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# victor horta un asilo a bruxelles



# **La sensualità della struttura. L'asilo in Rue Saint-Ghislain a Bruxelles di Victor Horta (1895–99)**

Dirk De Meyer

Nel 1895, all'approssimarsi del completamento dei lavori di costruzione di casa Frison a Bruxelles – uno dei primi progetti, realizzato contemporaneamente alla più nota casa Tassel – Victor Horta trascriveva nelle sue *Mémoires* le reazioni suscite dall'edificio: «Quant à la façade, bien certainement, on y trouvait à redire: que signifiaient ces moulures "mourant" à rien dans le nu de la façade, et ce détail-ci et ce détail-là... Cependant, l'habitude était déjà prise: c'était "du Horta" et si cela pouvait s'entendre mal, cela pouvait aussi s'entendre bien... Buls, Bourgmestre de Bruxelles, passant par là et la trouvant à son goût, me fit appeler en son bureau: j'ai vu votre maison, elle m'intéresse. Voulez-vous faire l'étude d'une école maternelle, rue Saint-Ghislain, pour mon administration? Si je voulais!»<sup>1</sup>.

Charles Buls aveva familiarità sia con l'architettura innovativa sia con le scuole. Prima di diventare sindaco di Bruxelles nel 1881, era stato consigliere comunale all'istruzione pubblica e l'edilizia scolastica occupava un posto importante nel suo vasto programma di riforma sociale, urbana ed educativa<sup>2</sup>. Buls, inoltre, era tra i liberali progressisti che nel 1864 avevano fondato la "Ligue de l'enseignement". Il gruppo, di cui faceva parte anche Pierre Tempels che l'anno dopo avrebbe pubblicato il suo influente testo intitolato *L'instruction du peuple*<sup>3</sup>, chiedeva interventi rapidi per migliorare le terribili condizioni delle infrastrutture scolastiche di Bruxelles. Queste infatti non si erano sviluppate parallelamente alla straordinaria crescita demografica che era seguita alla rapida industrializzazione della capitale. Fino al 1860 il numero delle scuole era rimasto pressoché invariato; la maggior parte era sovraffollata e in condizioni igieniche scadenti e nei quartieri più poveri della città non ve n'era praticamente nessuna.

La Ligue sosteneva l'istruzione obbligatoria (un tema centrale per le forze politiche progressiste in Belgio, che lo consideravano uno strumento della lotta contro il lavoro minorile) e un'educazione libera e laica impartita nelle due lingue parlate nella capitale, il francese e il fiammingo. Il gruppo mirava alla riforma dei programmi nonché al cambiamento della tipologia degli edifici scolastici. Ne risultò un'aspra battaglia con il Partito cattolico conservatore, che riuscì a bloccare o ritardare la maggior parte delle iniziative riformiste in gran parte del paese ma non a Bruxelles, dove il programma radicale divenne una realtà. Buls, in quanto segretario della Ligue, decise di finanziare la costruzione di una scuola modello. I programmi, i metodi didattici razionali e la disposizione delle aule avrebbero fatto da prototipo per le scuole popolari che dovevano consentire ai bambini delle famiglie povere non soltanto di ottenere un'istruzione decente ma anche di studiare in spazi ariosi, igienici e luminosi<sup>4</sup>. L'approccio razionale permeava il progetto a ogni livello: Joseph Dierckx inventò persino un nuovo metodo calligrafico "belga", che sostituì il cosiddetto stile inglese con uno più semplice e rettilineo, più facile da scrivere e da leggere. Buls fu il primo direttore della scuola e il suo coinvolgimento nel progetto andò ben oltre il livello programmatico e organizzativo, come dimostrano i suoi disegni per i banchi scolastici individuali. Buls affidò l'incarico di progettare la scuola modello a Ernest Hendrickx, architetto di Bruxelles formatosi nello studio di Viollet-le-Duc a Parigi e all'epoca docente dell'Université Libre de Bruxelles, un ambiente di liberali progressisti e intellettuali radicali<sup>5</sup>. Come Tempels e altri membri della Ligue, Hendrickx apparteneva alla loggia massonica "Les amis philanthropes", a cui Horta avrebbe aderito nel 1888.

Fu in questo contesto che nel 1895 Buls chiese a Horta, allora trentatreenne, di progettare il piccolo asilo infantile con quattro aule situato in rue Saint-Ghislain, una strada in lieve pendenza che si trovava al centro di uno dei quartieri più popolari di Bruxelles. Benché l'edificio non sia molto noto né molto pubblicato, si tratta di un'opera cruciale per comprendere il primo Horta. Borsig lo considerava addirittura come uno dei suoi lavori migliori<sup>6</sup>. I piani esecutivi furono firmati nel 1897, i lavori di costruzione iniziarono un anno dopo e si conclusero nel 1900, dopo quella che a quanto pare fu una collaborazione difficile con l'imprenditore edile<sup>7</sup>.

**La pianta** Riguardo al progetto, Horta non ebbe problemi a seguire la tipologia della scuola modello: «En ce temps-là, on avait décidé que les architectes des écoles maternelles auraient dû suivre un schéma-type, ce qui au point de vue de l'architecture n'offrait au fond aucun inconvénient: les façades, les coupes, les locaux secondaires étant bien suffisant pour que le talent de l'architecte y trouvât large et libre action»<sup>8</sup>. Lo schema prevedeva una modesta occupazione dell'area sulla strada, lo sviluppo della scuola in direzione dell'interno dell'isolato urbano e la disposizione delle aule lungo un cortile centrale, il cosiddetto *préau*, destinato alle lezioni di educazione fisica<sup>9</sup>. Horta seguì quel modello, seppur discostandosene leggermente rispetto alla collocazione delle aule: configurando la pianta come un quadrato quasi perfetto, le classi furono disposte ai quattro angoli in modo da liberare un'area coperta centrale a doppia altezza, riservata al gioco, che si estendeva in ambienti ad altezza semplice che insieme formavano una pianta a croce. All'esterno due ali laterali, più basse e piccole, con copertura vetrata, contenevano i bagni per i bambini. Per via di questa disposizione il piano generale di Horta richiama alla mente una delle trasformazioni principali dei blocchi di Friedrich Fröbel, come illustrati in *The Kindergarten Guide* di Kraus-Boelte pubblicato nel 1882: dallo schema per il *préau*, raffigurato in basso, a quello della disposizione delle aule, visibile a destra<sup>10</sup>. Inoltre, la forma dello spazio centrale evoca il "mulino a vento" n. 50 di Fröbel, in cui quattro volumi sono disposti attorno a un quadrato in quella che diventa una composizione cruciforme; la posizione delle aule, invece, segue quella del "mulino a vento" n. 48<sup>11</sup>. Le idee e i testi di Fröbel furono studiati e promossi appassionatamente dalla Ligue (come, per esempio, quelli di Rousseau e Pestalozzi). Contrariamente a quanto accadde in Germania, dove i metodi del pedagogista tedesco furono banditi dai programmi d'istruzione pubblica dopo la rivoluzione fallita del 1848 perché molti degli insegnanti sostenevano la riforma politica democratica, essi furono accolti con grande entusiasmo nel clima liberale e radicale della Ligue.

