Tragwerksentwurf IV

Raumbildung			Globale Form			Operation		
Vacchini Studio Vacchini Sporthalle Windisch	**Kerez** Fosterstrasse Ein-Wand-Haus	**Ito** Mediathek Serpentine	**geom. Form** Candela Nervi	**exp. Form** Isler, Otto,Musmeci	**Fabrikation** Gehry Guggenheim	**Para. Variation** Zaha Hadid Hungerburgbahn	**Kombination** Koohlhaas Maison á Floirac	**Transformation** Sancho-Madridejos Kapelle

Semester im Überblick

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Sendai Mediathek, Arch.: Toyo Ito, Ing.: Mutsuro Sasaki, 1995-2000

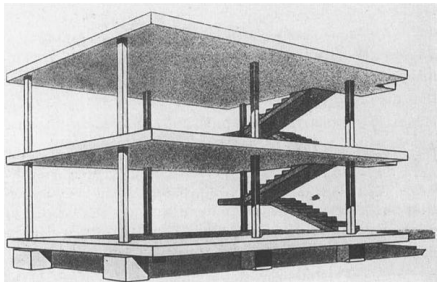
5 Punkte Le Corbusiers:

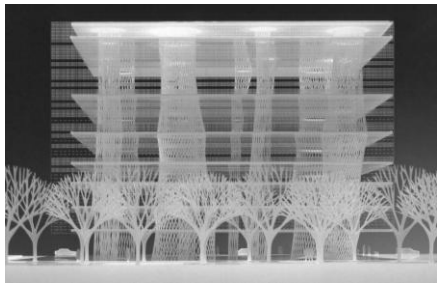
Die Stütze
Der Dachgarten
Die freie Grundrissgestaltung
Das Langfenster
Die freie Fassadengestaltung

Punkte in Itos Architektur:

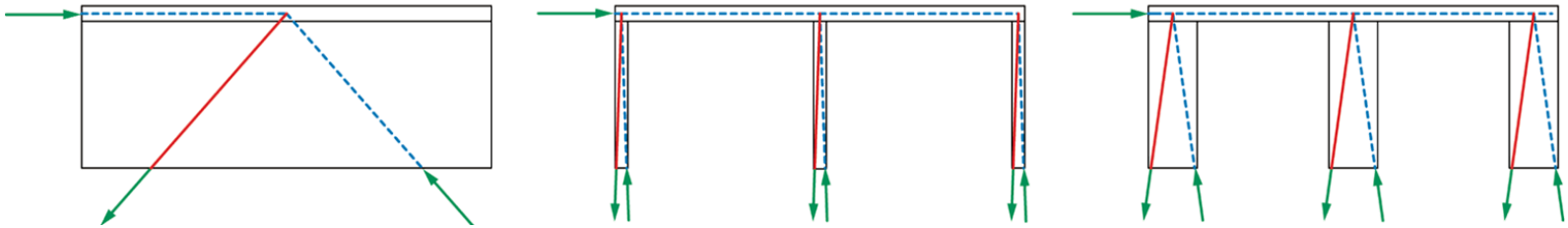
Fliessende Räume
Transparenz
Körperhaftigkeit

