

10:00: BUS DROP UP: MÜLLER SIGRIST ARCHITEKTEN AG
Hildastrasse 14a, CH8004 Zürich www.muellersigrist.ch (+41 (0)44 - 201 91 09)

15:00: BUS PICK UP: ZÜRICH

18:00: BUS DROP UP: HOTEL THERME CH-7132 Vals www.therme-vals.ch/en/hotel (+41 (0)81 - 926 80 80) GASTHAUS EDELWEISS CH-7132 Vals www.edelweiss-vals.ch +41 (0)81 - 935 11 33 HOTEL GLENNER CH-7132 Vals www.glenner.ch (+41 (0)81 - 935 16 68)

DINNER: RESTAURANT CHESSI, HOTEL THERME (from 18:00 - 21:00. Bath until 20:00), HOTEL GLENNER & GASTHAUS EDELWEISS

ACCOMODATION: HOTEL THERME, HOTEL GLENNER & GASTHAUS EDELWEISS



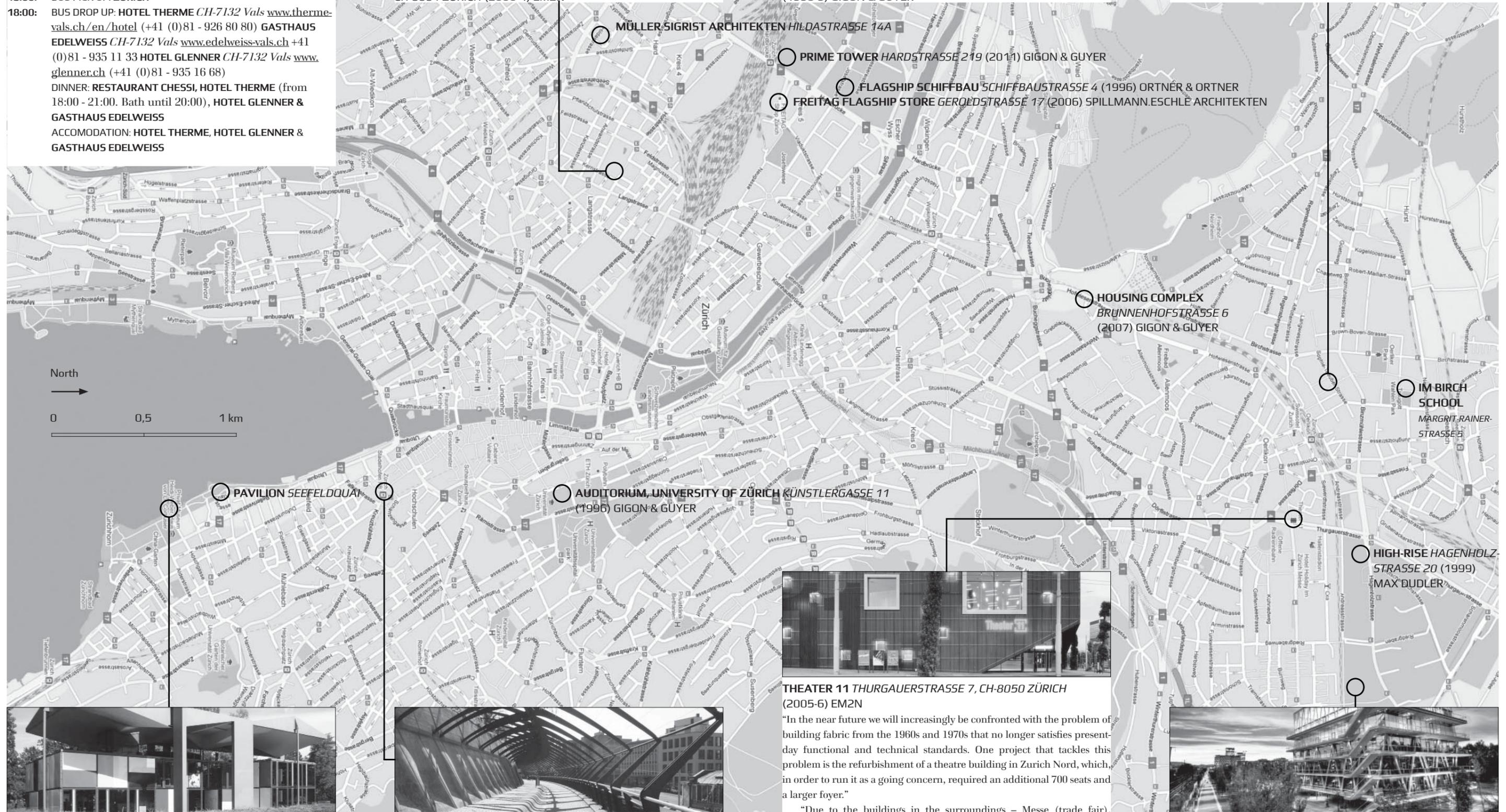
COMMUNITY CENTRE AUSSERSIHL HOHLSTRASSE 67, CH-8001 ZÜRICH (2000-4) EM2N



