DETAILS. Architecture seen in section
www.detailsinsection.org

A PROJECT BY
Marco Pogacnik,
DACC, Università IUAV di Venezia

SCIENTIFIC CURATORS
Marco Pogacnik, Università IUAV di Venezia
Orsina Simona Pierini, DASU, Politecnico di Milano

RESEARCH TEAM
Marco Pogacnik, Università IUAV di Venezia
Orsina Simona Pierini, DASU, Politecnico di Milano
Andrea Ambroso, Università IUAV di Venezia
Alberto Franchini, Università IUAV di Venezia
Mauro Sullam, DASU, Politecnico di Milano

GRAPHIC DESIGN & WEBSITE: Mauro Sullam
VIDEO: Stefano Zara, Valeria Cusinato

CONTRIBUTORS
Daniel Battistella, Pieve di Cadore
Marco Capitanio, Zürich/Tokyo
Francesca Castaniò, IDEAS II, Università degli Studi di Napoli
Sofia Colabella, co-founder of Gridshell.it, Università degli Studi di Napoli
Edoarda De Ponti, Studio Gardella
Raphaël Fabbri, ENSA Paris-Belleville
Guy Lambert, IPRAUS, ENSA Paris-Belleville
Marianna Nigra, Politecnico di Torino
Victor Olmos, ETSAM, Universidad Politécnica de Madrid
Alberto Pugnale, University of Melbourne
Manuel Santin e Fabio Minello, Permasteelisa Group
Luka Skansi, University of Rijeka
Annalisa Viati, AAM Mendrisio

THE FORMWORK is an association established by professors and PhD candidates with diverse academic backgrounds (history, architectural design, technology, preservation) working at the IUAV University in Venice and at Milan Politecnico. Through the exhibition Details. Architecture seen in section, the association aims to promote a collective project dedicated to the architectural detail.

The Formwork.
Cultural association
Cannaregio 638,
30121 Venezia.

info@theformwork.org
www.theformwork.org
The “Details” research

4 The project
The exhibition
Online atlas

The exhibition

6 Exhibits
8 Assembly system
10 Past exhibitions and events
12 Agreement for the hosting institution
Cost of the exhibition
THE “DETAILS” RESEARCH

/ THE PROJECT

The research stems from different sources, ranging from history of art (see the seminal book by Daniel Arasse, Le Détail, 1992) to architectural theory (Edward Ford, The Architectural Detail, 2011). Within the context of visual studies, the project investigates, through a series of case-studies, the notion of detail in order to unravel its double significance, which is at the same time constructive and formal-expressive.

The research analyses examples from post-WWII architecture, with a specific focus on the transformations occurred after the introduction of new forms of construction (the frame) and new building materials (reinforced concrete, steel, glass). For example, the wall is considered in the progressive loss of its monolithic substance, and therefore of its static and physical structure, which can only be understood by means of a section; a section revealed by the classical tectonic sequence – base, building envelope and eaves/roof.

The research project aims to demonstrate that a section can provide crucial insight into the complexity of the architectural artefact, since it allows the simultaneous perception of materiality and form, of building envelope and interior spaces. From this point of view, the section acquires an iconic character.

Rather than analysing each element of the architectural vocabulary (e.g. door, window, roof) as a separate and absolute object, the exhibition tries to focus on the interplay between them: how is the façade joined with the roof, how is the window inserted into the wall? The focus on details emphasises the relationship between different architectural elements and investigates the links between architectural composition and tectonic syntax.

/ THE EXHIBITION

The emblematic character of the section is highlighted through a series of panels, divided into three major thematic groups: Elements, Masters and Offices.

The first group of panels illustrates examples by taking a historical outlook on works by great masters (Mies, Perret, Scarpa, De La Sota, Utzon, etc.);

The second group of panels outlines the theoretical framework of our research. The detail is represented in its different expressive instances: the detail as decoration, as punctum, as joint/Junktur and as a no-detail. Depending on the compositional strategies deployed by the architect, the detail can result in different expressive outcomes: it can be isolated (punctum), it can be a part of a wider structural system (joint, Junktur), it can be reduced to a minimum until it disappears (no-detail) or it can be emphasized in its expressive nature, thus becoming mere decoration.