Villa Savoye, Le Corbusier, 1931

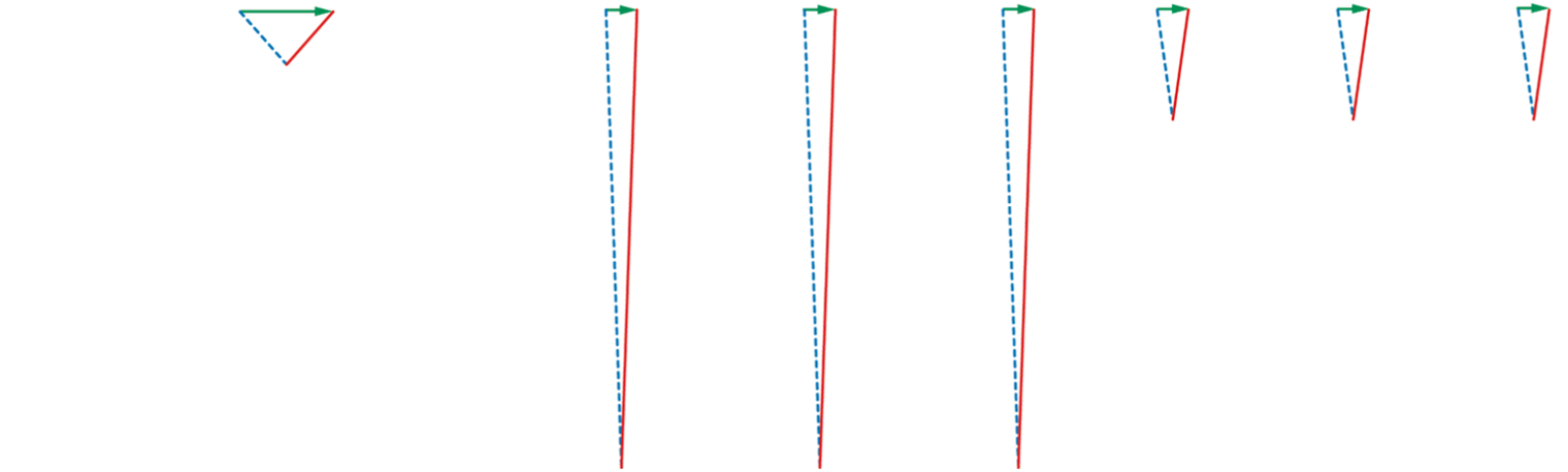


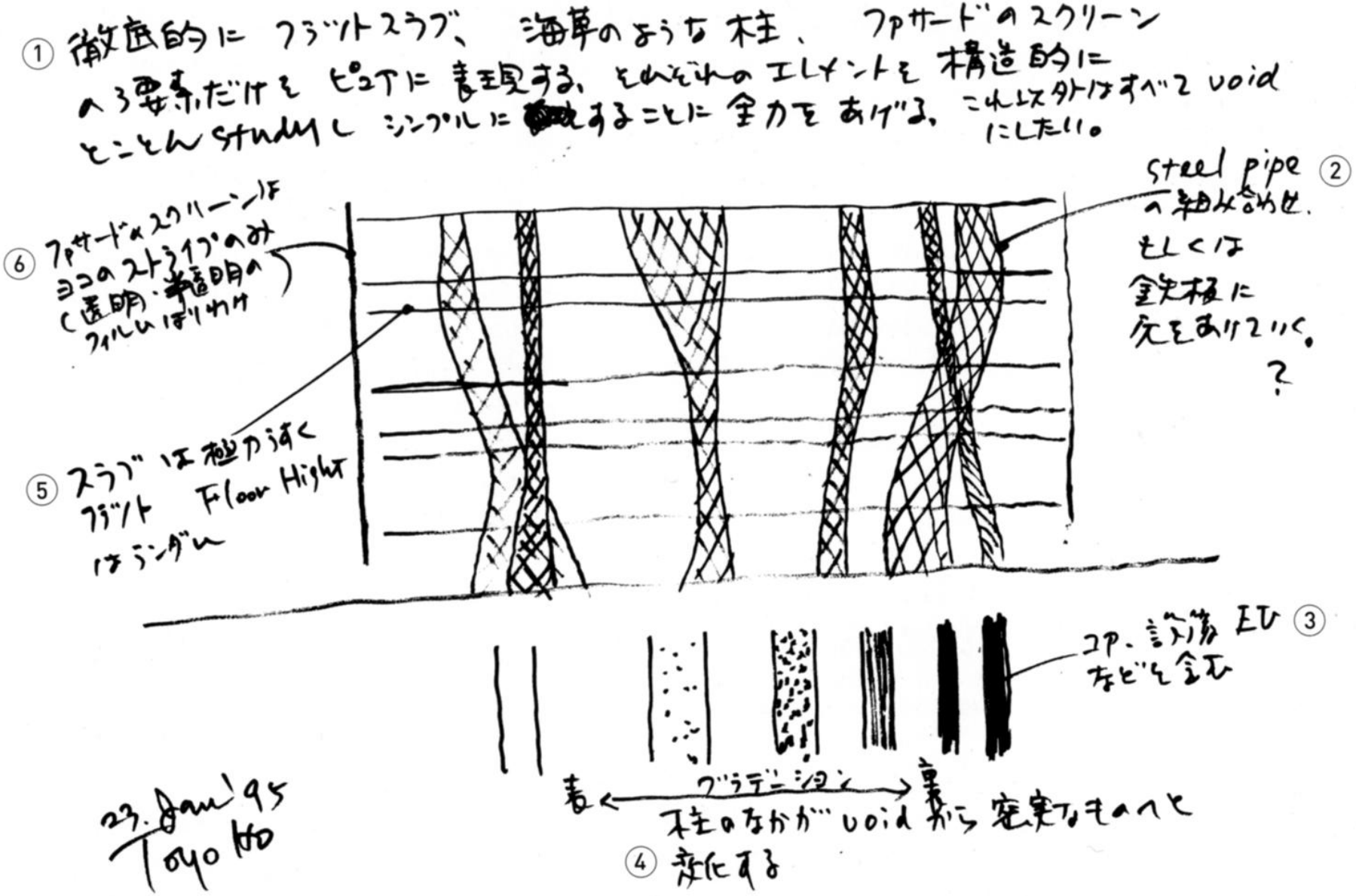


Horizontallast



Kräftepläne zur Horizontallast





Erste Entwurfsskizze *„Seetang der im Wasser tanzt“*

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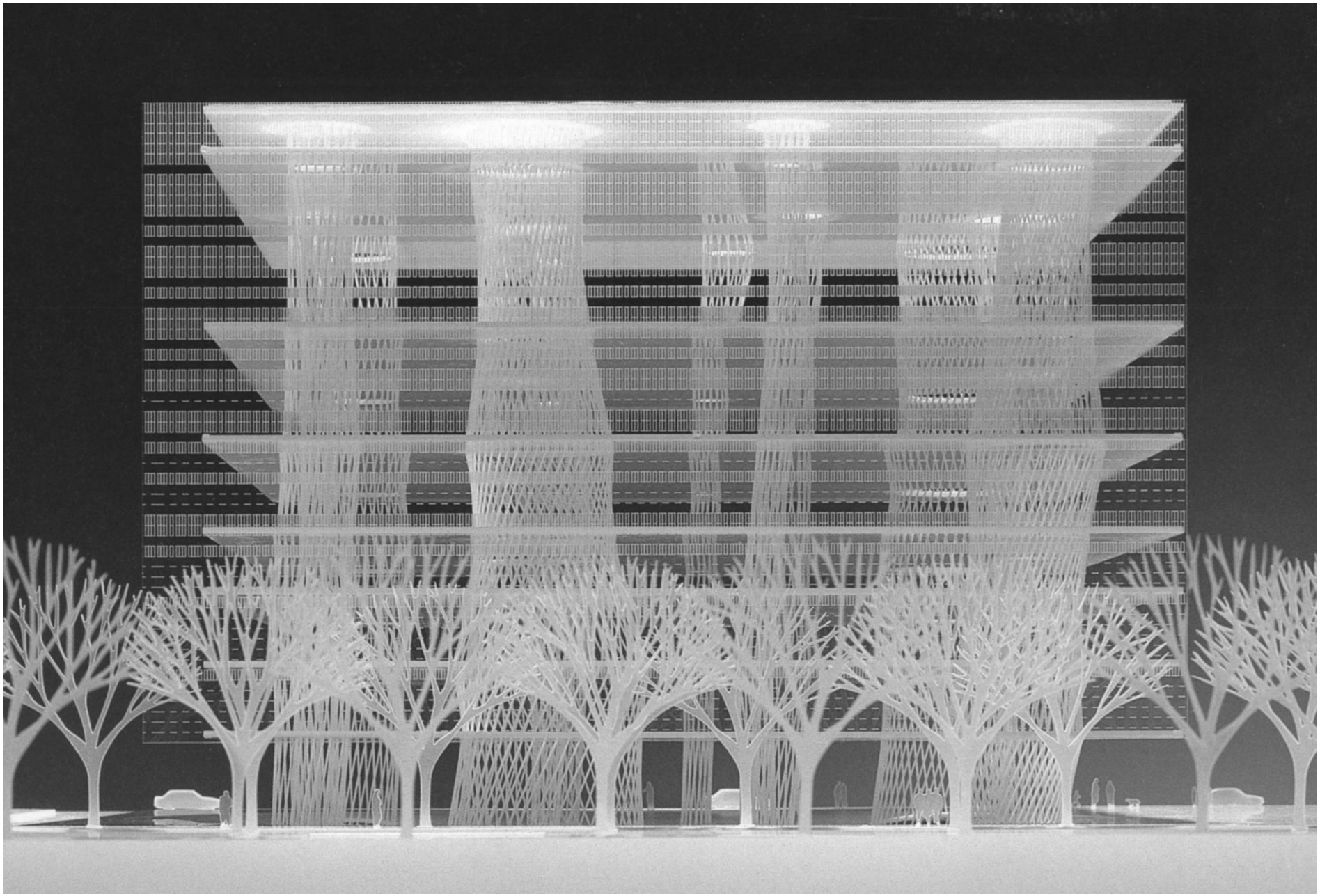
"... the image was poetic, but far from any known reality... “