SIGNAL BOX ECKE HOHLSTRASSE/DUTTWEILERBRÜCKE (1998-9) GIGON & GUYER



MFO PARK NEU OERLIKON (2002) BURCKHARDT + PARTNER



MÜLLER SIGRIST ARCHITEKTEN HILDASTRASSE 14A

PRIME TOWER HARDSTRASSE 219 (2011) GIGON & GUYER

FLAGSHIP SCHIFFBAU SCHIFFBAUSTRASSE 4 (1996) ORTNER & ORTNER

FREITAG FLAGSHIP STORE GEROLDSTRASSE 17 (2006) SPILLMANN.ESCHLE ARCHITEKTEN

HOUSING COMPLEX BRUNNENHOFSTRASSE 6 (2007) GIGON & GUYER

IM BIRCH SCHOOL MARGRIT-RÄINER-STRASSE 5

PAVILION SEEFELDTQUAI

AUDITORIUM, UNIVERSITY OF ZÜRICH KÜNSTLERGASSE 11 (1996) GIGON & GUYER

HIGH-RISE HAGENHOLZ-STRASSE 20 (1999) MAX DUDLER



HEIDI WEBER HAUS HÖSCHSGASSE 8, CH-8034 ZÜRICH (1964-7) LE CORBUSIER



STADELHOFEN STATION STADELHOFFERSTRASSE, CH-8001 ZÜRICH (1984) SANTIAGO CALATRAVA



THEATER 11 THURGAUERSTRASSE 7, CH-8050 ZÜRICH (2005-6) EM2N

"In the near future we will increasingly be confronted with the problem of building fabric from the 1960s and 1970s that no longer satisfies present-day functional and technical standards. One project that tackles this problem is the refurbishment of a theatre building in Zurich Nord, which, in order to run it as a going concern, required an additional 700 seats and a larger foyer."

"Due to the buildings in the surroundings – Messe (trade fair), Hallenstadion (sports stadium) – we aimed for a direct, raw and industrial kind of expression." (Text: www.em2n.ch)



LEUTSCHENBACH SCHOOL SAATLENFUSSWEG 3, CH-8050 ZÜRICH (2009) CHRISTIAN KEREZ



THERME VALS CH-7132 VALS (1990-6) PETER ZUMTHOR

Out of the eastern flank of the basin-shaped valley of Vals, a good 1,200 metres above sea level, rises a spring, its waters a warm 30°C. Beyond the spring is the village of Vals, a ribbon of rough-stone-roofed, timber farmhouses strung along the narrow Valserrhein river valley. The site next to the spring was once occupied by a modest spa hotel dating from 1893. The hotel had a number of finely appointed bathing cabins and shower rooms, according to a local historian, and, from around 1930, its yearlywinding clientele had the opportunity to bathe in a small outdoor pool filled with thermal waters which turned red on exposure to the air.

The hotel was replaced by the present thermal bath complex in around 1960, before alpine rusticism once again became the defining style of most new tourist facilities in the valleys of the Alps. The 1960s spa is simply built and, although it suffers from a number of architectural and technical problems, it has a straightforward presence, with a faint glimmer of the lightness of 1950s architecture which has long since been lost in this region.

This second spa has in turn become obsolete, and has been replaced by the new thermal bath from the end of 1996. The new bath is an independent structure set into the sloping southwest corner of the existing hotel area. Access is via a subterranean passage leading from the hotel. The building takes the form of a large, grass-covered stone object set deep into the mountain and dovetailed into its flank. It is a solitary building, which resists formal integration with the existing structure in order to evoke more clearly - and achieve more fully - what seemed to us a more important role: the establishing of a special relationship with the mountain landscape, its natural power, geological substance and impressive topography. In keeping with this idea, it pleased us to think that the new building should communicate the feeling of being older than its existing neighbour, of always having been in this landscape.

Mountain, stone, water, building in stone, building with stone, building into the mountain, building out of the mountain - our attempts to give this chain of words an architectural interpretation, to translate into architecture its meanings and sensuousness, guided our design for the building and step by step gave it form.

Consequently the design process was a playful but patient process of exploration independent of rigid formal models. Right from the start, there was a feeling for the mystical nature of a world of stone inside the mountain, for darkness and light, for the reflection of light upon water, for the diffusion of light through steam-filled air, for the different sounds that water makes in stone surroundings, for warm stone and naked skin, for the ritual of bathing. From the start, there was the pleasure of working with these things of consciously bringing them into play. Only much later, when the design was almost complete, did I visit the old baths in Budapest, Istanbul and Bursa, and understand more fully not only the sources of these seemingly universal images, but their truly archaic nature.

So our bath is not a showcase for the latest aquagadgetry, water jets, nozzles or chutes. It relies instead on the silent, primary experiences of bathing, cleansing oneself, relaxing in the water; on the body's contact with water at different temperatures and in different kinds of spaces; on touching stone.

A continuous internal space, like a geometric cave system, meanders through the bath's structure of large stone blocks, growing in size as it moves away from the narrow caverns by the mountain towards the daylight at the front. At the front edge of the building there is a change of perception. The outside world penetrates through large openings and merges into the carved-out system of caverns. The building as a whole resembles a large porous stone. At the points where this "large stone" projects out of the slope,

the precisely cut cavern structure becomes facade.

And this stone is built of stone. The section and profile of the structure as a whole is determined by a continuous series of natural stone strata - layer upon layer of Vals gneiss, quarried 1,000 metres further up the valley, transported to site, and built back into the same slope.

The walls are modelled after old retaining walls. In structural terms, they form a homogenous composite construction of layered stone blocks and reinforced concrete. This technique, which the construction workers have dubbed "Vals composite masonry", was specially developed for the building.