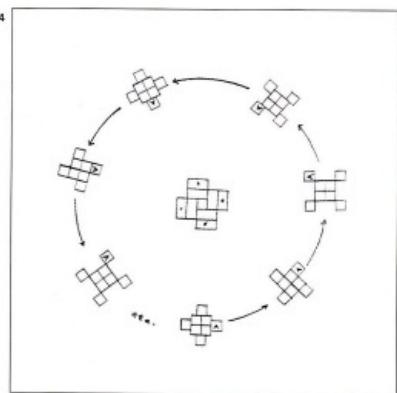
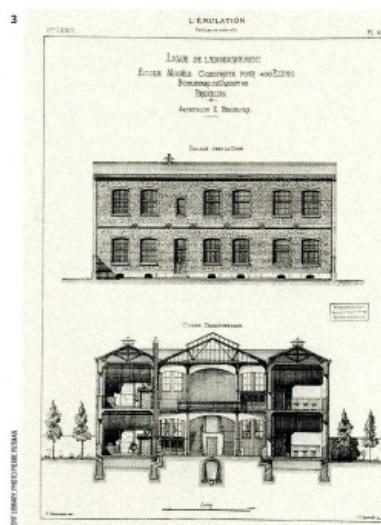
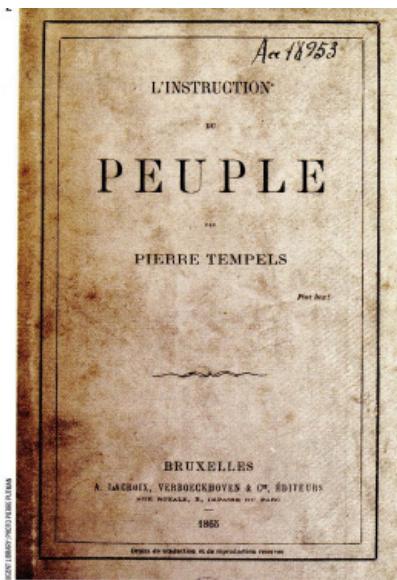
Di certo l'incarico per il piccolo asilo infantile consentì a Horta di approfondire le idee di Fröbel che, tra l'altro, dovevano apparirgli particolarmente interessanti per una certa affinità nell'approccio alle strutture naturali e costruite: prima di dedicarsi alla pedagogia Fröbel si era occupato di cristallografia e, come dimostrato da Jeanne Rubin, i suoi materiali didattici, l'uso che ne prescriveva e la sua filosofia dell'educazione derivavano in gran parte da quella scienza<sup>12</sup>. Nel suo *Die Menschenerziehung* (L'educazione dell'uomo) – pubblicato per la prima volta nel 1826, mentre le edizioni in francese uscirono a Bruxelles nel 1861 e nel 1881 – lo studioso osservava: «Che siano organici o

inorganici, cristallini o non cristallini, i processi di sviluppo appaiono uguali: in pratica, tendono a svilupparsi dall'interno all'esterno, sforzandosi di mantenere un equilibrio tra forze interne ed esterne»<sup>13</sup>. È facile notare come tale affermazione si adatti alla descrizione del movimento e della composizione delle facciate di Horta.

**La tecnica** Horta riteneva che l'elemento caratterizzante dell'intero progetto fosse quello che definiva «un saggio di struttura leggera»<sup>14</sup>, ossia la straordinaria struttura di metallo che copre l'area centrale riservata al gioco. Sottili travi di ferro composte, realizzate appositamente, appoggiate sul muro perimetrale portante, si estendono in senso diagonale fino a un rettangolo formato da quattro travi di ferro. Il progetto mette in evidenza, quasi a livello didattico, la differenza tra le due parti di una trave: quella superiore compressa, composta di due sezioni a L che formano una T, e quella inferiore, sollecitata a trazione, costituita da una solida barra a sezione circolare. L'importanza attribuita da Horta all'uso innovativo dei materiali industriali esistenti risulta evidente dalla dettagliata descrizione nelle sue *Mémoires*: «composé de deux équerres et d'un fer rond lié l'un à l'autre par un plat emprisonnant le fer rond dans un œillet et rivé aux deux équerres. Le tout donnant un ensemble schématique d'une âme et des ailes, non de poutrelle à vrai dire, mais d'un T»<sup>15</sup>. Il disegno del particolare alle due estremità della parte sollecitata a trazione consente persino una leggera pretensione della barra a sezione circolare, che risulta in un'ulteriore diminuzione delle dimensioni e dell'impatto della trave.

Il rettangolo centrale sostiene altre otto travi, di concezione simile, che si incontrano al centro della struttura. Lo spazio all'interno del rettangolo è coperto da un lucernario. Il suo elemento verticale corrisponde all'altezza di una trave reticolare leggera collocata sopra ognuna delle otto travi. Evitando le travi di ferro tradizionali Horta intendeva risparmiare il più possibile sui materiali, sperimentare soluzioni tecniche innovative e illuminare al massimo lo spazio. Per quanto la soluzione fosse chiara sotto il profilo concettuale e raffinata sotto quello estetico, non tutti furono soddisfatti del progetto poco ortodosso: l'imprenditore edile Joseph Pâris, con cui Horta ebbe un rapporto difficile, definiva i disegni dell'architetto «piuttosto confusi»<sup>16</sup>. Per Horta, invece, la struttura rappresentava la vera novità dell'edificio: «On m'a pris tant de détails dans mon architecture que je n'ai jamais compris comment cette charpente n'avait pas été copiée»<sup>17</sup>. Il progetto presentava anche un altro elemento innovativo, oltre a quello tecnico: l'inusuale scelta della tonalità verde pallido per sottolineare la leggerezza della struttura. Horta voleva rompere con la tradizione che imponeva l'uso esclusivo del nero –o eccezionalmente della vernice dorata– per le strutture metalliche<sup>18</sup>. L'assenza di qualsiasi forma di decorazione sul vetro allontana l'edificio dalle atmosfere più delicate e dorate degli interni *art nouveau* caratteristici dell'epoca.

La soluzione tecnica adottata nell'asilo ha un'estrema importanza, soprattutto se si considera che le analoghe strutture sviluppate in quello stesso periodo per i balconi del grande atrio della Maison du Peuple sono purtroppo scomparse. Inoltre essa dimostra il vero carattere dell'*art nouveau* di Horta: la struttura simile a un fiore formata dalle piastre saldate e inchiodate nel punto in cui le otto travi si incontrano non è il frutto di un intento decorativo bensì di un'incredibile capa-





**1**  
Victor Horta, asilo, Rue Saint-Ghislain, Bruxelles, 1895–99, la facciata sulla strada in una foto d'epoca  
Victor Horta, kindergarten, Rue Saint-Ghislain, Bruxelles, 1895–99, streetfront in a historical photo

**2**  
Pierre Tempels, *L'instruction du peuple*, Bruxelles 1865, copertina  
Pierre Tempels, *L'instruction du peuple*, Bruxelles 1865, cover

**3**  
Ernest Hendrickx, scuola modello per la Ligue de l'Enseignement, sezione trasversale, pubblicata in *l'Emulation*, 1879  
Ernest Hendrickx, model school for the Ligue de l'Enseignement, cross-section, published in *l'Emulation*, 1879

**4**  
Friedrich Fröbel, trasformazione sequenziale dei volumi, in M. Kraus-Boelte e J. Kraus, *The Kindergarten Guide, an Illustrated Hand-book Designed for the Self-instruction of Kindergartners, Mothers, and Nurses*, 2 voll., New York 1882, vol. I, ill. pp. 38–39.

Friedrich Fröbel, sequential transformation of the volumes, in M. Kraus-Boelte and J. Kraus, *The Kindergarten Guide, an Illustrated Hand-book Designed for the Self-instruction of Kindergartners, Mothers, and Nurses*, 2 vol., New York 1882, vol. I, ill. pp. 38–39.

**5**  
il cantiere durante la costruzione della struttura metallica  
the worksite during construction of the metal structure

**6**  
il salone centrale in una foto d'epoca  
the central room in a historical photo

cità, un *Kunstwollen*, che unisce materiali industriali, logica ingegneristica e abilità artigianale in una sintesi brillante dal punto di vista intellettuale ed estetico.

Dal trattamento di questo singolo elemento dell'edificio è possibile capire cosa possa aver colpito l'attenzione di Buls quando passò davanti a casa Frison: il sindaco urbanista condivideva con l'architetto l'interesse per la combinazione, logica e al tempo stesso molto raffinata, di pietra e strutture metalliche quasi industriali e per una nuova e più libera organizzazione dello spazio, in cui ammezzati e pozzi di luce creavano uno spazio gradevole e vitale al centro dell'edificio. Anche Buls credeva in un'architettura onesta che adoperasse il ferro in maniera logica, senza mascherarlo, proprio come Horta aveva fatto per casa Frison e stava sperimentando in maniera ancora più completa nei cantieri di casa Tassel e casa Winssinger. Buls riconobbe nel giovane Horta il successore ideale di Ernest Hendrickx, l'architetto della sua scuola modello, morto prematuramente nel 1892. Horta era stato assistente di Hendrickx all'Université Libre de Bruxelles e nel 1893 aveva preso il posto del suo maestro come docente all'Ecole Polytechnique. Secondo *L'Art Moderne* Hendrickx era il leader della scuola modernista belga, rappresentando la corrente razionalista dell'architettura<sup>19</sup>. Più che gli studi compiuti presso l'Accademia di Belle Arti di Gent, era stato Hendrickx che aveva distolto Horta dall'accademismo ottocentesco e lo aveva introdotto ai principi di Viollet-le-Duc e all'architettura funzionale basata sul programma dell'edificio da realizzare, sul corretto uso dei materiali e sull'economia di mezzi. Questo atteggiamento permea tutto il progetto, anche nei particolari degli interni, come per esempio il dado che corre lungo le pareti dello spazio centrale: questo elemento di pietra grigia delicatamente scolpito separa la parte inferiore del muro piastrellata – e più facilmente lavabile – da quella intonacata, ma pare che sia stata usato anche come attaccapanni per i cappotti dei bambini<sup>20</sup>.

