

Studio Anne Holtrop

ETH Zürich

design studio

HS20

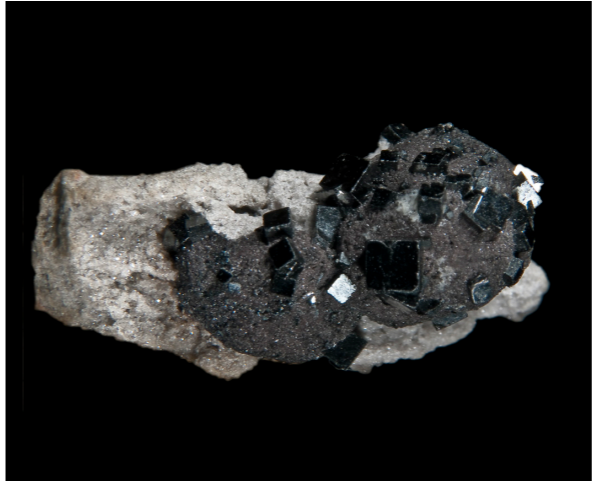


MATERIAL GESTURE:

STONE



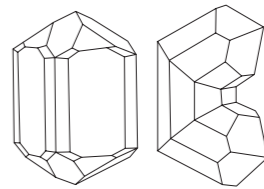
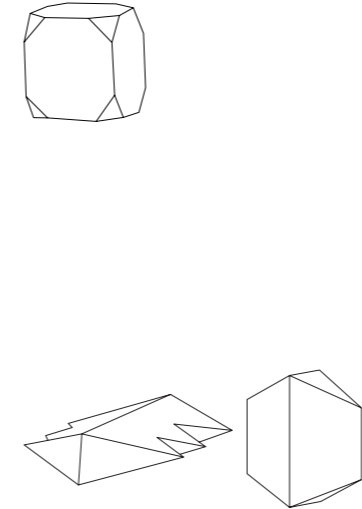
NATIVE ELEMENTS: Copper (Cu), Silver (Ag)



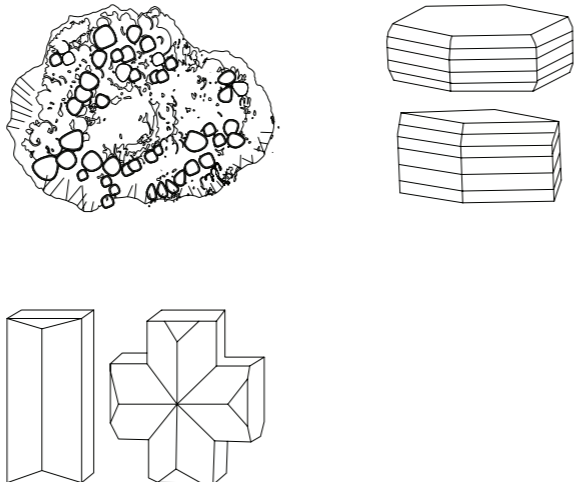
OXIDES: Bixbyite, Rutile



SILICATES: Hyalite opal, Muscovite,



**Staurolite
46**



**SULFIDES: Arsenopyrite, Molybdenite
47**





BEPPU, Kyushu Island, 2019

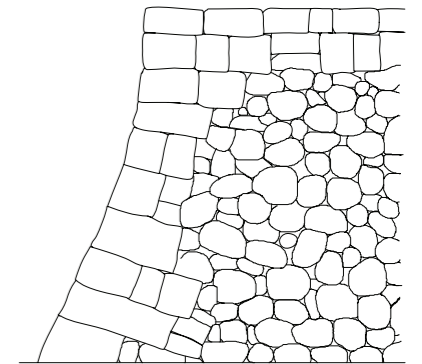
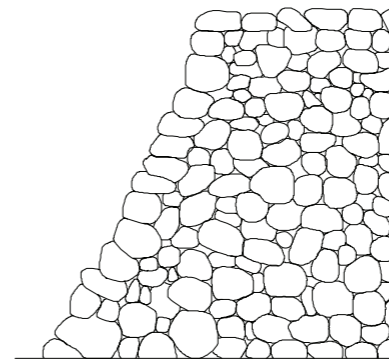