From an architectural viewpoint, the uniform stone layering appears to be almost literally monolithic. Circulation areas, pool floors, ceilings, stairs, stone benches, door openings - all are developed out of the same consistent layering principle. One stone layer is placed on top of another stone layer. The transitions from floor to wall and from wall to ceiling are detailed in this way. Similarly, the technical solutions - pool- and floor-waterproofing, pool overflows, sluicing-channels, heating, airconditioning, thermal insulation and expansion joints - have been designed to reinforce the monolithic, homogenous presence of the structure as a whole: they either fit the pattern of layering and joining stone masses (e.g. water overflows, sluicing channels, vertical expansion joints), or are incorporated within the composite construction of stone and concrete (e.g. waterproofing, thermal insulation, horizontal expansion joints.)

Thus, with the finishing of the superstructure, the building itself is practically complete. The final building will contain only a small number of basic details which can be explained quite directly by their use, such as the water channels hewn out of the mass of the stone floor, the carefully placed handrail and gripail stanchions, or the brass pipes punched through the masonry to carry both natural and treated thermal waters to the various basins and gulleys.

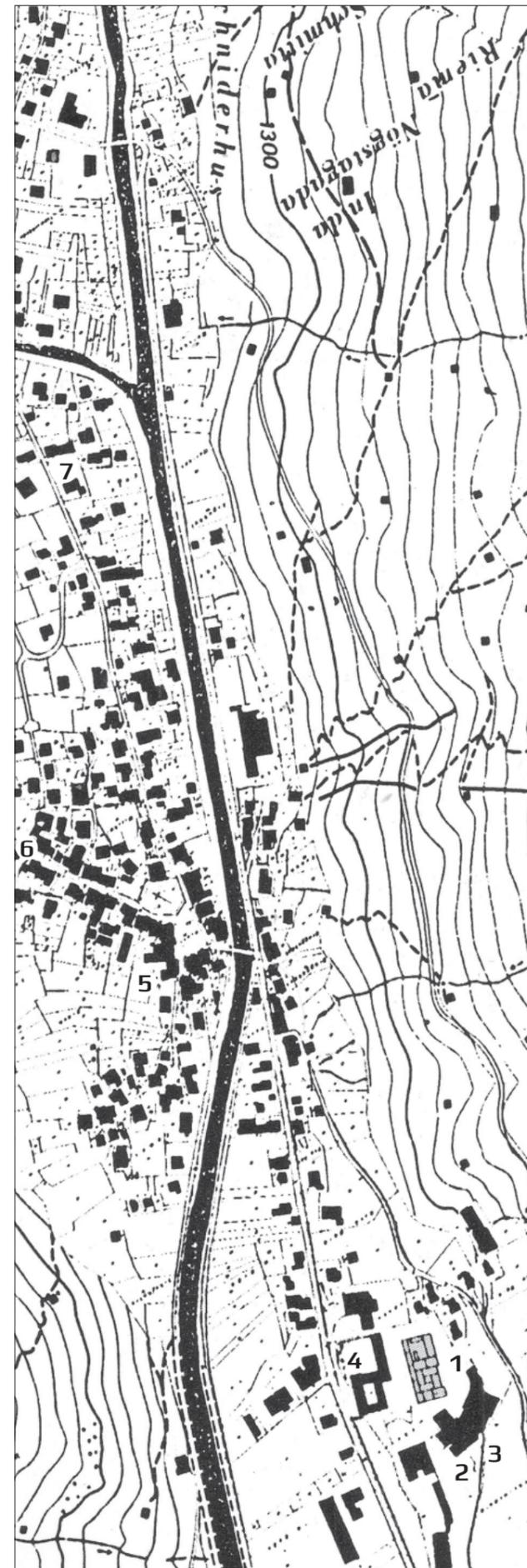
The building has been conceived as a technically ordered, architectonic structure which avoids naturalistic forms. Yet within its homogenous stone mass it still retains a clear sense of the strongest of the initial design ideas - the idea of hollowing out. The sunken springwater basins and gulleys appear chiselled out of the dense mountain rock.

The idea of hollowing out a huge monolith and providing it with caves, sunken areas and slots for a variety of uses also helped to define a strategy for cutting up the stone mass towards the top of the building, to bring in light. The large blocks in the plan are matched by a network of fissures in the ceiling, so that one side of each block is washed by toplight. This has created a new spatial dimension which characterizes the bathing level and suggests an additional way of reading the building: here, the meandering internal space is structured by big "tables" of stone, assembled in a geometric pattern. The stone field of the floor is linked, by a kind of footplate, to the blocks, which in turn carry hefty slabs of concrete - the "table tops". Daylight filters in through the narrow gaps between the individual ceiling slabs.

This is what visitors experience when they leave the artificially lit cavern system of the entrance, pass through the darkly clad changing rooms, and step onto a raised band of rock to see, for the first time, as bathers now, the continuous space of the bathing floor lying before them. And when they climb down into the landscape of blocks and wander through the different interconnected opening and closing spaces, they become aware that the blocks have doors cut into them, and that each block contains a special hollowed-out space. These spaces serve functions which require intimate, or benefit from it. During the course of construction, the blocks have acquired names which indicate what these different functions are: sweat stone, shower stone, massage block, drinking fountain stone, rest space, fire bath, flower bath, cold bath, sounding stone. Traditional therapies such as medicinal baths, mud treatments, massages and physiotherapy are offered in further blocks on the lower floor.