**La facciata** Paragonata alle facciate neoclassiche delle scuole dell'epoca, quella di Horta ci appare quasi pittoresca. È composta da tre parti diverse: un elemento centrale più alto, che per proporzioni e tipologia somiglia a una casa, fiancheggiato ai due lati da un volume più piccolo. Tale disposizione non riflette soltanto l'organizzazione interna, ma segue anche i dettami della Ligue de l'enseignement riguardo alle scuole: i nuovi edifici dovevano integrarsi nel contesto urbano in cui sorgevano, senza inutili sfoggi di monumentalità. L'intento di Horta rispetto alla facciata coincideva esattamente con quello della Ligue: l'architetto mirava a «un caractère de jeunesse bien loin du caractère solennel des autres architectures d'écoles»<sup>21</sup>.

Benché i due volumi minori dal lato della strada abbiano altezza e dimensioni identiche, Horta applica una leggera modifica al trattamento della facciata per adeguarla alla pendenza della via, collocando al centro – senza tuttavia accentuare in alcun modo un asse di simmetria – l'ingresso della scuola. Un'accogliente tettoia riduce l'altezza dell'entrata, quasi a volerla adattare alle proporzioni dei bambini, distinguendola così dalle entrate delle scuole neoclassiche. Analogamente svolge la scala, che qui non è esterna e monumentale bensì inserita nella facciata. L'altezza effettiva della porta si rivela soltanto quando la si confronta con quella più piccola collocata alla sua destra. Quello che sembra un ingresso di servizio è in effetti l'accesso separato

al livello dello scantinato che secondo il programma era costituito da depositi che potevano essere affittati alla gente del quartiere.

Il trattamento dell'ingresso principale e della tettoia dimostra la grande abilità di Horta nel combinare materiali diversi utilizzandoli in modo da sfruttarne al massimo le qualità tettetiche: la pietra sporge dalla cornice della porta al limite di quanto tecnicamente possibile, estendendosi per ricevere il sostegno metallico della tettoia di vetro. Il sostegno di ferro segue una curva elegante, eppure risponde alla logica ingegneristica dell'economia dei materiali: il profilo a T "cresce" proporzionalmente alle esigenze statiche. Inoltre, la tettoia di vetro si sviluppa nella facciata per sostenere la sovrastante finestra di legno che sporge rispetto al piano della porta. Ne risulta una composizione armonica e logica che non solo assolve la propria funzione di protezione dagli agenti atmosferici, ma svolge diversi altri compiti relativi alla segnaletica, alle proporzioni e all'iluminazione. Come osservato da Borsi, «Raramente l'incontro pietra-ferro, legno-pietra, ferro-vetro, legno-vetro è stato sfruttato con una così grande precisione in un solo punto»<sup>22</sup>.

La tettoia sul retro dell'edificio è del tutto diversa. Contrariamente a quella che dà sulla strada, è sostenuta soltanto da una tensostruttura composta da sezioni standard di ferro che, con un chiaro riferimento a Viollet-le-Duc, mostra la materializzazione più chiara delle forze statiche che deve contrastare.

Il passaggio da una parte della facciata principale all'altra è sottolineato da due elementi verticali: un comignolo medievaleggianti e una scala. Le diverse parti, tuttavia, sono collegate dalla disposizione orizzontale della pietra di due colori, caratteristica della tradizione edilizia medievale belga. Per effetto di tale soluzione il colore della facciata varia dal grigio della *pierre bleu* del plinto al giallo chiaro della pietra Gobertange e alla tonalità simile della *pierre d'Euville*. Poiché la Gobertange è disponibile solo in piccoli formati, la *d'Euville* è stata utilizzata per gli inserti più grandi e per quasi tutte le parti scolpite in situ. La facciata è decorata da sottili elementi verticali trilobati che, intersecando le modanature orizzontali, creano una curiosa combinazione di particolari organici curvilinei –che per molti sono diventati un segno distintivo dell'*art nouveau*– ed elementi della tradizione e dell'artigianato gotico. Le modanature orizzontali introdotte per compensare la pendenza della strada rientrano tra gli elementi che caratterizzano il diverso trattamento delle due facciate delle aule, evidente anche nel particolare delle cornici di pietra delle finestre che risponde a una precisa volontà di Horta di negare la simmetria dell'insieme. Su un lato dell'edificio, ben visibile dalla parte più alta della strada, sporge in maniera inaspettata e quasi enigmatica la capriata di legno e acciaio del tetto. Tale presenza potrebbe essere intesa come una scelta didattica dell'architetto per sottolineare l'importanza attribuita tanto da Fröbel quanto da Pestalozzi all'architettura intesa come strumento d'apprendimento.

**Il restauro** Esattamente cento anni dopo la sua costruzione, la piccola scuola di Horta è stata restaurata in maniera attenta e intelligente dall'architetto Barbara Van der Wee, che è stata incaricata di restaurare diversi altri edifici di Horta. Obiettivo principale dell'intervento, durato dal 1995 al 1999, era quello di recuperare il concetto

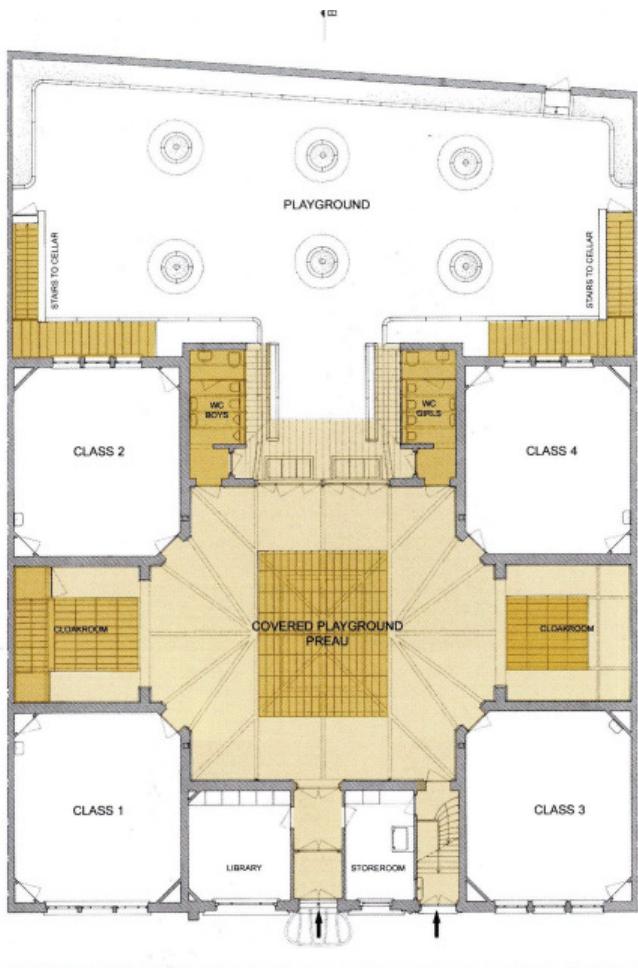


7  
il fronte principale, si noti il dettaglio della capriata del tetto  
view of main facade showing detail of roof beam