The third group consists of about 60 panels dedicated to a single contemporary architect or architectural firm asked to make a statement about their conception and usage of detail in their professional activity.

The exhibits also include videos and a booklet which contains a broader selection of drawings.

/ ONLINE ATLAS: WWW.DETAILSINSECTION.ORG

Our website provides updates on our future events and offers a large database with an online atlas of panels, publications and videos.

The online atlas, organised into the same three categories as the exhibition – ELEMENTS AND ISSUES, MASTERS and CONTEMPORARY ARCHITECTS – has been designed as a virtual archive. Each panel is provided in low-resolution together with its written contents in plain text format. All the essays and articles that we have published about the subject are available in the “Publications” section.
**The Cornice**

**Elements**

The cornice is the line that delimits the position of roofing or eaves. That was how architects understood this figure. The condensation of an architectural expression that includes volume and surface, the cornice is a morphological element that occurs in different shapes and geometry throughout history. It is a horizontal plane with a profile of plastic design, thus recognizable in appearance and not always in actuality.

Traditional design historically played a fundamental role in the design of cornices. From details as modest and significant as the type of cornice molding, the manner in which the cornice is connected to the wall above, or the choice of cornice materials, the levels of complexity in cornice design can be precisely defined. Cornices are sometimes reduced to a simple horizontal line that only marks the roof edge. Otherwise, the cornice is an important structural and functional element which may be used to cover the gutter or channels, for example.

As the result, such skin with thickness is both a technical element enclosing the gutter as well as a general element of the structure. With this idea, the section size of each wood element is the same width are entwined in each other to form a muntin grid). Nowadays, the handling of the building corner, the crowning elements of a building having top, bottom, front and rear. The rules have lost their founding value in the course of a building's life. "Man sees architecture with his eyes. Cornice are all elements that structure our perception of environment and our actions are devoted to the observer, has been gradually missed. Well becribing the location of the building in relation to the environment, transparency by making the most of the material's texture.

**Elements & Issues**

**Ignazio Gardella**

**Edges & readings**

Whether from structural space or spatially considered as an edge, the edges can be as significant as the facades in an architectural context. Closely related to the theme of "stop and start", the edges are still in the process of being defined in the present. The balance between the edges of two structures that make up the whole of the building relies on the balance between the edges that are open and the ones that are closed. The edges are the boundaries created by the meeting of two materials. The edges are the openings that allow the entrance of light and finally, the height of the element as the horizontal or vertical. The edges are also important for the identification of materials in the design. The edges are the place where the architecture is structured by defining the relationship among various materials and the way in which the building is perceived by the observer.

**Kengo Kuma & Associates**

**Exterior Wall with Thickness**

The project's internal volume has two series of volumes: one in the north facing the street and the other in the south facing the garden. The two series of volumes are connected at the corners and are articulated by the changes of materials and the views. The two series of volumes are connected at the north and south sides, and the internal spaces are articulated by the changes of materials and the views. The two series of volumes are connected at the north and south sides, and the internal spaces are articulated by the changes of materials and the views. The two series of volumes are connected at the north and south sides, and the internal spaces are articulated by the changes of materials and the views. The two series of volumes are connected at the north and south sides, and the internal spaces are articulated by the changes of materials and the views. The two series of volumes are connected at the north and south sides, and the internal spaces are articulated by the changes of materials and the views.
THE EXHIBITION

// EXHIBITS

// BOARDS: ELEMENTS & ISSUES

The cornice
String courses and mouldings
The cladding
The glass skin
The curtain wall
Timber construction
Italy after World War II – Part I
Italy after World War II – Part II
Italy after World War II – Part III
Italian Alpine Architecture
The use of precast concrete as structure and skin
Ultra High Performance Fibre-Reinforced Concrete