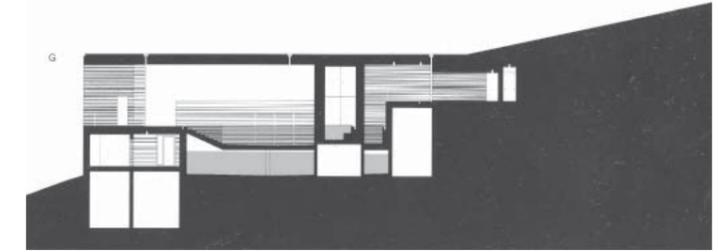
The blocks are loosely assembled in recurring figurative patterns, which are often tied into various orthogonal ordering lines. Underlying this informal layout is a carefully modelled path of circulation which leads bathers to certain predetermined points but lets them explore other areas for themselves. The large continuous space between the blocks is built up sequentially. The perspective is always controlled. It either ensures or denies the view, guaranteeing the distinct spatial quality of each element of the sequence while respecting its function and meaning within the whole.

(text by: Peter Zumthor in: *A+U Architecture and Urbanism* 1998, Peter Zumthor)

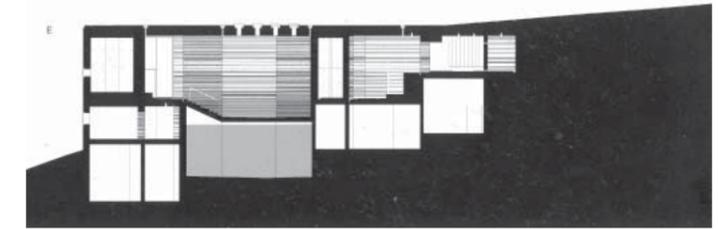


Site plan of Vals

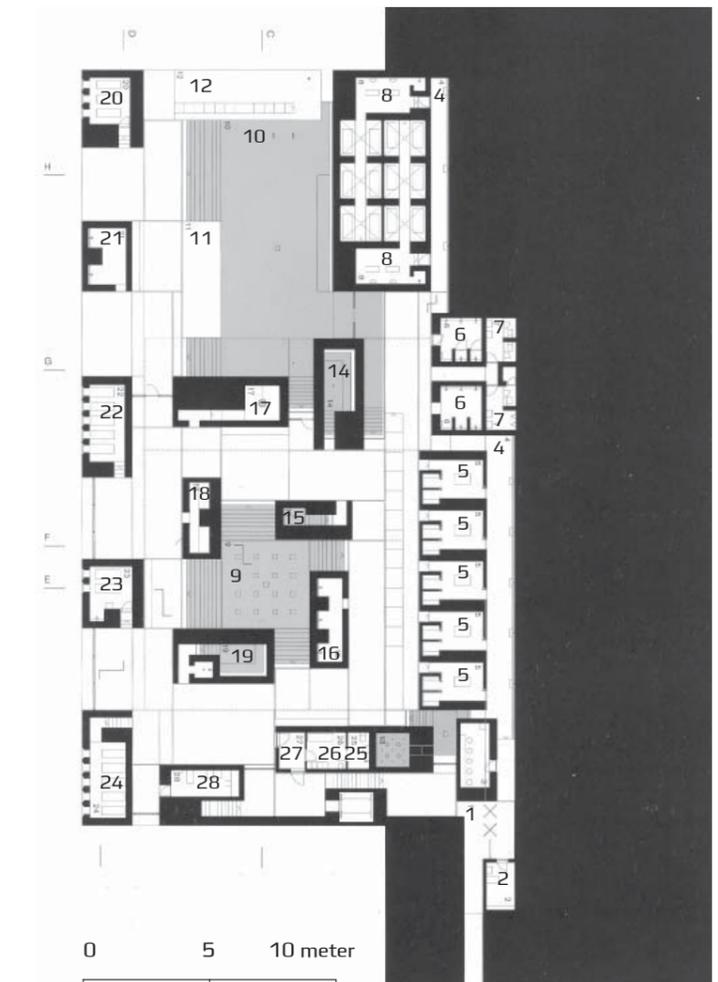
1: Therme, 2: Therme Entrance, 3: Hotel Therme Entrance, 4: Restaurant Chessi, 5: Hotel Alpina, 6: Gasthaus Edelweiss, 7: Hotel Glenner



Section G



Section E



Plan of bathing level

1: Entrance and Exit Area, 2: Utility Room, 3: Make-up Room, 4: Hall with Drinking Fountain, 5: Changing Room, 6: Showers, 7: Rest Rooms, 8: Sweat-stone with Turkish Showers and Sweat Chambers 42°C/107,6°F, 9: Indoor Bath 32°C/90°F, 10: Outdoor Bath 36°C/96,8°F, 11: Island of Stone, 12: Stone Terrace, 13: Spring Grotto 36°C/96,8°F, 14: Fire Bath 42°C/107,6°F, 15: Cold Bath 14°C/57,2°F, 16: Shower Stone, 17: Drinking Stone, 18: Sounding Stone, 19: Flower Bath 30°C/86°F, 20: Rest Space, 21: Outdoor Shower Stone, 22: Rest Space 2, 23: Massage, 24: Rest Space 3, 25: Disabled Rest Room, 26: Disabled Cloak Room, First Aid, 27: Disabled Entrance, 28: Bath Attendants

STUDY TOUR SCHWEIZ + FR, D & AT 2011

SATURDAY APRIL 2 (1)