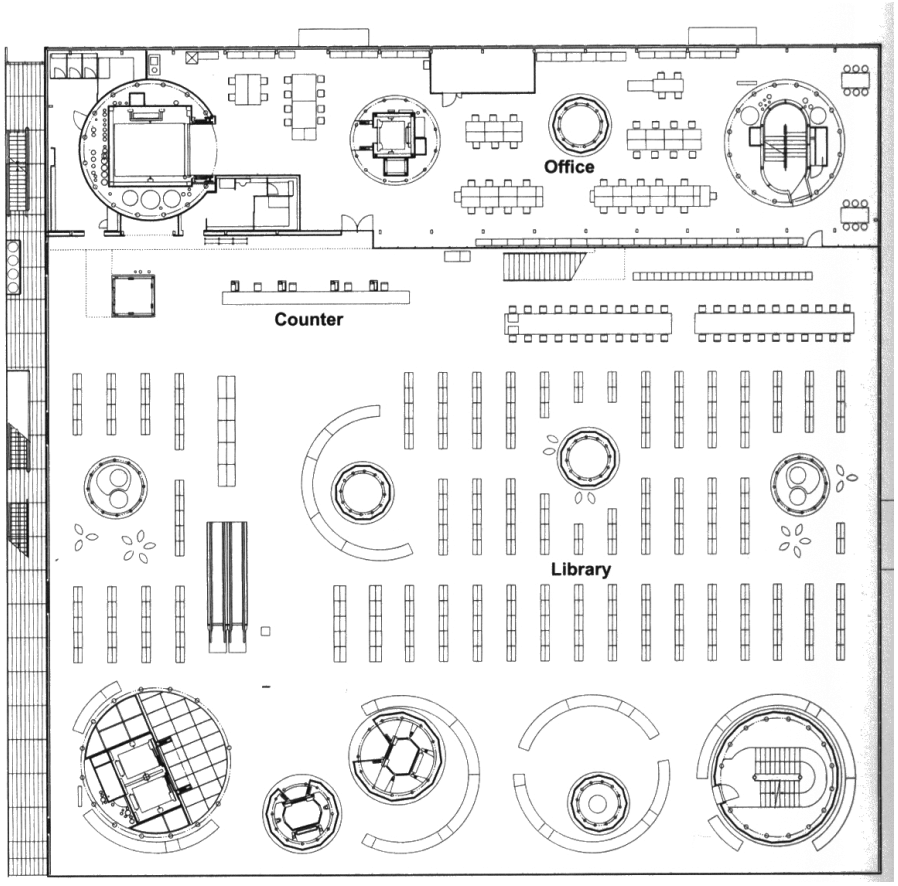
Mutsuro Sasaki`s erste Reaktion auf Itos Skizze



Wettbewerbsmodell

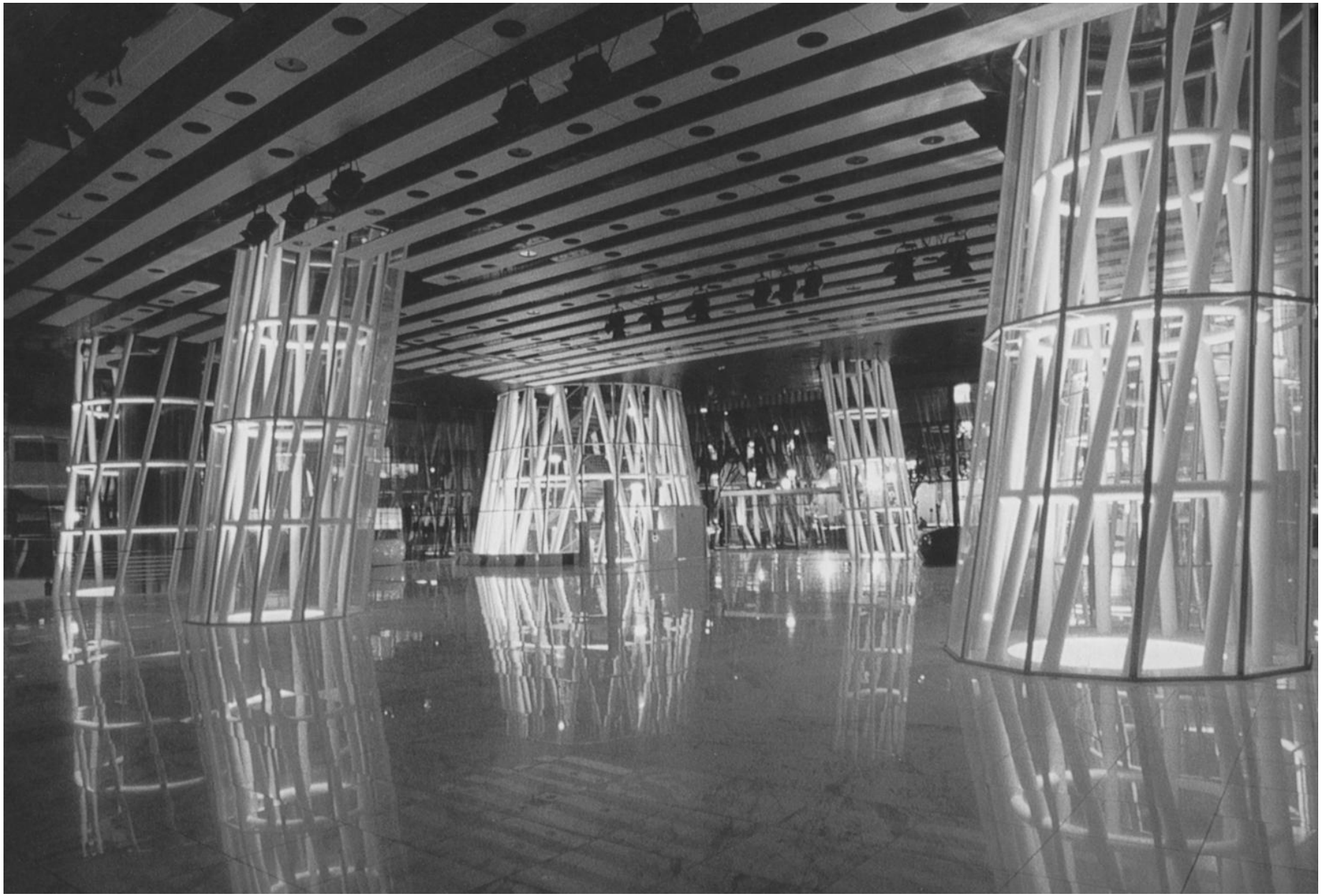
„In the case of Sendai however, he (Sasaki) was probaly shocked by the design and made a tremendous effort to realize the „tube“ that we had drawn. Or perhaps I should say he forced our design on his modernistic logic.“