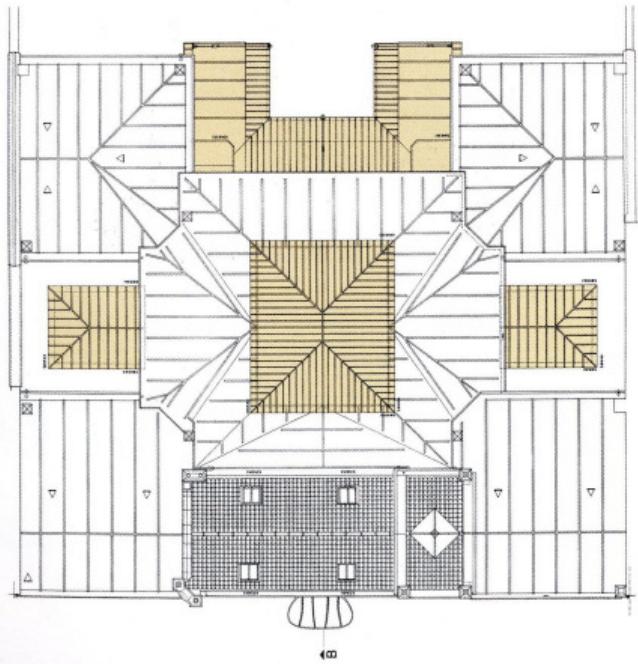
8  
dettaglio dell'elemento verticale in pietra sulla facciata principale  
detail of stone vertical element on main facade

9  
la pensilina d'ingresso sul fronte principale  
entrance canopy on the main facade

10



11



12



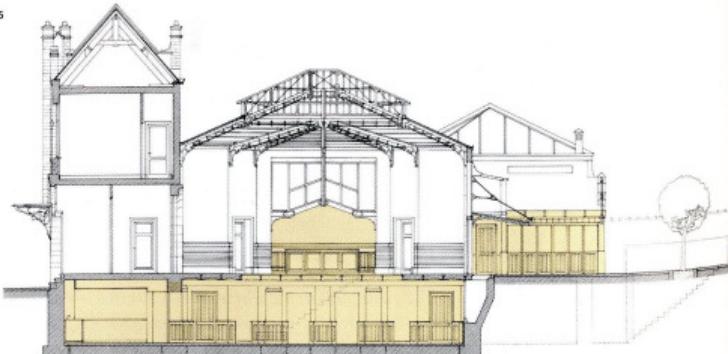
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14



15



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spaziale originario, pur adattando l'edificio alle esigenze dei nostri tempi. In particolare bisognava considerare il fatto che oggi i bambini trascorrono molte più ore all'asilo rispetto a un secolo fa, e che le aspettative relative al riscaldamento e alle misure di sicurezza sono ovviamente cambiate. Per soddisfare i nuovi requisiti, lo spazio sotterraneo è stato integrato nella scuola creando nuove aule e una cucina. Questi interventi hanno permesso di eliminare dal cortile centrale originario quanto era stato aggiunto nel corso del Novecento. L'elemento più evidente del nuovo progetto è il pavimento di vetro della corte centrale, grazie al quale il livello sotterraneo riceve molta luce naturale. La struttura di sostegno del vetro è la stessa che un tempo sosteneva il pavimento di mattonelle. Nel corridoio laterale dello spazio centrale è stata aggiunta una scala discreta e lungo la facciata posteriore due rampe di scale consentono l'accesso dalle nuove aule al cortile esterno per la ricreazione<sup>23</sup>. Questi interventi meticolosi e discreti hanno fatto sì che i bambini potessero essere ancora accolti in questo ambiente delizioso creato da Horta.

#### Note

- Ringrazio Barbara Van der Wee, architetto responsabile del restauro, per l'aiuto prezioso e appassionato nella raccolta del materiale per questo articolo.
- 1 V. Horta, *Mémoires*, a cura di Cécile Dullière, Bruxelles 1985, p. 42.
  - 2 Su Buls vedi: M. Smets, *Charles Buls, les principes de l'art urbain*, Liège 1995; per il suo coinvolgimento nel settore educativo vedi in particolare pp. 49 e segg.
  - 3 P. Tempels, *L'instruction du peuple*, Bruxelles 1865.
  - 4 P. Tempels, *Ecole modèle: 1<sup>er</sup> règlement des élèves; 2<sup>o</sup> circulaire du 8 août 1877; 3<sup>o</sup> règlement des professeurs; 4<sup>o</sup> instruction générales aux instituteurs; 5<sup>o</sup> tableau des heures*. Brussels 1877. Vedi anche: Bruxelles, Liberal Archief. Archivi della Ligue de l'enseignement.
  - 5 Vedi E. Hennaut, *Ernest Hendrickx et l'influence de Viollet-le-Duc*, in R. Hoozee, a cura di, *Bruxelles: carrefour de cultures*, Antwerp 2000, pp. 27-31.
  - 6 F. Borsi, P. Portoghesi, *Victor Horta*, Roma 1969.
  - 7 Bruxelles, Archivio comunale, T.P. 4916-4925. L'archivio è uno dei pochi che conserva una corrispondenza quasi completa riguardante il cantiere di uno dei primi progetti di Horta.
  - 8 V. Horta, *op. cit.*, p. 42.
  - 9 E. Hendrickx, *Ecole modèle pour la Ligue de l'Enseignement*, in «l'Emulation», 1879, a. V. coll. 82-84, tavv. 40-43.
  - 10 M. Kraus-Boelte, J. Kraus, *The Kindergarten Guide, an Illustrated Hand-book Designed for the Self-instruction of Kindergartners, Mothers, and Nurses*, New York 1882, vol. I, pp. 38-39. Cfr. anche J. S. Rubin, *The Froebel-Wright kindergarten connection: a new perspective*, in «Journal of the Society of Architectural Historians», 1989, vol. 48, n. 1, pp. 24-37.
  - 11 M. Kraus-Boelte, *op. cit.*, vol. I, p. 60, ill. 48 e 50.
  - 12 J. S. Rubin, *op. cit.*, pp. 24-25.
  - 13 F. Froebel, *The Education of Man*, New York 1887, pp. 68 e segg. pubblicato a Bruxelles nel 1861 e 1881 come: *L'éducation de l'homme*, trad. dal tedesco del barone de Crombrugge.
  - 14 V. Horta, *op. cit.*, p. 42.
  - 15 V. Horta, *op. cit.*, pp. 42-43. Horta fornisce una descrizione ancora più dettagliata della parte compresa: «les fers plat de balcon se coupant à angle droit étaient découpés de moitié pour s'emboîter et ainsi déforçaient mutuellement. Replier l'un et laisser passer l'autre comme ceci: [disegno di Horta nel testo]».
  - 16 Joseph Pâris, *Ateliers de constructions métalliques*, Marchiennes (Belgium), corrispondenza conservata a Bruxelles, Archivio comunale, T.P. 4916-4925.
  - 17 V. Horta, *op. cit.*, p. 42.
  - 18 Cfr. le osservazioni di V. Horta, *op. cit.*, p. 43.
  - 19 Nécrologie. Ernest Hendrickx, architecte, in «L'Art Moderne», 1892, vol. 12, n. 25, p. 414. cit. in E. Hennaut, *op. cit.*, p. 30.
  - 20 Come risulta evidente da una fotografia originale degli interni.
  - 21 V. Horta, *op. cit.*, p. 43.
  - 22 F. Borsi, P. Portoghesi, *op. cit.*
  - 23 Cfr. A. Malliet, *Restoration of the nursery school Catteau by Victor Horta*, Brussels, in *Flanders Architectural Yearbook 00/01*, Bruxelles 2002, pp. 49-55.



10-15

progetto di restauro: pianta del piano terra, pianta della copertura, facciata posteriore, facciata principale, sezioni A-A e B-B 1:300  
restoration project: ground floor plan, roof plan, rear facade, main facade, sections A-A and B-B 1:300

16

dettaglio della struttura di ferro della copertura della sala centrale  
detail of iron structure of the roof of the central room

17

dettaglio dell'aggancio della pensilina sul fronte posteriore  
detail of the attachment of the canopy on the rear facade





18  
il salone centrale  
central room

19  
la facciata posteriore  
rear facade

20  
la copertura della sala centrale  
roof of the central room

sible – and factor he has in common with Mies. At the same time, it is precisely the metaphysical quality of his work that has left us speechless ever since Olgiati made his entrance in the international avant-garde with the construction of the school of Paspels in 1998 and the "Yellow House" at Flims one year later.

The wavering between non-referential and referential could easily lead to a language based on a formalistic liberty of architectural forms, materials and technologies – or to something lifeless, rigidly formal. But that is not the case with Olgiati, who takes an artistic approach to this contradiction, embracing subtle moments of restlessness without giving up on his incessant pursuit of totality. Olgiati explains this difficult step toward a "nothing" that is "everything" and an "everything" that is "nothing" by reminding us of another painting: *Onement* 1 by Barnett Newman. *Onement*, as the title indicates, is just one thing. In spite of the presence of a vertical red stripe that seems to divide the canvas into two halves, a closer look reveals that this is not the case: the red stripe is painted on a ribbon that keeps it separate from the darker surface. For the unity of the painting, the red stripe is simultaneously important and not important.