- 07:00:** BATH OPENS FOR GUESTS FROM: **HOTEL THERME**
BREAKFAST: **HOTEL THERME CH-7132 Vals** www.therme-vals.ch/en/hotel (+41 (0)81 - 926 80 80) **GASTHAUS EDELWEISS CH-7132 Vals** www.edelweiss-vals.ch **HOTEL GLENNER CH-7132 Vals** www.glenner.ch (+41 (0)81 - 935 16 68)
- 11:00:** BATH RESERVATION: **GASTHAUS EDELWEISS & HOTEL GLENNER**
- 11:30:** BUSPACKING: **HOTEL THERME**
- 12:00:** BUS PICK UP: **HOTEL THERME**
- 15:00:** BUS DROP OF: **KUNSTHAUS BREGENZ Karl-Tizian-Platz, AT-6900 Bregenz** www.kunsthhaus-bregenz.at (+41 5574 48594-0)
GUIDED TOUR: **KUNSTHAUS BREGENZ**
- 17:00:** BUS PICK UP: **KUNSTHAUS BREGENZ**
- 19.30:** BUS DROP OF: **LUZERN YOUTH HOSTEL Sedelstrasse 12, CH-6004 Luzern** www.youthhostel.ch/luzern (+41 (0)41 - 420 88 00)
EVENING TOUR: **KKL LUZERN**
ACCOMODATION: **LUZERN YOUTH HOSTEL**



KUNSTHAUS BREGENZ KARL-TIZIAN-PLATZ, AT-6900 BREGENZ (1990-7) PETER ZUMTHOR

The art museum stands in the light of Lake Constance. It is made of glass and steel and a cast concrete stone mass which endows the interior of the building with texture and spatial composition. From the outside, the building looks a lamp. It absorbs the changing light of the sky, the haze of the lake, it reflects light and colour and gives an intimation of its inner life according to the angle of vision, the daylight and the weather.

The outer skin of the building consists of finely etched glass. It looks like slightly ruffled feathers, or like a scaly structure made up of largish glass panels. The glass panels, which are all the same size, are neither perforated nor cut. They rest on metal consoles, held in place by large clamps. The edges of the glass are exposed. The wind wafts through the open joints of the scaly structure. Lake air penetrates the fine mesh of the space-framework, of the steel structure of the self-bearing facade which rises from the pit of the basement and embraces, without firm contact, the interior of the monolithic spatial sculpture with a differentiated system of facade glazing, heat insulation and shading.

The multi-layered facade is an autonomous wall construction which harmonises with the interior and acts as a weather skin, daylight modulator, sun shade and thermal insulator. Exonerated from these functions, the spacedefining anatomy of the building is able to develop freely in the interior. The ability of the cast concrete to now into complex shapes, to integrate technical installations and to assume the appearance of a large monolithic form of an almost sculptural character has been fully exploited. By this I mean that there is no facing, no cladding, and no overpainting. The dematerialisation of surfaces which often occurs with additive construction methods using layered materials has been avoided. Reduced to essentials in terms of statics, and to usefulness and as near as possible an approach to what was envisaged in terms of use and function, the construction, material and visual form of the building constitute a whole. The building is just as we see it and touch it, as we feel it beneath our feet: a cast concrete, stony body. The floors and stairs are polished, the walls and ceilings have a velvet gleam.

We believe that the works of art will benefit from the sensuous

presence of the materials which define the space. As a result or the eminent presence of materials in the interior, the concrete mass of the building adjusts as it were independently to the right temperature for the requirements of the museum. A system of water-filled pipes which can be heated or cooled as needed has been integrated in the walls and ceilings, as well as a second system of pipes which renews the air in the rooms. The absorption and storage capacity of the unclad, constructive concrete mass is used to keep the climate stable, thus obviating the necessity of a conventional air-conditioning plant with big pipes to transport large quantities of air to heat or cool the rooms and humidify or dehumidify the atmosphere.

The ceilings of the exhibition rooms on the upper floors story-height halls designed to act as light collectors open to the light of the sky - consist of light trapped in glass. Open-jointed glass panels with exposed edges hang individually from the concrete ceiling on hundreds of thin steel rods. A sea of glass panels, etched on the side facing the room, with subtly shimmering surfaces and edges, distributing the daylight throughout the room, the daylight which enters the man-high cavity above the glass ceiling from all sides of the building. We feel how the building absorbs the daylight, the position of the sun and the points of the compass, and we are aware of the modulations of light caused by the invisible and yet perceptible outside environment. And in the heart of the building the light is modulated by the three wall slabs which bear the rooms.

The spatial constellation of the slabs varies the orientation of the light, generates shadows and reflections. It tempers the mood of the light and gives depth to the room. The constantly fluctuating light creates the impression that the building is breathing. Everything seems permeable, permeable to light and also to the wind and the weather, as if the building could manage, up here, without an airtight skin.