// BOARDS: MASTERS

Ignazio Gardella – Edges & mouldings
Steven Holl Architects + Guy Nordenson & Associates
– About hollows and grids
Toyo Ito – Architecture, Structure, Material
Mies van der Rohe – Corner and mullion solutions
Mies van der Rohe – Tugendhat house, Brno, 1928-30
Luigi Moretti and the Column
Auguste Perret – Structure and claddings
SANAA – The Detail and the Legislation
Francisco Javier Sáenz de Oíza – Banco de Bilbao, Madrid
Carlo Scarpa – Technique and Antiquity
Alejandro de la Sota – Gimnasio Maravillas, Madrid
Jorn Utzon, Sydney Opera House – The Tile and the Glass Facade
Marco Zanuso – 6 pillars / part I
Marco Zanuso – 6 pillars / part II

// BOARDS: CONTEMPORARY OFFICES

Wiel Arets Architects, Amsterdam/Maastricht/Zürich
ARTEC Architekten - Bettina Götz and Richard Manahl, Wien
Barkow Leibinger, Berlin
Giulio Barazzetta + SBG Architetti, Milano
Bevk Perovic arhitekti, Ljubljana
Bruno Fioretti Marquez Architekten, Berlin
Burkhalter Sumi Architekten, Zürich
C+S Architects, Venezia
Antonio Citterio Patricia Viel and Partners, Milano
Conzett Bronzini Gartmann, Chur
Hermann Czech, Wien
Elasticospa+3, Chieri/Budoia
Pascal Flammer, Balsthal
Massimo Fortis e Simona Pierini, Milano
Gigon-Guyer Architekten, Zürich
Grafton Architects, Dublin
HC, Shanghai
Estudio Herreros, Madrid
Hild und K Architekten, München
Kahlfeldt Architekten, Berlin
Kokaistudios, Shanghai
Kengo Kuma and Associates, Tokyo
Labics, Roma
LAN, Paris
Laps Architecture, Paris
Linazasoro & Sánchez Arquitectura, Madrid
Ludloff+Ludloff Architekten, Berlin
Peter Märkli, Zürich
Dick van Gameren - Mecanoo, Delft
Miller & Maranta, Basel
Navarro Baldeweg Asociados, Madrid
OAB, Barcelona
OBR, Milano/Genova/London/Mumbai
Park Associati, Milano
Dominique Perrault Architecture, Paris
Périphériques - Marin+Trottin+Jumeau, Paris
Estudio Carme Pinós, Barcelona
Boris Podrecca Architekten, Wien
Riegler Riewe Architekten, Graz
SAM Architekten, Zürich
Brigitte Shim + Howard Sutcliffe, Toronto
Werner Sobek, Stuttgart
Stauffer+Hasler, Frauenfeld
Stoffel Schneider Architekten, Zürich/Weinfelden
Takaharu + Yui Tezuka Architects, Tokyo
Emilio Tuñón Architects, Madrid
Studio Valle architetti associati, Udine
Wält + Galmarini, Zürich
Witherford Watson Mann Architects, London
CZA Cino Zucchi Architetti, Milano
This section contains interviews made by the curators to contemporary architects (among others to Toyo Ito and Kengo Kuma). The interviews focus on the role that these architects attribute to details in their projects.

The booklet contains a selection of the details chosen by contemporary architects and masters featured in the panels, drawn by students from Iuav and PoliMi. The details are printed in a large format, which allows to feature 1:10-1:20 scale reproductions (panel scale). During the time of the exhibition, the booklet provides a useful tool for students and researchers who want to focus on the construction and redraw the sections presented.
// ASSEMBLY SYSTEM

// DESCRIPTION

The panels are provided with a fixing system already tested in the previous exhibitions. Panels are fixed to the ceiling and can be placed against a wall (PHOTO 1) or suspended (PHOTO 2).

The fixing system is made up of 2 wood listels (horizontal current: section 3 x 1,5 cm, length 200 cm) to stiff horizontally the forex panels (thickness 3 mm) and of two ropes passing through the listels.

The listels are fixed to the panels with little pieces of double-sided tape and 4 metal clips (width 50 mm) (PHOTO 3) and the two ropes can be anchored directly to the ceiling with the aid of some hooks, clamps or rings (PHOTO 2) or to an already existing hanging system (PHOTO 3 · 4).