Olgiati refers to Newman's painting because it is not a modular work: it is composed of a single thing and derived from a single idea. This concept is very important for Olgiati, who explains that «modular things can break», while his architecture cannot. He is convinced – and all his buildings reveal this characteristic – that in spite of the contradiction between non-referential and referential, it is possible to pursue an architecture of tectonic one-ness.

Olgiati says that architecture can fundamentally be divided into two major species. His work belongs to the species that can be called "architecture of division", as opposed to "architecture of addition", a compositional architecture. Olgiati's architecture «is founded by a single thing, a single idea, and then subjected to a process of division, to the point in which it functions as a building». Unlike an architecture in which «the building takes a bit of this and a bit of that, gets bigger, is organized and takes form», Olgiati renounces this formalistic freedom not because he rejects freedom as an ethical dimension, but because an architecture of this type is "too underdeveloped, too dependent on instinct" – in definitive terms, because it does not have that intellectual, inventive potential of ideas that, in his view, architecture should have to be able to become the object of the dreams of man.

Olgiati has observed that there is a formal consequence of his intention to create architecture based on a single idea:

«My projects are always, more or less, squares». And so the circle closes. «After all, the square is a form that is in relation to the non-referential, the non-contextual. The square is more like the idea of the temple, correlated to itself. If it is correlated with something other than itself, this happens in the abstract sphere».

The architecture of Valerio Olgiati (Chur, Switzerland, 1958) has drawn great attention on an international level because his buildings are part of a sort of "avant-garde patrouille" of contemporary architecture. The architect aims to extend earlier architectural ideas developed in the 1990s. The purpose of this article is not to offer a detailed overview of the major theoretical expansions of the architecture of Olgiati with respect to the previous generation of Swiss architects and those from elsewhere. What we can say here is that the pursuit of "reduction", which has been very important for more than one generation of architects, is obtained not through reference to Calvinist rigor, but – if we decide to use the concept of "reduction" to define Olgiati's work – more in relation to theoretical problems articulated in the elusive character of Surrealism, Dada and the late Baroque of central Europe. The second aspect of enormous importance – in spite of the fact that Olgiati, who studied architecture at the Federal Polytechnic of Zurich from 1980 to 1986 and opened his own studio in 1996, belongs to a generation that has declared obsolete questions of truth, reason, correctness and incorrectness – is that his architecture is more human (in the sense that it does not aspire to be more "different" than necessary), more spiritual (in the sense that it clearly aims at a sphere that is beyond itself) and therefore more alive than the "specific architecture" based on the "specific object" of the minimalist tradition, focused on epistemological questions. Olgiati himself has compared his buildings to temples: anyone who has visited the K+N house in Wollerau, completed in 2005, or seen the project for the National Palace Museum of Taipei (2004), knows about their masterfully metaphysical character. The fact that Olgiati has created such works is even more surprising because he has stated that the difference between him and his father – the famous modernist architect Rudolf Olgiati (1910–95) – lies in the fact that his father was «a man who believed in things, while I try not to believe in anything».

What these buildings and projects by Olgiati have in common is the vision of the building as "system". This is a fundamental intuition because it permits the building to be, first of all, "nothing": not the projection of values or the incarnation of a purpose, but pure architecture. Precisely because it is pure architecture, it can be "everything", something similar to but much more radical than the formal and

spatial independence of the churches and temples of the past. "Everything" means, now, that the building is a recipient that permits any possible ontological and epistemological investigation to crystallize. The most radical examples are the proposal for the Learning Center of the Federal Polytechnic of Lausanne (2004) and the winning project in the competition for the administration building of the University of Lucerne (2003). These are projects that represent an extraordinary synthesis of the philosophical aspirations of Olgiati, with excellent structural and programmatic solutions that result in a physical presence whose parallels lie in the incredible inventiveness of ancient Asian and Pre-Columbian architecture.

The fact that Olgiati's buildings are a dynamic, reciprocal synthesis of "nothing" and "everything" also seems to have repercussions on our imagery. His buildings provoke such strong reactions in their inhabitants and visitors – usually a deep sense of metaphysical joy, not very different from what some people feel in religious buildings, but without the rigid semantic associations – because in his "systems" the stratified elements are placed in mutual relation without a preset meaning for the observer. The resulting field of forces is defined by the objective and subjective parameters of the physical, tangible building, and by the imaginative, intangible force of the observer, requiring responses from both, on both the intellectual and the emotional planes. Olgiati's architecture is masterful because its structure unifies these contradictions, which appear by means of subtle modulations on all the levels of the building's organism: for example, the large staircase of the Visitors' Center of the Swiss National Park, the non-orthogonal panes of glass that, through changing reflections, divide and do not divide the interior spaces of the office at Flims, or the decorative rosettes in the concrete, repeated hundreds of times on the exterior of Atelier Bardill. These modulations, at times so close as to seem disturbing at first, are integrated in the whole thanks to the imagination. Olgiati's architecture achieves that totality by means of a possible mental reflection, following which the building can be conceptualized just enough to make it attractive and, very importantly, to permeate it with a sense of the universal. This sense of the universal – Olgiati admits that he often dreams of temples – is there precisely because there is no static representation of a purpose. After all, if Olgiati's architecture were open to complete conceptualization, we would not find it so fascinating. It offers a perpetual play between the attempt to conceptualize what we see and our admission that we cannot do so in an absolute way. The perpetual motion of the mind, between conceptualization and imagination, fills Olgiati's architecture with its

epistemological and metaphysical force, a precise reminder of ancient temples.

Markus Breitschmid

#### page 53

Victor Horta, Kindergarten, 1895–99  
Rue Saint-Ghislain, Brussels

In 1895, Victor Horta's Frison house in Brussels, an early work built contemporaneously with the more widely known Tassel house, was about to be finished, and Horta notes in his *Mémoires* the reactions it aroused: «Quant à la façade, bien certainement, on y trouvait à redire: que signifiaient ces moulures "mourant" à rien dans le nu de la façade, et ce détail-ci et ce détail-là... Cependant, l'habitude était déjà prise: c'était "du Horta" et si cela pouvait s'entendre mal, cela pouvait aussi s'entendre bien... Buls, Bourgemestre de Bruxelles, passant par là et la trouvant à son goût, me fit appeler en son bureau: j'ai vu votre maison, elle m'intéresse. Voulez-vous faire l'étude d'une école maternelle, rue Saint-Ghislain, pour mon administration? Si je voulais!».

Charles Buls was no stranger to innovative architecture and schools. Before becoming, in 1881, lord mayor of Brussels, he had been the aldermen of public education and his interest in school building was part of his larger programme of social, urban and educational reform.<sup>2</sup> Buls was one of the progressive liberals who had founded, in 1864, the *Ligue de l'enseignement*. This group, to which also Pierre Tempels belonged, who was about to publish his seminal book *L'instruction du peuple*,<sup>3</sup> wanted to urgently react on the dire conditions of education and school infrastructure in Brussels. Development of it had not followed at all the exceptional growth of the urban population in the wake of the rapid industrialisation of the capital. Until 1860 there had been little change in the number of schools; most of them were overcrowded, in poor hygienic condition, and as good as absent from the poorer quarters of the city.

The Ligue defended compulsory attendance at school (a core issue for progressive political forces in Belgium and an instrument in their strive against child labor) and free and non-confessional education in the two languages spoken in the capital, French and Flemish. They aimed at reforming the school programmes as well as the building typology. The result was a ferocious battle with the conservative Catholic Party, that could hold off or delay most of these initiatives in the rest of the country and outside the major cities, but in Brussels the radical programme could be turned into reality. Buls, as secretary of the Ligue, took the initiative to finance the building of a model school. Its programmes, rational methods of instruction and disposition of the rooms would

serve as a prototype for popular schools that would provide children from low-income families not only with decent education, but also with school spaces that were airy, hygienic and light.<sup>4</sup> The rational approach penetrated the project on every level: even a new "Belgian" method of handwriting was developed, by Jos Dierckx. It replaced the so-called English style with a more plain and rectilinear one that was easier to read and write. Buls became the first director of the school. His involvement in the project went beyond the programmatic and organizational level, as witnessed by his own design of the new schoolbenches, individualized for each child. As architect for the new school Buls asked Ernest Hendrik, Brussels architect trained in the studio of Viollet-le-Duc in Paris and by then a professor at the Université Libre de Bruxelles, for an environment of progressive liberty and radical intellectuals.<sup>5</sup> Hendrik longed, as Tempels and other members of the Ligue, to the massonic lodge *Les philanthropes*, to which Horta would belong here in 1888.