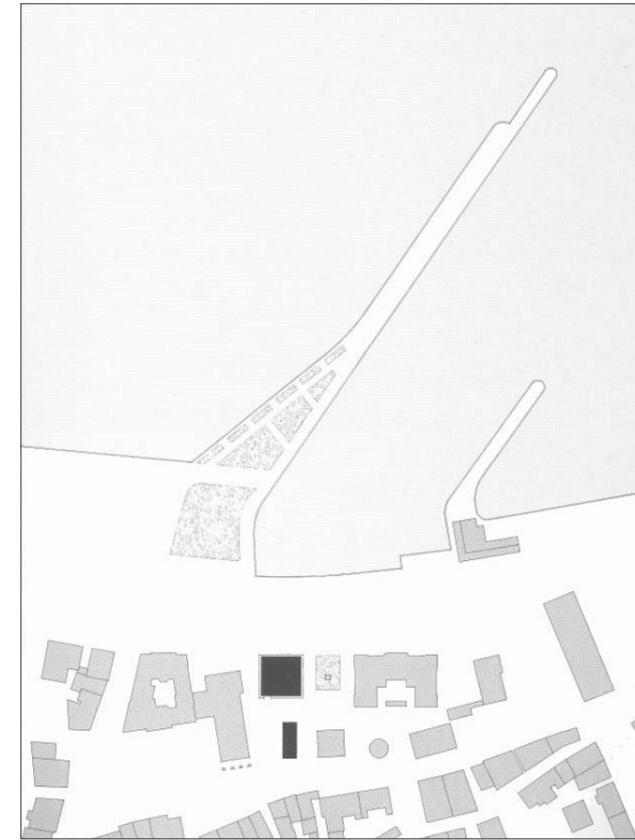
The inner side of the steel and glass facade wall construction, which accommodates the technically indispensable sealing and insulating elements, is plainly visible from the ground floor. We see it when we pass through the tunnel-like main entrance to the foyer: a smooth shaft of etched glass rising from the light wells of the basement and disappearing towards the sky, separated by only a small gap from the monolithic concrete structure which it embraces and protects.

The massive outer walls and glass ceilings which distinguish the exhibition rooms are absent on this floor of entry and inception. The three load-bearing wall slabs rooted in the deep caisson foundations of the second basement, which penetrate and bear all the floors of the building, are freestanding in this ground floor room. They shield the vertical accesses of the building - the main staircase, the goods and passenger lifts, the emergency stairs, the rising mains - from the main hall, and they are integrated in the large square of the ground plan in such a way as to create a number of spatially varied situations in the peripheral zones. Movement, barely perceptible, emerges in space. Spatial curiosity is aroused. This is the moment that sparks a spiral movement which leads us up through the building, which grips us at the main entrance and gently propels us into the building's interior. We see the door, the entrance to tile next floor, the cascade of the stairs and the radiant daylight ceiling of the upper room. It receives us on the other side of the door and leads us up to the light of the exhibition. So we move from floor to floor, from room to room, observing the characteristic stacking of the stories, the tower-like shape of the museum which defines the face of the town. The body of light that is the art museum takes its place confidently in the row of public buildings which surround the bay of the lake. Set apart from the small buildings of the Old Town, it and the Kornmarkt Theatre define a new square between the Old Town and the lake. The design of the square is based on the confrontation between the different scales, the finely fractionated structure of the edge of the Old Town and the wide rhythms of the buildings and free scope of the lake. The radiation and light of the lake penetrate the tall gap between the glass body of the museum and the stony fly tower of the theatre and take their effect in the square, endowing the approach to the museum with a special mood.

The museum's administration building, designed as an independent entity, accommodates rooms not intended for the contemplation of works of art and plays the role of a point of transition in the thematic composition of the square. The size of the building and its utilisation as a small office building with a bar and museum shop on the ground floor fit

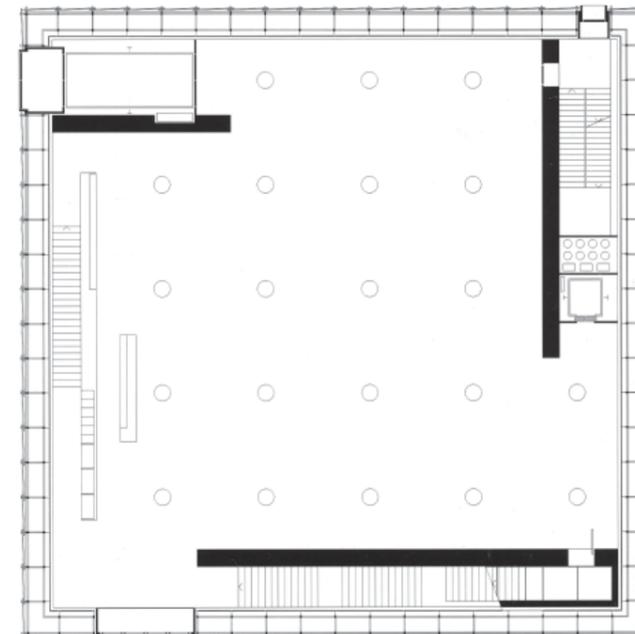
in with the Old Town. Everything else about the elegant black structure conveys a sense of urban luxury and supra-local extravagance which is comprehensible only in terms of its sense of belonging to the radiant glass building with which it shares the square and to whose entrance its main facade alludes.