Toyo Ito im Interview mit Koji Taki 2005



Grundriss und Geschossplatte im 2. OG

Die raumhaltige Stütze



Die „Tubes“ als raumbildende und lichtführende Elemente

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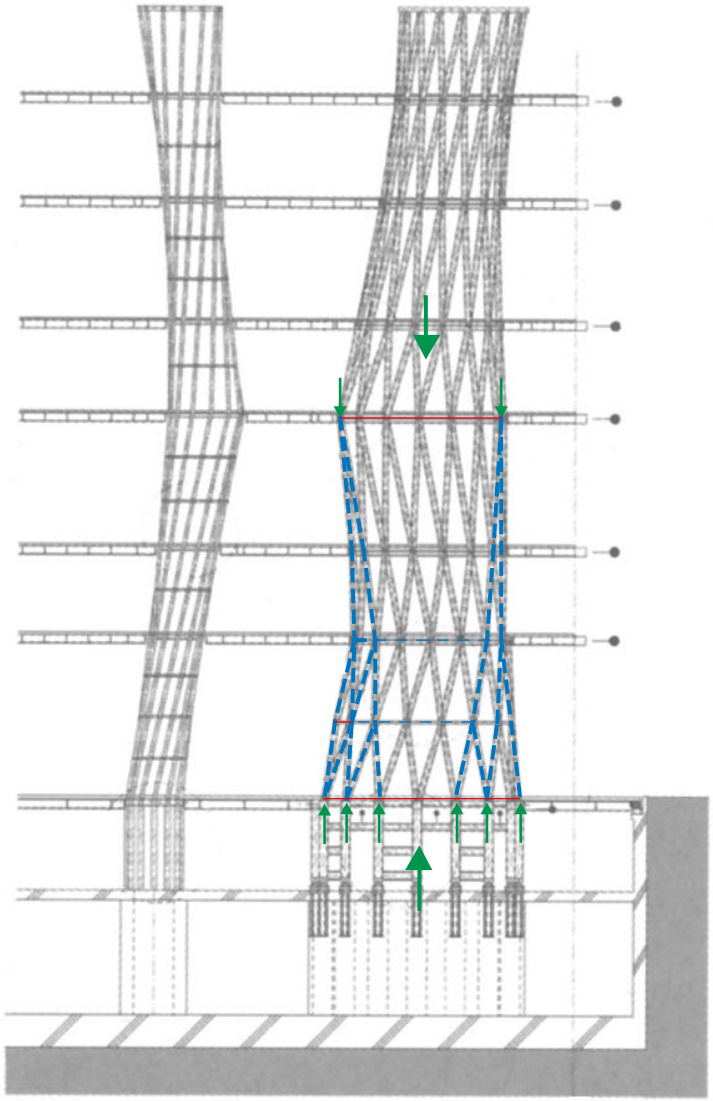
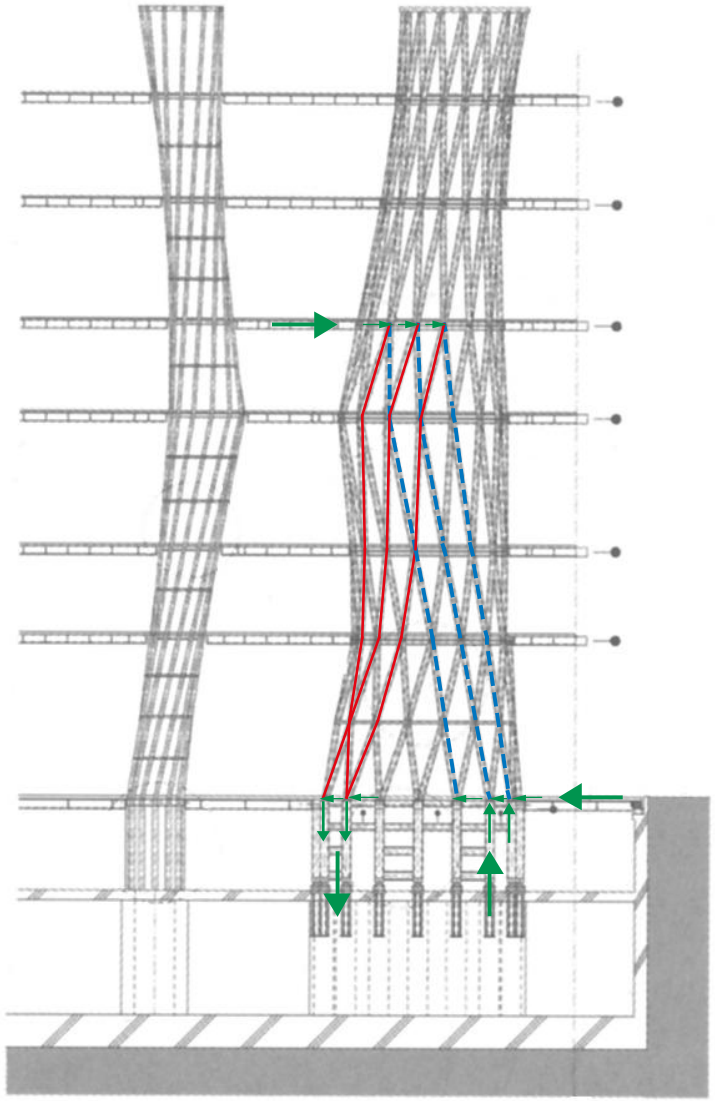
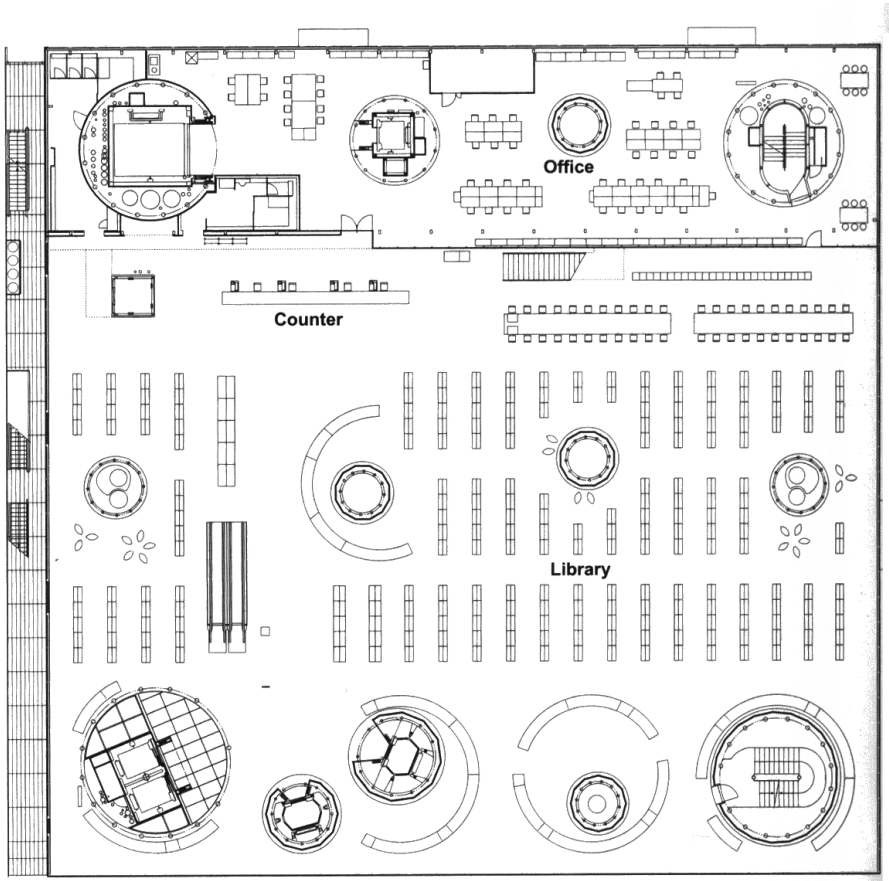
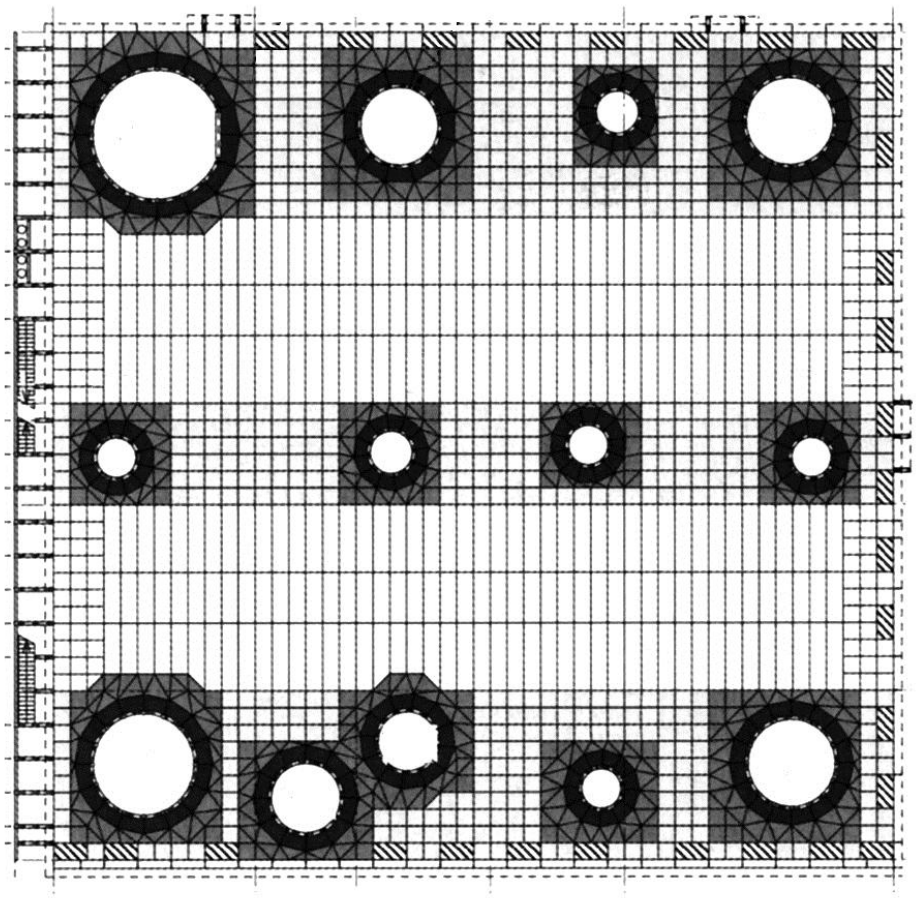