It is in this context that Buls, in 1895, invited the 34 year old Horta to build the first model kindergarten, with four classes, in the slightly sloping rue Saint-Ghislain, in the heart of one of Brussels' most popular working-class districts. Although not widely known and published, it is a crucial work to understand the early Horta – Borsig even considered it one of his top projects.<sup>6</sup> The exact plans were signed in 1897, worked out a year later and were finished by 1899, after what was seemingly a difficult cooperation with the contractor.<sup>7</sup>

**Plan.** For the plan, Horta had no trouble following the typology developed for the model school: «En ce temps-là, on décidait que les architectes des écoles maternelles auraient dû suivre une ma-type, ce qui au point de vue de la construction n'offrait au fond aucun intérêt: les façades, les coupoles, les corps secondaires étant bien suffisants pour que le talent de l'architecte y ait large et libre action».<sup>8</sup> That said, it included a modest occupation along the street, the development of the school to the heart of the urban block, an arrangement of classes alongside a trial court, the so-called préau, which was intended for physical education and gymnastics.<sup>9</sup> Horta followed this model, but diverges slightly where it comes to the arrangement of the classes: forging the whole plan into a nearly perfect square, the classes are put in the four corners, leaving a central, double height covered play area, which extends into two height parts, together forming a U-like plan. Outside, two lower and semi-covered side aisles, also roofed with glass, contain the children's lavatories.

In choosing for this arrangement, the overall plan resembles one of the

transformations of Friedrich Fröbel's kindergarten blocks, as illustrated in Kraus-Boelte's *The Kindergarten Guide of 1882*: from the scheme below for the *préau*, to the right hand scheme for the disposition of the classes.<sup>10</sup> [ill.] Moreover, the form of the central space echoes Fröbel's "windmill" no. 50, where four blocks are arranged around a square in what becomes a crosslike composition; the positioning of the classrooms follows the layout of "windmill" no. 48.<sup>11</sup> [ill.] Fröbel's ideas and books were intensely studied and promoted by the Ligue (as were, for instance, Rousseau's and Pestalozzi's). Contrary to Germany, were Fröbel's methods had been banned from public education in the wake of the failed revolution of 1848 because many of the kindergarten teachers were also advocates of democratic political reform, they were, for the very same reason, received with great enthusiasm in the liberal and radical climate of the Ligue. Undoubtedly Horta, through this small kindergarten commission, became familiar with Fröbel's ideas. Moreover, they must have had a particular appeal to Horta for a certain similarity in approach to natural and built structures: Fröbel had a previous career as a crystallographer and, as Jeanne Rubin has demonstrated, his didactic materials, their prescribed usage, and his educational philosophy derive largely from that science.<sup>12</sup> In his *Die Menschenerziehung* (The Education of Man), first published in 1826 with French-language editions published in Brussels in 1861 and 1881, he makes the observation that, whether organic or inorganic, crystalline or noncrystalline, developmental processes seem to be the same: in essence they tend to develop outward from within, striving to maintain balance between inner and outer forces;<sup>13</sup> – a sentence that one could easily transfer to describe the movement and composition of Horta's façades.

**Technology** For Horta himself the most distinguishing feature of the whole project is, what he calls, «an essay in lightweight frameworks»<sup>14</sup> the exceptional metal structure that covers the central playing area. Slender, specially designed composite iron trusses spring from the load-bearing perimeter wall and span diagonally onto a lightweight iron ring beam. The design highlights, to a nearly educational level, the difference between both parts of a beam: the upper compressed part, made of two paired L-sections forming a T, and the lower, stressed part consisting of a solid rod. The importance, for Horta, of innovative use of existing industrial materials is evident from the detailed description in his *Mémoires*: «composé de deux équerres et d'un fer rond liés l'un à l'autre par un plat emprisonnant le fer rond dans un oeillet et rivé aux deux équerres. Le tout donnant un ensemble schématique d'une arme et des ailes, non de pourtelle à vrai dire, mais d'un T».<sup>15</sup> The design of the detail at both ends of the stressed part al-

lows even for a light pre-stressing of the rod, resulting in further diminished dimensions and impact of the beam.

The rectangular ring beam supports eight other, similarly conceived beams that meet at the centre of the structure. The area inside the rectangle is covered by a glazed lantern. Its vertical element corresponds to the height of a light truss positioned on top of each of the eight beams. By avoiding traditional iron beams, Horta wants to economize as much as possible on material, to explore innovative technical solutions, and to allow a maximum of light to enter the space. How conceptually clear and esthetically refined his solution may be, not everybody was happy with its unorthodox design: the contractor, Joseph Pâris, with whom Horta had a difficult relationship, would call the plans "quite confused".<sup>16</sup> But for Horta the real novelty of building resides exactly in this structure: «On m'a pris tant de détails dans mon architecture que je n'ai jamais compris comment cette charpente n'avait pas été copiée».<sup>17</sup> Novelty in the design extends beyond the mere technological: the unusual choice for a palish grey-green color has to strengthen the material lightness of the structure. According to Horta, he wanted to break with the tradition of using only black – or, exceptionally, gold – for iron structures.<sup>18</sup> No painting either, nor ornaments, are used on the glass itself, distanciating this building even further from the more subdued and gilded atmospheres of contemporary art nouveau interiors.

The presence of this technological solution in the kindergarten is of the utmost significance, since the similar and contemporaneously developed structures for the balconies in the great hall of the Maison du Peuple have sadly disappeared. It is important also, because it demonstrates the real character of Horta's Art Nouveau: the flowerlike structure that is formed by the welded and riveted plates where eight beams meet, results, not from a decorative programme, but from an incredible capacity, a *Kunst-wollen*, that forges industrial materials, engineering logic and craftsmanship into one synthetic whole, in an intellectually and esthetically gratifying form.

From Horta's treatment of this single element of the building alone, it is possible to understand what Buls's sharp eye had seen while walking past the Frison house: the mayor-urbanist shared a belief in the at once highly refined and logical combination of stone and nearly industrial metal structures, and in a new and freer spatial organisation, where mezzanines and light shafts brought light and pleasure at the heart of a building. He shared a belief in an architecture that was honest and that used iron in a logical and non-disguised way, as Horta had done in the Frison House and was fully exploring on the

building sites of the Tassel and Winssinger houses. He recognized in the young Horta the ideal successor for Ernest Hendrickx, the architect of his modelschool who had died prematurely in 1892. Horta had been the assistant of Hendrickx at the Université Libre de Bruxelles, and had, in 1893, taken the position of his former master as professor at the Ecole Polytechnique. Hendrickx was considered, according to *L'Art Moderne*, as the leader of the modernist school in Belgium, representing the rationalist current in Belgian architecture.<sup>19</sup> Rather than his training at the Academy of Fine Arts in Ghent, it had been Hendrickx who had moved Horta away from nineteenth-century academicism, and had introduced him in the principles of Viollet-le-Duc's teaching, in a functional architecture based on the nature of the building programme, the correct use of materials and an economy of means. This attitude penetrates the project into the level of the interior detailing, for instance in the dado along the walls of the central play area: this gently carved grey-stone element separates the lower tiled – and more easily cleanable – part from the painted part of the wall, but seems also to have doubled as a coat rack for the kids.<sup>20</sup>

**Façade** Compared to the then current neo-classical school façades, Horta's comes across as nearly picturesque: it is composed of three distinct parts: a central higher element, which in scale and typology resembles a house, is flanked on each side by a lower classroom. This disposition not only reflects the interior organisation, but follows what the *Ligue de l'enseignement* had prescribed for their schools: the new buildings needed to be integrated in their urban context, without unnecessary monumentality. Horta's own ambition with the façade fits neatly with the Ligue's: he strived for «un caractère de jeunesse bien loin du caractère solennel des autres architectures d'écoles».<sup>21</sup>

Although the two classes along the street side have the same dimensions and height, Horta makes a subtle change in treatment of the façade in order to deal with the slope of the street. In the middle of the façade, yet decidedly not accentuating any axis of symmetry, is the school entrance. A welcoming canopy reduces the height of the entrance, as if to bring it more in scale with the children – especially if one compares it with the entrances of neo-classical schools. The stairs, inserted in the façade rather than the more usual and monumental protruding out of it, serve the same aim. The actual height of the door is revealed when one compares it with the second, smaller door to its right. What looks like a service entrance, is actually a separate entrance to the cellar level that, according to the indication on the plans, was intended as rental storage space for people of the neighbourhood.