(text by: Peter Zumthor in: *A+U Architecture and Urbanism* 1998, Peter Zumthor)

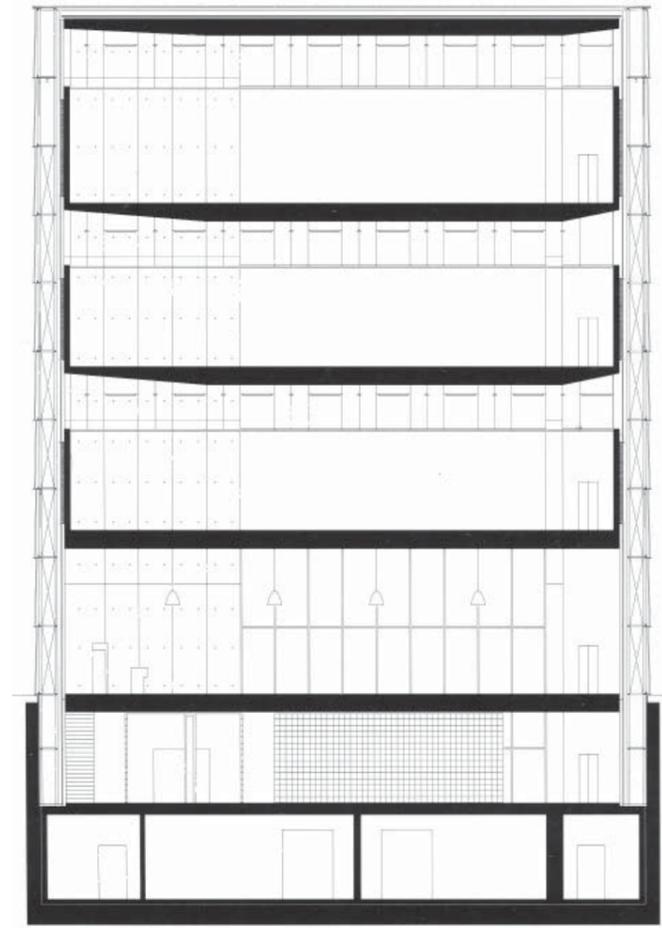


Site Plan

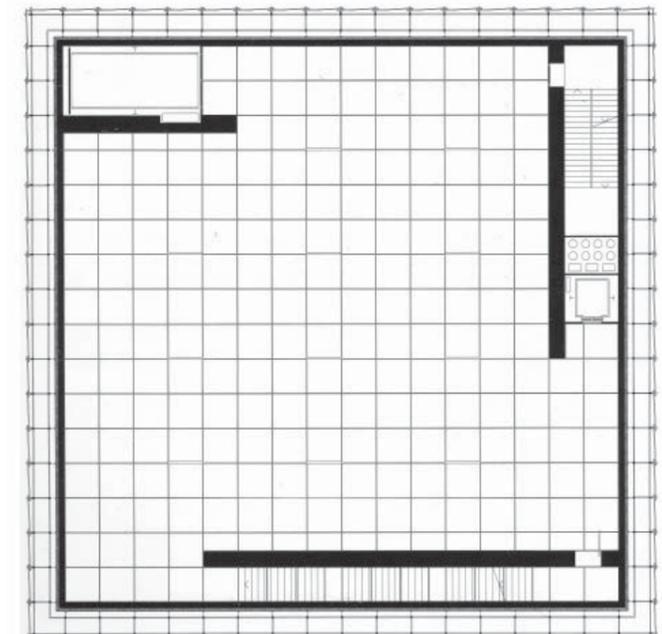
North



Ground Floor Plan



Section looking north



Typical Floor Plan

0 5 10 meter



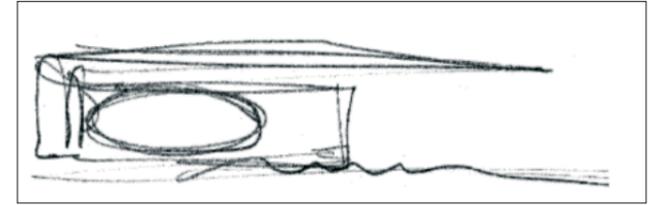
LUZERN YOUTH HOSTEL SEDELSTRASSE 12, CH-6004 LUZERN



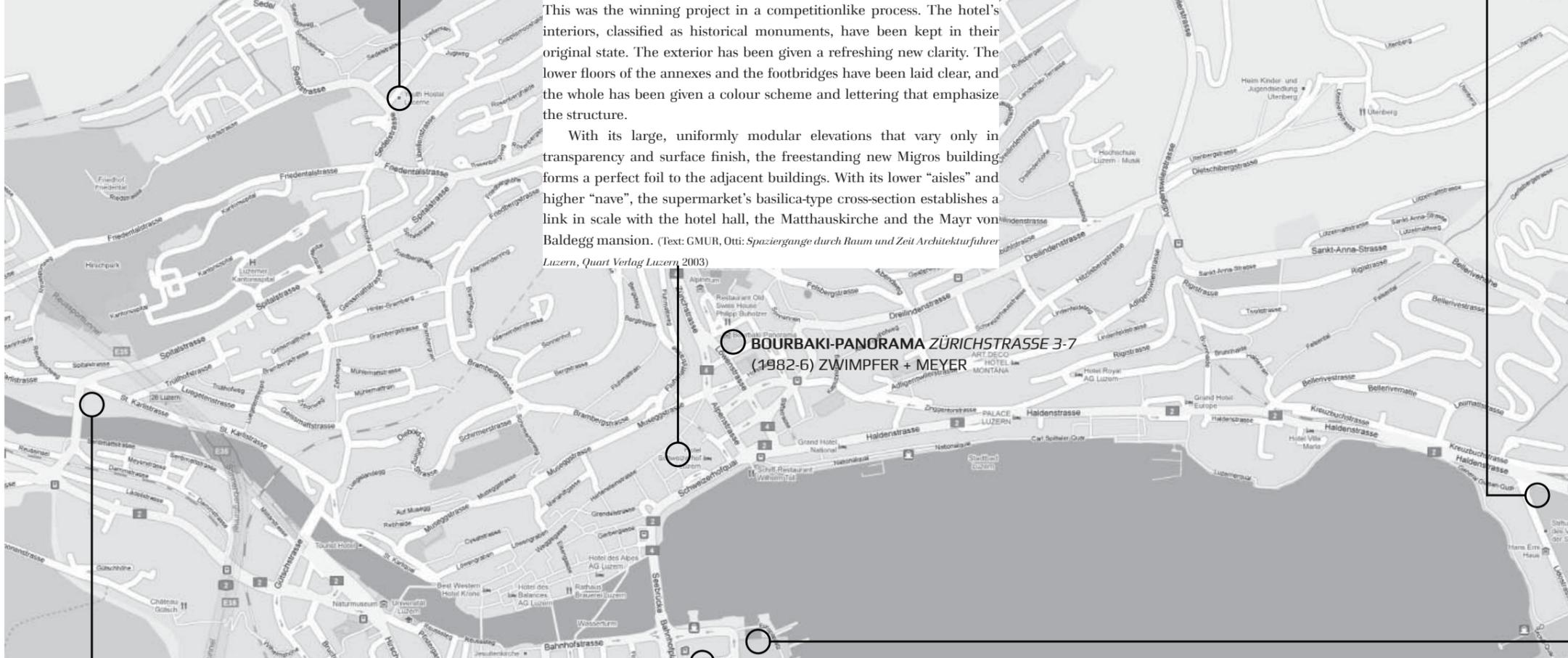
MIGROS SHOPPING CENTRE HERTENSTEINSTRASSE, CH-6044 LUZERN, CH-6044 LUZERN (2001) DIENER & DIENER