The panels can be hung in 4 ways: on the wall or in the space, on a single row or superimposed. Depending on the characteristics of the space and the scientific program, it is possible to choose the panels for the exhibition among the following 3 groups: offices (51 panels), masters (14 panels) and elements (12 panels). As a whole we have 77 panels (possibly more in the future), all of the same size: 107 x 213,5 cm. All panels and pictures from previous exhibitions can be viewed on our website.
THE EXHIBITION

// ASSEMBLY POSSIBILITIES

ON THE WALL

IN THE SPACE

A PANEL / B 2 X WOOD LISTELS / C 4 X CLIPS / D 2 X ROPES

// BOARD EXAMPLE

A TITLE AND SUBTITLE / B STATEMENT / C SECTION SCALED 1:10 OR 1:20 / D PROJECT DESCRIPTION + PHOTOS
VENICE 8-10 JULY 2014
EXHIBITION AT BIENNALE SESSIONS

Closing seminar with:
Prof. Arch. Pierre Alain Croset
Arch. Francesco Pagliari, “The Plan”
ing. Olindo de Luca, Permasteelisa

VENICE 24 NOV. - 12 DEC. 2014
EXHIBITION AT IUAU UNIVERSITY

Opening seminar with:
Prof. Arch. Donatella Fioretti
Prof. Arch. Christian Sumi
Arch. Pietro Valle
Arch. Marianna Nigra
Manuel Santin e Fabio Minello
THE EXHIBITION

MILAN 24 NOV. - 12 DEC. 2014
EXHIBITION AT POLITECNICO

Opening lectures with:  
Prof. Arch. Yvonne Farrell  
Prof. Arch. Peter Märkli  
Christian Schittich, “Detail”

PARIS 5-27 NOVEMBER 2015
EXHIBITION ENSA BELLEVILLE

Opening lecture with:  
Prof. Françoise Fromonot  
Prof. Arch. Frank Barkow  
Prof. Orsina Simona Pierini
THE EXHIBITION

/ AGREEMENT FOR THE HOSTING INSTITUTION

The exhibition Details. Architecture seen in section is property of IUAV University of Venice and the association “THE FORMWORK” is responsible for the correct use and preservation of all its materials.

The association makes available all the necessary materials for the exhibition Details. Architecture seen in section: a selection of panels, the hanging system, videos and explanation boards. The hanging and dismantling of the exhibition will take place under the supervision of the assistants of the DETAILS team.

The concept, the selection of panels, the layout of the exhibition, the didactic and cultural programs (seminars, lectures, etc.) will be scheduled together with the hosting institution and the scientific curators.

Borrowed materials (digital data, videos, prints, etc.) cannot be used for other purposes and in other contexts, except for the planned exhibition, without the authorization of the scientific curators.

The panels of the exhibition have to be returned in the original state and should therefore not be perforated, cut, modified or damaged. In case of damage, the cost of reprinting will be charged to the hosting institution.

The amount charged by the hosting institution includes:

1. Delivery inside Europe of the exhibition materials from and back to Venice. The delivery includes two wooden boxes 120 cm x 230 cm x 50 cm for a total weight of 130 kg per box;
2. Travel and accommodation for the people assisting the hanging and dismantling of the exhibition;
3. The cost of additional panels (didactic panels, etc.). These new panels will integrate the exhibition and will be property of Venice IUAV University;
4. Graphic design for flyers and posters provided by “THE FORMWORK”;
5. Insurance coverage.

The hosting Institution will provide a logistic support for all the phases of mounting, including a team of 6 students and all necessary tools (ladder, electricity, drill, etc.).

The scientific curators of the project, Prof. Marco Počanik and prof. Orsina Simona Pierini are invited for the opening of the exhibition. Their travel expenses, accommodations and meals will be refunded by the hosting institution.

/ COST OF THE EXHIBITION

For more information about the costs of the exhibition, please contact us using these addresses:

The Formwork.
Cultural association
Cannaregio 638,
30121 Venezia.

info@theformwork.org
www.theformwork.org