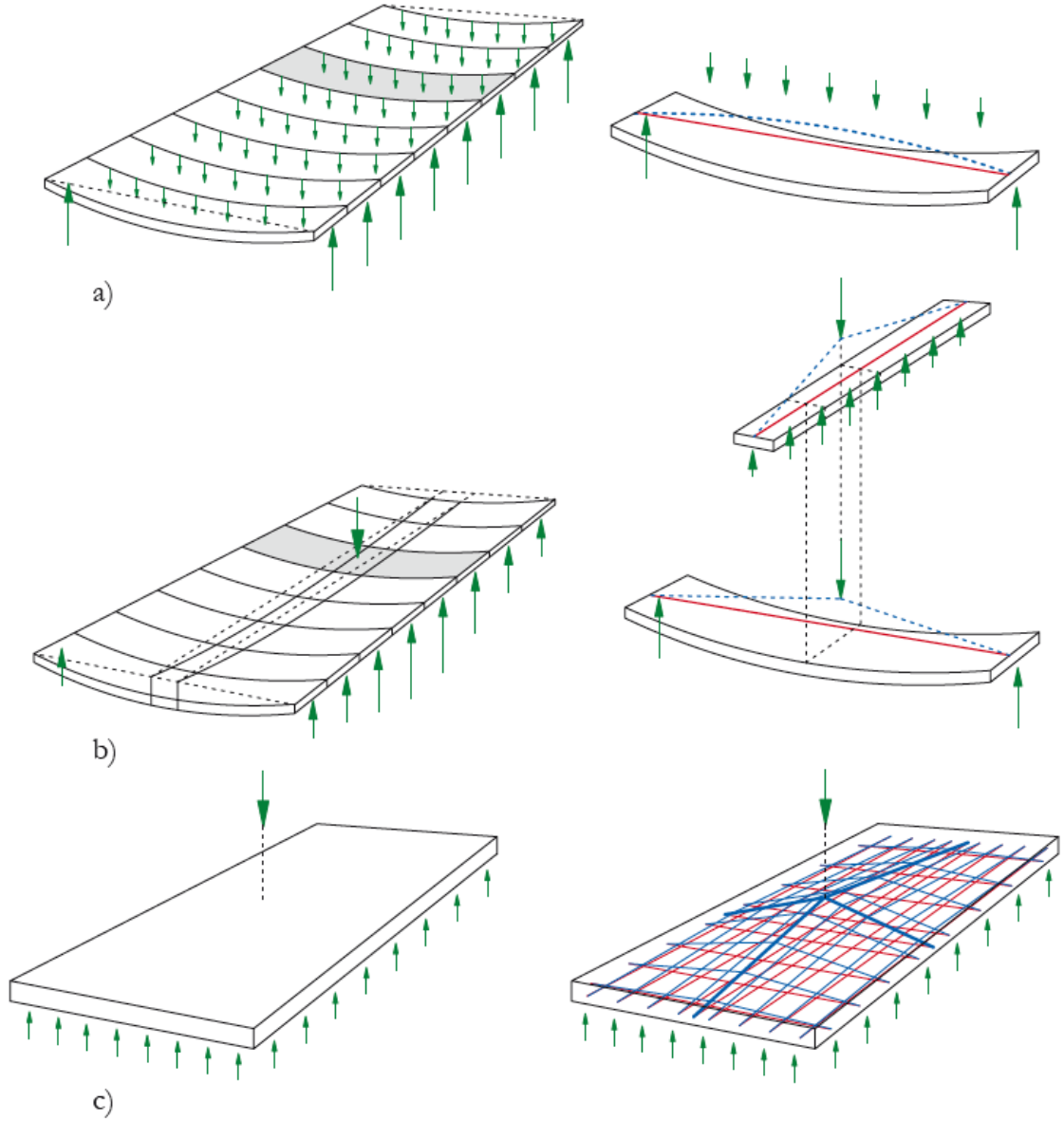


„Tubes“ unter horizontaler und vertikaler Last

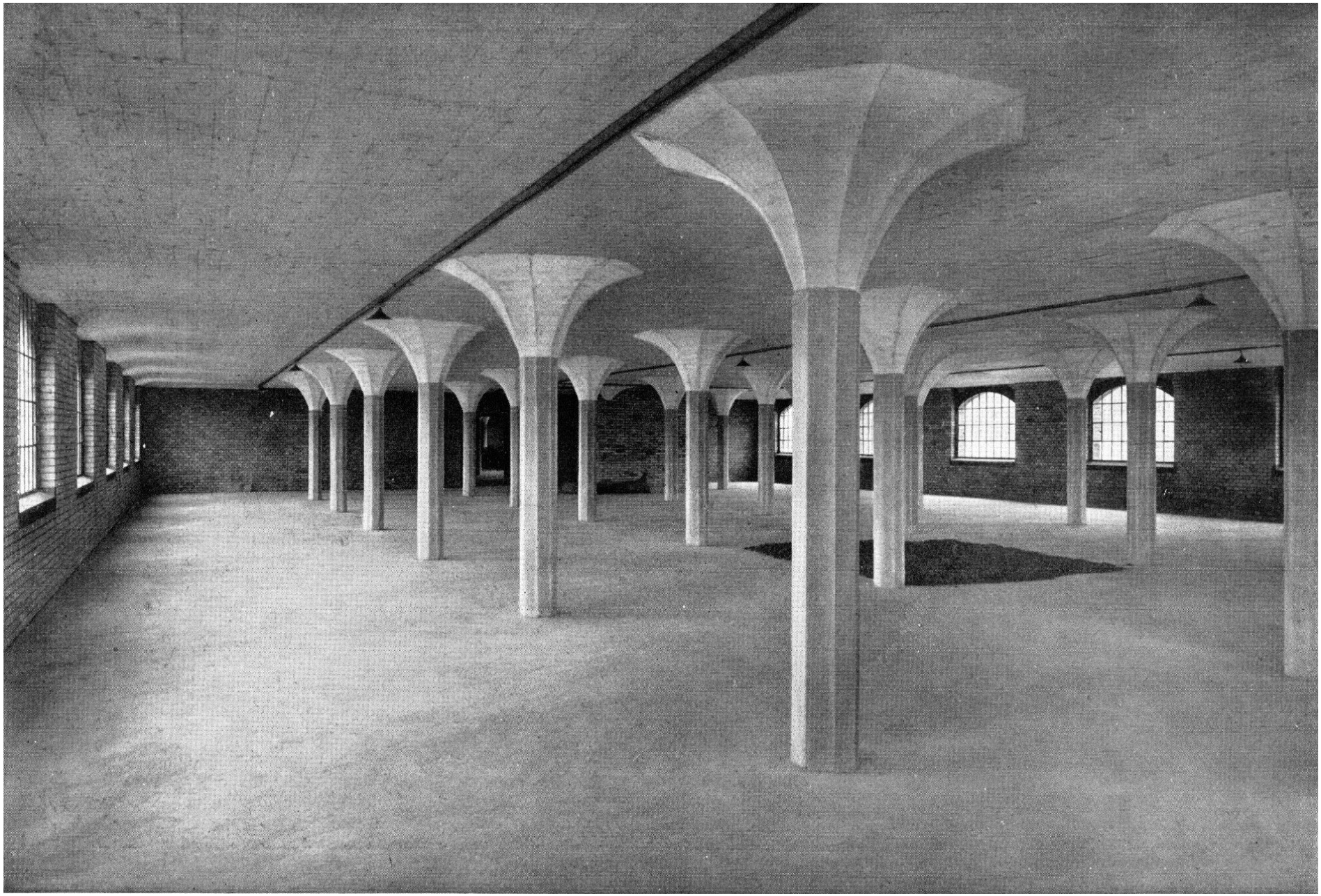




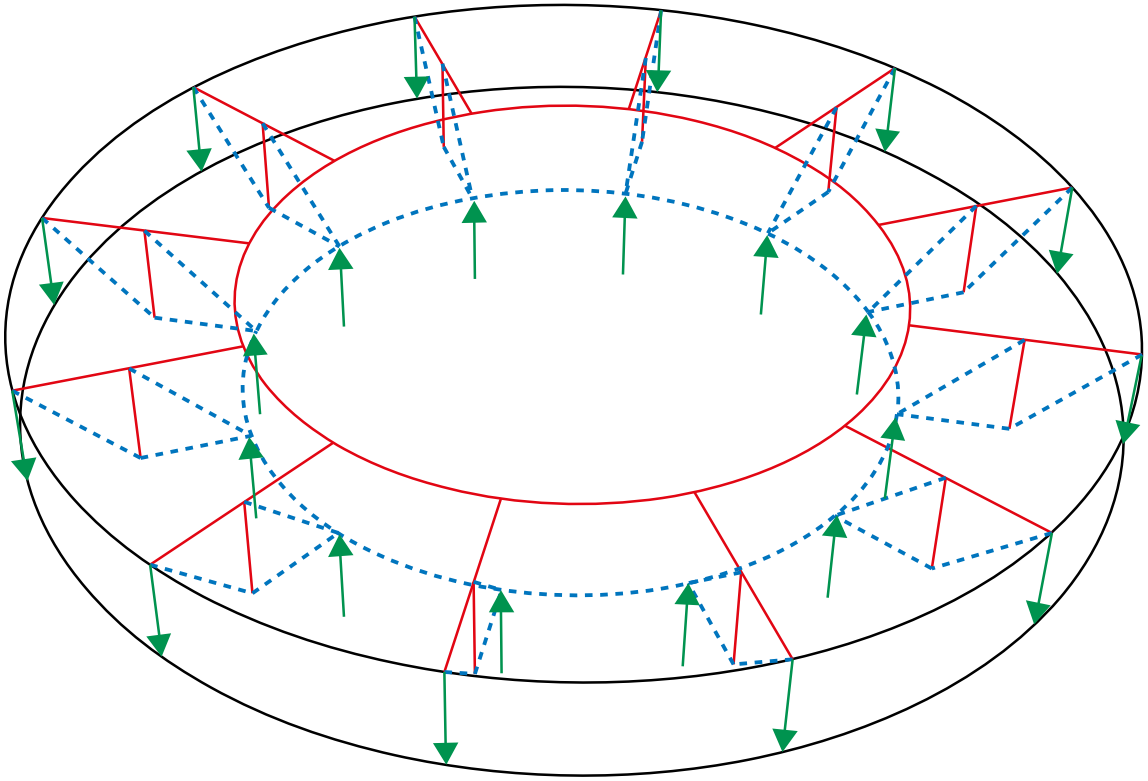
Grundriss und Geschossplatte im 2. OG



Tragverhalten von Rechteckplatten

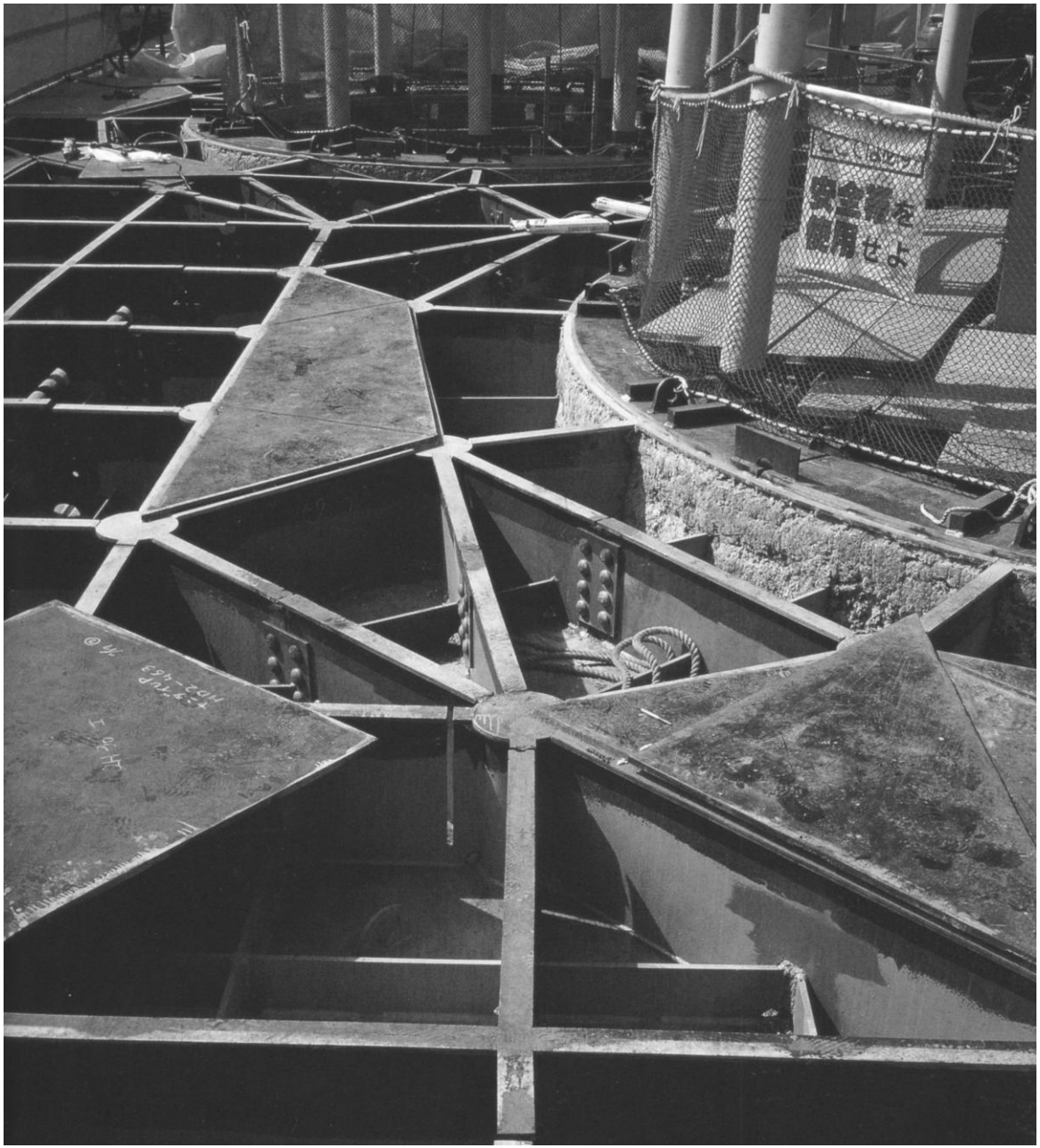


Lagerhaus Giesshübelstrasse, Zürich, 1910, Arch. & Ing.: Robert Maillart



Tragweise der Platte in der Nähe des Auflagers

Wollfabrik Gatti, Rom, 1951-53, Arch. & Ing.: P. L. Nervi



Stahlrost in der Nähe der „Tubes“

Blick in eine „Tube“

„I would like this building to become a strategic base for such activities, a place where the act of creation is itself archived. “Take to the streets to create a book” – that is what I hope Sendai Mediatheque will ultimately inspire people to do.“

Toyo Ito im Interview mit Koji Taki 2005

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Serpentine Gallery, Arch.: Toyo Ito, Ing.: Cecil Balmond, 2002

"That is the difference between my production and Mies´s production. Mies manipulated the same thing again and again, then refined the grid. But I want to look for different directions with every single project like a growing tree. “