The materialisation of the main entrance and its canopy demonstrates Horta's extreme ability in combining different materials and using them in such a way that their intrinsic qualities are stretched to their tectonic maxima: the stone extends out of the doorframe to the limits of what is technically achievable, reaches out to receive the metal support of the glass canopy. The iron support is elegantly bent and transparent, yet follows an engineer's logic in the economy of materials: the T-form profile "grows" with the static need. Further, the glass canopy develops into the façade, to support the wooden overdoor window that is projected outward from the plane of the door itself. The result is an integrated and logical composition that serves not only its immediate function of weather protection, but also takes up various tasks related to signage, scale and illumination. «Rarement la rencontre pierre-fer, bois-pierre, fer-verte, bois-verte, a été exploitée avec une aussi grande précision en un seul point», Borsi would comment.<sup>22</sup>

The canopy at the back of the building could hardly be more different. Contrary to its street side cousin, it is scarcely supported from underneath, and is kept in place by a tension structure composed of standard iron sections that, in a clear reference to Viollet-le-Duc, shows the most straightforward materialisation of the static forces that it is coping with.

The passage from one part of the street façade to the other is accentuated by two vertical elements: a medievalizing chimney, and a staircase. Yet, the different parts are linked by a horizontal bichromic use of stone, typical for Belgian medieval building traditions. This solution gradually lightens the colour of the façade, from the grey *pierre bleue* of the plinth to the bright, yellowish Gobertange stone and the similarly coloured *pierre d'Euville*.

Since Gobertage is only available in small formats, the Euville stone is used for the larger formats and for most of the carving, which was done on site. Slender, vertical three-lobed elements (*lesene*) protrude from the façade. Their intersection with horizontal mouldings shows a curious combination of the curvilinear, organic details, which have become for many the hallmark of art nouveau, with fragments of a gothic tradition and craftsmanship. The horizontal mouldings are introduced by Horta to cope with the slope of the street, and are part of the different treatment of the façades of the two classes, also present in completely different detailing of the stone window frames, which is only one element of Horta's voluntary disturbing of any symmetry in the façade.

On one side of the building, clearly visible from the higher part of the street, is the unexpected, nearly enigmatic appearance of the wood and steel roof truss, protruding out of the façade. This illustrative pres-

ence might be understood as a didactical move by the architect, following the importance that Fröbel as well as Pestalozzi were giving to architecture as an instrument of learning.

**Restoration** Exactly a century after its realisation, from 1995 to 1999, Horta's small school has been carefully and intelligently restored by Barbara Van der Wee, who is also the architect in charge of the restoration of various other Horta buildings. The main aim of the restoration was to return as much as possible to the original spatial concept of Horta, while adapting the school to contemporary needs. These new needs are the result of children spending much more hours at the kindergarten than a century ago, and of changed expectations regarding heating and safety measures. In order to achieve these aims, the cellar space was integrated into the school, creating additional classrooms and a kitchen. These interventions allowed to free the original central court of its twentieth-century additions. The most visual trace of the new project is the glass floor in central court, which provides ample natural light entering the underground level. The supporting structure of the glass is the one originally bearing the tiled floor. In the side aisle of the central space a discrete staircase was added, and along the rear façade two sunken courts in steps provide direct access from the new classes to the outside playground.<sup>23</sup>

These meticulous and discrete interventions have allowed for a fortunate continuation of the children's presence in a delightful Horta environment.

Dirk De Meyer

**Notes** I would like to thank Barbara Van der Wee, architect responsible for the restauration, for her passionate and precious help in gathering material for this article.

1 Victor Horta, *Mémoires*, (Cécile Duijere, ed.), Brussels, 1985; p. 42.

2 On Buls see: Marcel Smets, *Charles Buls, les principes de l'art urbain*, Liège, Mardaga, 1995; for his involvement in education in particular pp. 49 ff.

3 Pierre Tempels, *L'instruction du peuple*, Brussels, 1865.

4 Pierre Tempels, *Ecole modèle : 1<sup>e</sup> règlement des élèves; 2<sup>e</sup> circulaire du 8 août 1877; 3<sup>e</sup> règlement des professeurs; 4<sup>e</sup> instruction générale aux institutrices; 5<sup>e</sup> tableau des heures*, Brussels, 1877. See also: Brussels, Liberaal Archief. Archives of the *Ligue de l'enseignement*.

5 See Eric Hennaut, *Ernest Hendrickx et l'influence de Viollet-le-Duc*, in: Robert Hoozee (ed.), Bruxelles: carrefour de cultures, Antwerp, Fonds Mercator, 2000; pp. 27-31.

6 Franco Borsi, Paolo Portoghesi, Victor Horta, Bruxelles, Vokaer, 1970; p. 78.

7 Brussels, City Archive, T.P. 4916-4925.

The archive is one of the very few that holds a rather complete correspondence concerning a building site of Horta in his early period.

8 Horta, 42.

9 Ernest Hendrickx, *Ecole modèle pour la Ligue de l'Enseignement*, in 'l'Emulation', 1879, 5ème année, kol. 82-84, plates 40-43.

10 M. Kraus-Boelte and J. Kraus, *The Kindergarten Guide, an Illustrated Handbook Designed for the Self-instruction of Kindergartners, Mothers, and Nurses*, 2 vols., New York, 1882, vol. I, ill. p. 38-39. Cf. also: Jeanne S. Rubin, *The Froebel-Wright kindergarten connection: a new perspective*, in 'Journal of the Society of Architectural Historians', 1989, vol. 48, nr. 1; pp. 24-37.

11 Kraus-Boelte, vol. I, ill. 50, resp. 48, p. 60.

12 Rubin, 24-25.

13 Friedrich Froebel, *The Education of Man*, trans. by W. N. Hailmann, New York, 1887, 68ff. Cit. in Rubin 1989:25. Fröbel's book was published in Brussels as: *L'éducation de l'homme*, trad. de l'allemand par la baronne de Crombrugge. Bruxelles, Claassen, 1861 and 1881.

14 Horta, 42.

15 Horta, 42-43. Horta even gives a more detailed description of the compressed part: "les fers plat de balcon se coupant à angle droit étaient découpés de moitié pour s'emboîter et ainsi déforçaient mutuellement. Replier l'un et laisser passer l'autre comme ceci: <drawing Horta in text>".

16 Joseph Pâris, *Ateliers de constructions métalliques*, Marchiennes (Belgium), correspondence in Brussels, City Archive, T.P. 4916-4925.

17 Horta, 42.

18 Cf. remarks by Horta, 43.

19 Nécrologie. Ernest Hendrickx, architecte, in 'L'Art Moderne', Brussels, 1892, vol. 12, nr. 25; p. 414. cit. in Hennaut, 30.

20 As evident from an original photograph of the interior.

21 Horta, 43.

22 Borsi, 78.

23 On the restoration, see: Anne Maliet, *Restoration of the nursery school Catteau* by Victor Horta, Brussels, in: *Flanders Architectural Yearbook 00/01*, Brussels, Ministerie van de Vlaamse Gemeenschap, 2002; pp. 49-55.