Lines by drilling holes for blasting,
smooth surface by diamond wire cut
100



FORTIFICATION OF JAPANESE CASTLE, 15th-19th centuries
128

Field & dimension stones
129



A NON-SITE (FRANKLIN, NEW JERSEY), Robert Smithson, 1968



TRISHA DONNELLY AT MATTHEW MARKS GALLERY, New York, 2019–2020
15



PETRA, Southern Jordan, 400 BC
107



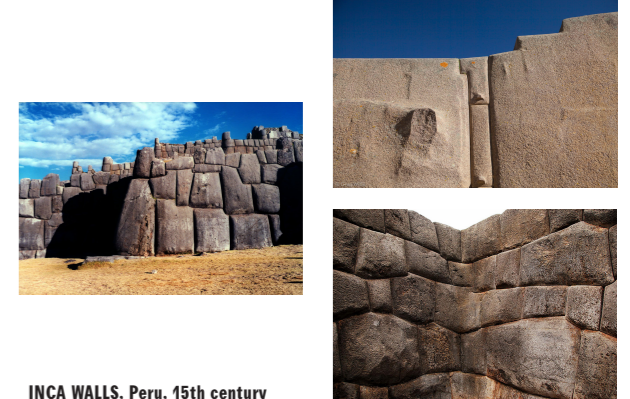
BARBAR CAVES, Makhdumpur, Janabad, India, 322-185 BCE
111



EGYPTIAN PYRAMIDS, Egypt, 2630-2184 BC
122



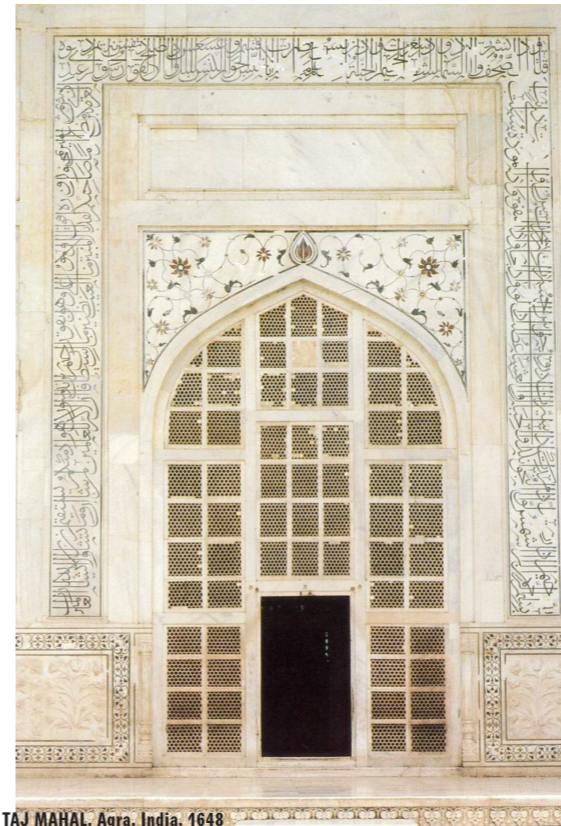
INCA WALLS, Peru, 15th century
126



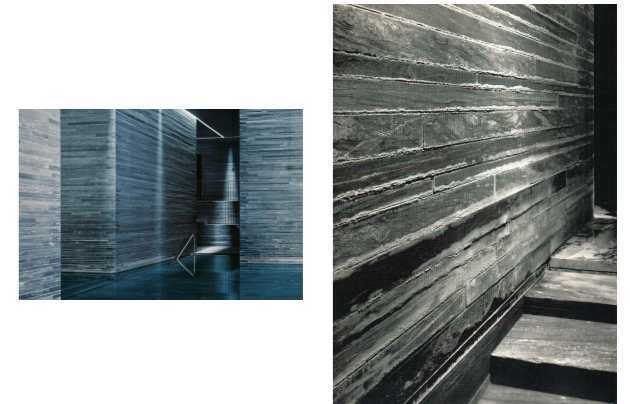
FETEHPUR SIKRI, Mughal Emperor Akbar, India, 1571-1585
127