VERKEHRS MUSEUM VERKEHRSHAUS DER SCHWEIZ, LIDOSTRASSE 5, CH-6006 LUZERN (2005-9) GIGON & GUYER



KULTUR- UND KONGRESSZENTRUM LUZERN EUROPAPLATZ 1, CH-6005 LUZERN (1995-2000) JEAN NOUVEL



This was the winning project in a competitionlike process. The hotel's interiors, classified as historical monuments, have been kept in their original state. The exterior has been given a refreshing new clarity. The lower floors of the annexes and the footbridges have been laid clear, and the whole has been given a colour scheme and lettering that emphasize the structure.

With its large, uniformly modular elevations that vary only in transparency and surface finish, the freestanding new Migros building forms a perfect foil to the adjacent buildings. With its lower "aisles" and higher "nave", the supermarket's basilica-type cross-section establishes a link in scale with the hotel hall, the Matthauskirche and the Mayr von Baldegg mansion. (Text: GMUR, Otti: *Spaziergänge durch Raum und Zeit Architekturführer Luzern, Quart Verlag Luzern 2003*)

BOURBAKI-PANORAMA ZÜRICHSTRASSE 3-7 (1982-6) ZWIMPFER + MEYER

SCHWEIZERISCHE NATIONALBANK PILATUSSTRASSE 10 (1922) HERMANN HERTER



ST. KARLI KIRCHE SEMPACHERSTRASSE 14, CH-6002 LUZERN (1930-34) FRITZ METZGER

The church is a masterpiece of urban planning: Its site is a bridgehead, and the way up to the monumental entrance hall gives a view across the river into the city. The integrated modern architectural design is defined by freestanding load-bearing columns and by an enclosing wall separated from the roof by a continuous glass frieze. The clear concept for the generous unified space bears witness to the liturgical change as seen in what was, at that time, a new perception of parish structure. Marco Korner was in charge of the refurbishment carried out in 1997-1999. (Text: GMUR, Otti: *Spaziergänge durch Raum und Zeit Architekturführer Luzern, Quart Verlag Luzern 2003*)



THE HOTEL SEMPACHERSTRASSE 14, CH-6002 LUZERN (2006) JEAN NOUVEL



BAHNHÖFÜBERBAUUNG (VORHALLE) (1989-91) SANTIAGO CALATRAVA

This building complex makes perfect use of the site between the station and postal sorting office. Its projecting wing on the city side forms a clear spatial turning point towards the station square; this is further emphasized by the roof that cantilevers far out above the lake. Earth, water, air, and the city, the lake, and the landscape define the site.

The building's functions are the reason for both its tripartite form and, by means of its high and airy spaces and water channels, for melding the structure into the character of the place. The architecture oscillates between the intellectually comprehensible functional and the seemingly fortuitous. In fact, it is both "without qualities" and full of complex modernity. Like Musil's "The Man without Qualities", it presents itself as a structural framework that becomes a rich narrative and arouses a multi-tude of images only in the percipient eye willing to engage in a game of associations with the interior and outside views, colours, reflections, and the changes of mood produced by the weather and the artificial lighting.

The building is an open entity, a characteristic also evident in the art museum's variable rooms under the roof of the first and central sections. The contrast with the exterior's multiplicity of meanings is all the more surprising in the on-ambiguousness of the almost classic concert hall.

The Centre has become Lucerne's new landmark, one that does not present itself in a given content - music - or in a fixed form - the roof - but in the open spaces it embraces, in which landscape, city, and visitor encounter one another in an unmistakable manner. (Text: GMUR, Otti: *Spaziergänge durch Raum und Zeit Architekturführer Luzern, Quart Verlag Luzern 2003*)