#### page 64

#### The Gesù Redentore parish complex in Modena

The invitational competition announced in 2000 by the Conferenza Episcopale Italiana (CEI) for the parish complex of Gesù Redentore in Modena was completed the following year with the choice of the project submitted by the group headed by Mauro Galantino (see the supplement to *Casabella*, n. 694, 2001). The evident differences between the project submitted to the commission

and the work completed a few months ago bear witness to a complex evolution of the project, the result of intense, fertile discussion and collaboration between the architect and his clients, especially the parish priest Marco Pongiluppi and the liturgist Giuseppe Arosio. The building is located on the southern outskirts of the city, in an urban zone of medium-height residential buildings along a four-lane traffic artery, not far from the Modena-Reggio Emilia rail line. The oblong site contains two buildings – on one side the parish services, on the other the church, the weekday chapel, the lodgings for the clergy and the home for the aged – connected by a galleria across the large space in between. The space is slightly raised with respect to the level of the street that opens toward the city. It functions as a «churchyard, square and courtyard, at the same time», as we read in the project description. It is similar to the solution applied for the church built by Galantino at Cesano Boscone (*«Casabella»*, n. 687, 2001). In Modena the presence of a loggia on columns on two sides of the churchyard is an allusion to an arcaded court, while individually corresponding to the underground presence of the peristyle of a Roman villa discovered during excavation, which revealed the bases of columns and the remains of mosaics. The public character of this access space is underscored by the presence of a continuous bench below the loggias. On the crosswise axis determined by the presence of the churchyard, to the south a paved zone and a public garden are planned, corresponding to the existing garden which is extended beyond the street, opening a space amidst the residential buildings. The space for outdoor ceremonies, equipped with a mobile shelter, has been moved from the opposite part beyond the barrier of the columns and the churchyard, where it was positioned in the competition entry. The volumes of the church are almost completely closed when seen from the outside. Toward the churchyard the white stucco-clad concrete wall – the characteristic feature of the entire project – contains a series of solutions that indicate the presence of the main facade. First of all, the monumental portal – not initially planned and explicitly requested by the client – formed by a long cut, and flanked for its full height by gray stone cladding on the wall. The same stone is utilized –almost an oxymoron for the exonarthex. An element on a smaller scale that establishes a dialogue with the reassuring dimension of the loggias and functions like a base for a sculptural work, the narthex is in turn the location of one of the entrances, placed parallel to the facade to avoid conflict with the main portal. All this is topped by a roof with a trapezoidal profile, which is fluidly connected, resolving the attachment to the loggias, with a vertical partition to the left of the facade.

Toward the street the building seems even more hermetic. On an embankment stand the volumes of the baptistery, the church and the weekday chapel. The only windows visible from the outside are the holes and cuts irregularly positioned on axes that intersect each other perpendicularly in the corner volume. Again in this case, the architect has responded to a request of the parish to give a more precise identity to the baptistery, increasing its volume and marking it with a series of windows that were limited, in the first hypothesis, to the steeple. To the side, screened by an opaque wall, are the church hall and the chapel, with a gradually lowering profile marked by high openings for light. The steeple, composed of two parallel walls with visible bells and stars, rises beyond the churchyard. The most complex solution is the one for the spaces for ceremonies. The hall of the church is organized by a dual system of axes that intersect an almost square layout. The first, parallel to the street facade, starts at the main portal, passes beside the octagonal baptismal font and concludes with the weekday chapel, which contains the tabernacle. The font generates a large fountain that, after crossing the corner glazing, forms an outdoor pool screened by a wall that protects it from being seen from the street. A sort of watery path that accompanies and comments on the path that crosses the building. On the second axis, perpendicular to the first, we find the ambo, the altar and the olive grove, also visible from the inside through a large window, but closed off by a wall from the outside. This arrangement is the result of lengthy development of the competition project, which called for the more linear, traditional positioning of the altar to the east, facing the entrances, with the suitable orientation of the congregation. The radical nature of the solution proposed for the presbytery and the perplexities regarding the relationship between the altar and the sacristy led to the rethinking of the space of the church hall: conserving the two lateral elements, the garden and the fountain, conceived –as at Cesano Boscone, in– to flank the axis of the altar, and having inserted the main portal, the decision was made to rotate the congregation. In this way «all the elements took the right position», as Galantino writes: the altar is in front of the transparency of the *hortus conclusus* of the olive trees, a reminder of the space of the apse, while the fountain and the garden become spatial foci placed in tension by the baptismal font and the altar: «the project of characterization of the natural elements through two elements of the liturgy is fully realized». And the architecture underlines this, with the presence on the two opposite sides of massive, evocative cruciform pillars –beside the windows that dematerialize the corners to show earth and water– and with the introduction of a different hue, a red ob-

tained with cocciopesto (in contrast with the whiteness of the building) which from the wall behind the altar extends to the counterfacade, all the way to the baptismal font, and then extends outward, in the wall that concludes the fountain beside the eucharistic chapel. It represents, as we read in the liturgical report on the church by Marco Pongiluppi, «a tangible link between the place of custody and the place of sacrifice», connecting all the salient points of the liturgy.

The double focus of the space is also evident in the position of the ambo, no longer beside the altar but in front of it, to form the pole opposite to the central ellipse created by the pews. A solution that reminds us of the one utilized a few years ago in the *Redemptoris mater* papal chapel in the Vatican, which appears in works by Rudolf Schwarz and has remote precedents in arrangements that can be traced back, according to liturgical experts, to the early Christian basilicas of northern Syria. This arrangement is seen in many of the projects submitted for the most recent series of competitions held by the CEI for the design of new churches (see the supplement to *«Casabella»* n. 765, 2008).

The space of the church is enhanced and commented on by a series of significant episodes. The steps on the counterfacade – a sort of women's gallery – give the entrance zone the character of a lengthened endonarthex, corresponding to the one outside. The access ramp establishes a dialogue with the monumental cornice of the portal, drawing the off-scale effect back toward a more controlled dimension. On the opposite side, a curved, perforated wall contains the sacristy, a children's area and, at the corner, the staircase leading to the residences. At the center the space is dominated by the block of the altar, on a slightly raised presbytery, and by the double ambo –lower for the proclamation, higher for the reading of the Gospel– whose program is based on a tradition that may have begun with Paul the Silentiary's description of the ambo of Santa Sophia in Constantinople.

One of the qualifying elements of the design, as was also acknowledged by the competition jury, and can be seen in the constructed building, is the careful research on light sources. The solution for the roof initially utilized determined –with high skylights on three sides– a «crown of light», a perimeter zone lit from above and a sort of ambulacrum around the pews that also contained the altar and the ambo. The wall behind the altar was interrupted by a long opening lit by an external light chamber, for a backlighting effect. Devices of this type, that underline the presence of the altar by lighting it, are frequent in the ecclesiastic architecture of the second half of the 20<sup>th</sup> century, also in Italy, but in this case one has the impression that the architect has concentrated on a more ancient tradition, for example the solutions of the protagonists

of the architectural scene of the Roman Seicento. The revisions made to the design of the church hall led to substantial changes in the lighting system.

As we have seen, the building is practically without windows directly facing the outside. But this does not mean that it is a closed volume. Actually the main light sources, the two glazings on the garden and the fountain, intentionally tend to dematerialize the masonry enclosure, and the same can be said of the exonarthex, made like a diaphragm paced by lengthened segments with zenithal lighting. The roof of the hall also contributes to this effect. The great suspended wooden vault denies and, at the same time, from certain vantage points, permits viewing of the upper light sources, appearing as an aerial, almost floating element. This device too has illustrious precedents.

The focus on the modulation of light is directly connected with the careful control of indoor-outdoor relations. The decision to make openings in the wall of the baptistery led, by request of the parish, to the opening of a horizontal cut that permits a view of the hall from the outside, even when the church is closed. Nevertheless, the selected position prevents observation of the congregation, just as it prevents them from directly looking outside. Where the opening on the garden is concerned, Galantino's description is telling: «a green space, slightly raised to offer a view of the grassy surface inside the church, screened to prevent observation from outside, planted with three olive trees, without creating glare for the congregation, because it is placed to the north». One of the devices created for the regulation of light also becomes an architectural signal that contributes to mark the sequence of the volumes outside. This is a true machine for the refraction and reflection of light, separating the church proper from the weekday chapel, and visible on the elevation toward the street as a doubling of the wall in the point at which the eaves level is lowered. The set of openings it contains, connected to the wall below, spreads light alternatively to the church or the chapel, depending on the time of day.

The chapel is lit by a long low opening across the entire lateral wall, a cut that directly faces the water, producing effects of refraction enriched by the presence of the colored wall bordering the fountain. The apse, with its square space, is topped by a glazing that doubles its size –not without another refined backlighting effect behind the altar and the tabernacle– screened on the outside by a monumental skylight visible from the street and the courtyard offering access to the eastern part of the complex.

The volume of the chapel is projected, in fact, toward the residences for the clergy and the home for the aged. Together with the church it forms two sides of the courtyard faced by the residences. The