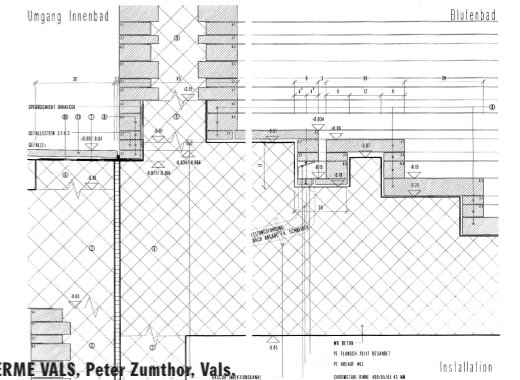
ROCK PRINT PAVILLION, Gramazio Kohler Research, ETH Chair of Architecture and Digital Fabrication, 2018
131



TAJ MAHAL, Agra, India, 1648
139



THERME VALS, Peter Zumthor, Vals, Switzerland, 1996
143



EXPERTS

ELIAS AND YOUSEF ANASTAS

Elias and Yousef Anastas studied architecture in Paris, before returning to work in Bethlehem. Their studio brings together architecture practices, furniture-making, research projects and cultural initiatives. They founded Local Industries, an industrial furniture-making network, in 2012 and SCALES, a research department, in 2016.

Their most recent works include Qamt, a stone bench acquired by the Victoria and Albert Museum, the Hebron courthouse, and the ongoing Stonematters, an experimentation-based research around the possibilities of stone usage in contemporary architecture. They co-founded Radio alHara – a community based online radio – and are about to launch The Wonder Cabinet in Bethlehem, a multipurpose cultural platform bringing together artisans and artists.

MITUL DESAI

After graduating from Washington University in St. Louis in 2008 with M.Arch, Mitul joined Studio Mumbai for an internship. This engagement evolves and continues as a collaborator for publications, exhibitions and installations in India and abroad. Mitul has his own architectural practice and continues to engage with various design institutions in his hometown, Surat. A self-taught photographer, he rigorously documents the everchanging Indian landscape. Cities, urban fringes, industrial landscapes, demolition, material studies and informal architecture are few of many photographic interests that he considers crucial for his ongoing dialogue with Bijoy Jain. Architecture, photography, research and teaching are seamless and interdependent entities for his ever-growing interest in culture, anthropology and habitat.

FABIO GRAMAZIO

Gramazio is an architect with multidisciplinary interests, ranging from computational design and robotic fabrication to material innovation. In 2000, he founded the architecture practice Gramazio & Kohler, in conjunction with his partner Matthias Kohler, where numerous award-winning designs have been realised. Current projects include the design of the Empa NEST research platform, a future living and working laboratory for sustainable building construction. Opening also the world's first architectural robotic laboratory at ETH Zürich, Gramazio & Kohler's research has been formative in the field of digital architecture, setting precedence and de facto creating a new research field merging advanced architectural design and additive fabrication processes through the customised use of industrial robots. This ranges from 1:1 prototype installations to the design of robotically fabricated high-rises. His recent research is outlined and theoretically framed in the book *The Robotic Touch: How Robots Change Architecture* (Park Books, 2014). From 2017 to 2019, Fabio Gramazio was Director of Studies for Bachelor and Master Architecture.

STEFAN HEUBERGER

(Winterthur, 1976)
Heuberger graduated from ETH
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Zürich with a diploma in Earth Sciences in 2001. From the same institution, he then earned a PhD focusing on geological field studies in the Hindu Kush and Karakoram Mountain Ranges in Pakistan. After these studies at ETH Zürich, he spent 12 years working as a consulting geologist in different industry projects in Switzerland. There, he first worked in the fields of analysis of rare, extreme natural disasters like earthquakes for reinsurance applications and for safety measures of nuclear power plant sites. Then, he focused on geological exploration studies and projects for geothermal energy and the nuclear waste disposal industry. Since 2017, he is back at the ETH Zürich Department of Earth Sciences as head of the Georesources Switzerland Group, which conducts applied research in the field of mineral and energy resources of Switzerland and strongly collaborates with the Swiss Federal Office of Topography (swisstopo) and the Swiss Federal Office of Energy.

AGLAIA KONRAD

Austrian born, self-taught as an artist, since the early 90s, Konrad has developed a strong interest in urban space, architecture and sculptural architecture. Metropolitan urban space forms a key focus in her photographic work; she has been exploring the post-war

urban landscape and its various forms and manifestations in a wide array of mega cities on different continents. Her work comes about in various media, like photography, film, video, printed publications and installations. She has participated in many international group exhibitions, such as Documenta X and Cities on the Move, and has had solo shows in numerous venues, including Museum M, Leuven; Fotohof, Salzburg; Netwerk, Aalst; Sainsbury Centre for Visual Arts, Norwich; Museum für Gegenwartskunst, Siegen; Camera Austria, Graz; and Luminair City, Lisbon. A selection of her published books includes: Elasticity (2002); Iconocity (2005); Desert Cities (2008); Carrara (2011); Zweimal Belichtet (2013); Aglaia Konrad: From A to K (?); SCHAUBUCH: Skulptur (2017) and upcoming Japan Works (2020). She lives and works in Brussels and teaches at the LUCA School of Arts.

CLAUDIO MADONNA
(Locarno, 1983)

In 2013, Madonna obtained his PhD at ETH Zürich with his thesis “Laboratory Measurements of Seismic Attenuation and Computation of Elastic Moduli of Reservoir Rocks”. At present, he is lab manager of the Rock Physics and Mechanics Laboratory and senior researcher at ETH Zürich. His competence in the

SCCER-SoE group focuses on research and development in experimental rock physics on material properties and geomechanical processes relevant to deep geoenery reservoir engineering. Design of, and participation in studies that allow bridging small-scale rock properties and deformation experiments with larger-scale properties and behaviour of underground rock laboratories.

MARIO MONOTTI
(Locarno, 1975)

Monotti graduated from Zurich Polytechnic with a degree in Civil Engineering and subsequently, earned a PhD in Technical Sciences where he focused his research on the plastic analysis of reinforced concrete slabs. Since 2009, he has held the position of Professor of Structural Design at the Accademia di architettura in Mendrisio, Switzerland. He is also the founder and owner of the Monotti Ingegneri Consulenti SA in Locarno. His company specialises in structural design in architectural contests in the public and private sectors on national and international levels. Mario Monotti works collaboratively with young architects. His name is associated with the school of Leutschenbach of C. Kerez (European steel design award 2011), the House on Two Pillars of C. Scheidegger and J. Keller (Betonpreis 2017), the National Pavilion of the Kingdom of

Bahrain for Expo Milano 2015 of Anne Holtrop, and many other project and exhibition pavilions.

FILIPPO SCHENKER
(Basel, 1983)

Schenker is a field geologist with a strong background and expertise in structural geology, metamorphic petrology, geochronology and numerical modelling. His research interests include the study of geological processes from the micrometre to the kilometre scale, combining geological mapping with analytical and numerical techniques. In 2013, Filippo received a PhD in structural geology and tectonics at ETHZ with his dissertation focusing on mechanical and thermal aspects of extensional migmatitic domes in compressional orogens. From 2014–15, he was a postdoctoral researcher at the University of Lausanne and coordinator of the Doctoral Programme in Mineral Sciences (Programme doctoral en Sciences des Minéraux) of Western Switzerland. Since 2015, Filippo is researcher at SUPSI, and he is associate editor of the “Bolletino della Società ticinese di scienze naturali” since 2016.

ANNIKA STAUDT

Staudt is a self-employed stonemason and sculptor, based in Düsseldorf. Her Atelier was founded by the

sculptor Friedrich Meyer in 1967 and her aim is to pursue and develop the strong sculptural language of this Atelier. The work focuses on massive stoneworks and can be self-contained, as well as responding to natural and architectural space. The shape and surfaces arise through long-developed craftsmanship and careful observation of the process. For more than five years, she worked at the Atelier of Peter Zumthor in Haldenstein, with responsibility for the model workshop. Throughout this experience, she was in close exchange with architects and architecture, thinking and developing intervention in stone. Lectures, workshops and teaching assignments include: Maastricht Academy of Architecture with Jos Bosmann (2019), Hogeschool Rotterdam with Groothuijse/ de Boer (2018), TH Köln with Nikolaus Bienefeld (2017), Accademia di Architettura Mendrisio with Quintus Miller (2016/17) and with Francis Kèrè (2017), ETH Zürich with Gion Caminada (2015) and Akademie für Handwerksdesign (2015).



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