Toyo Ito

Links: Serpentine Gallery, Arch.: Toyo Ito, Ing.: Cecil Balmond, 2002 Rechts:Fransworth House, Arch. Mies van der Rohe, 1951

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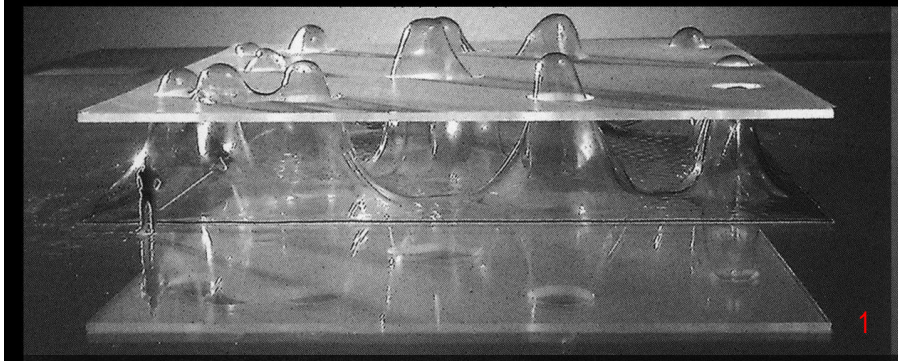
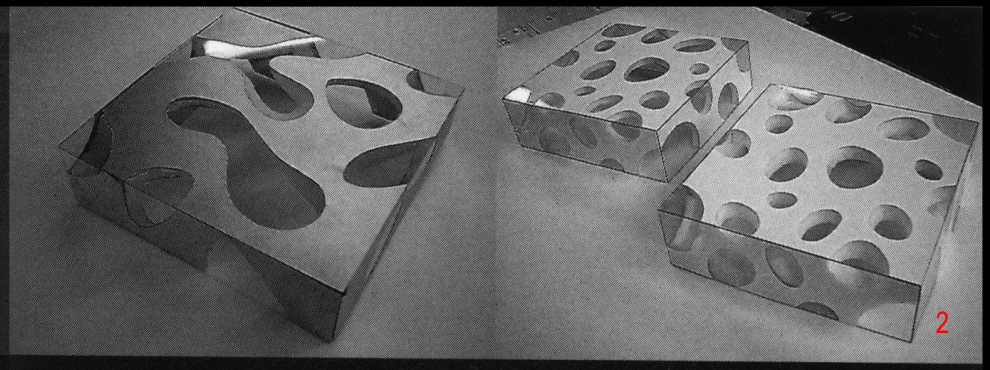
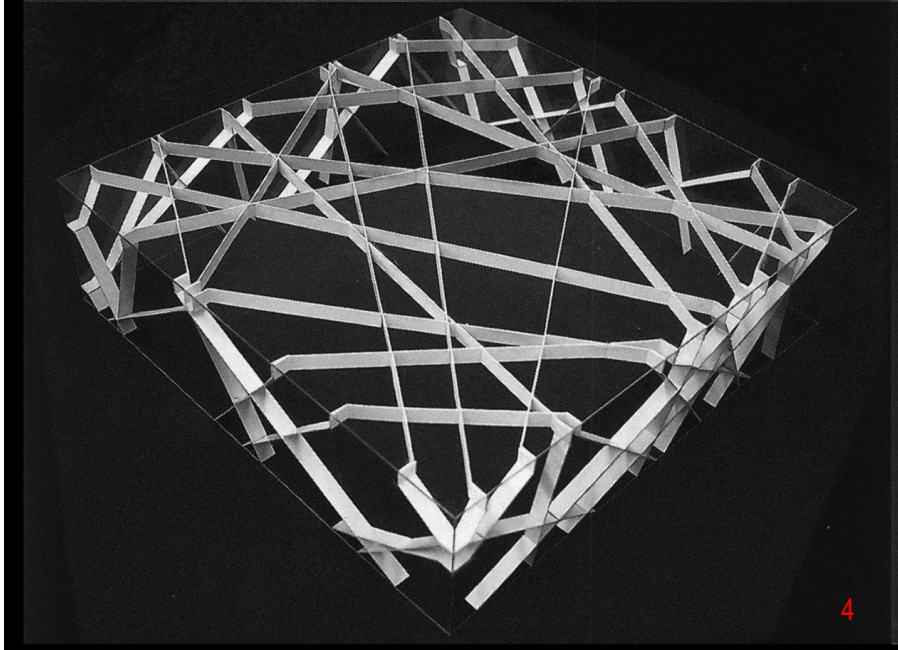
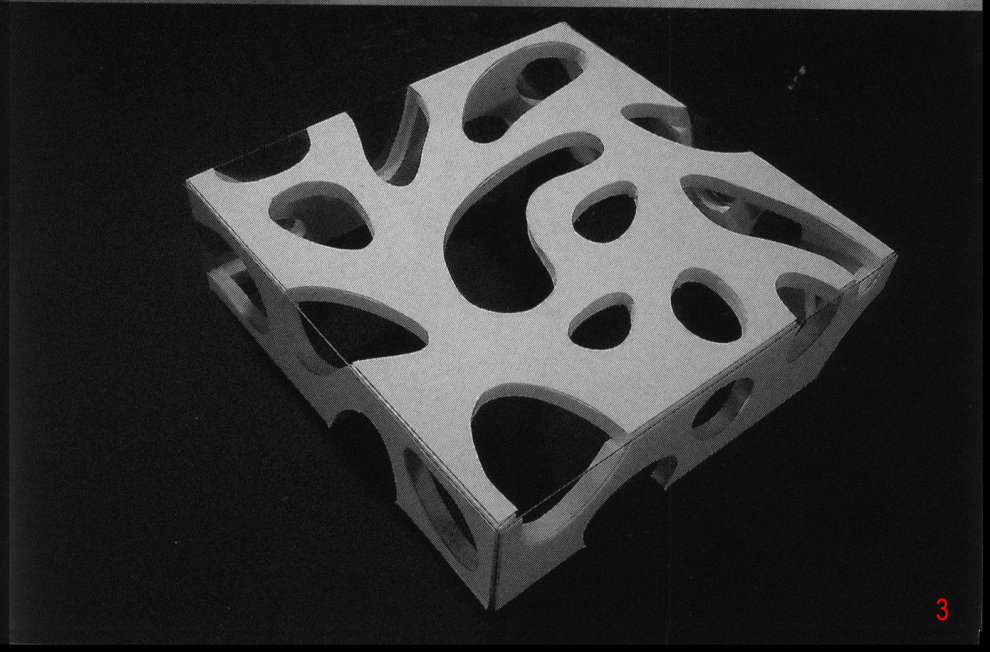




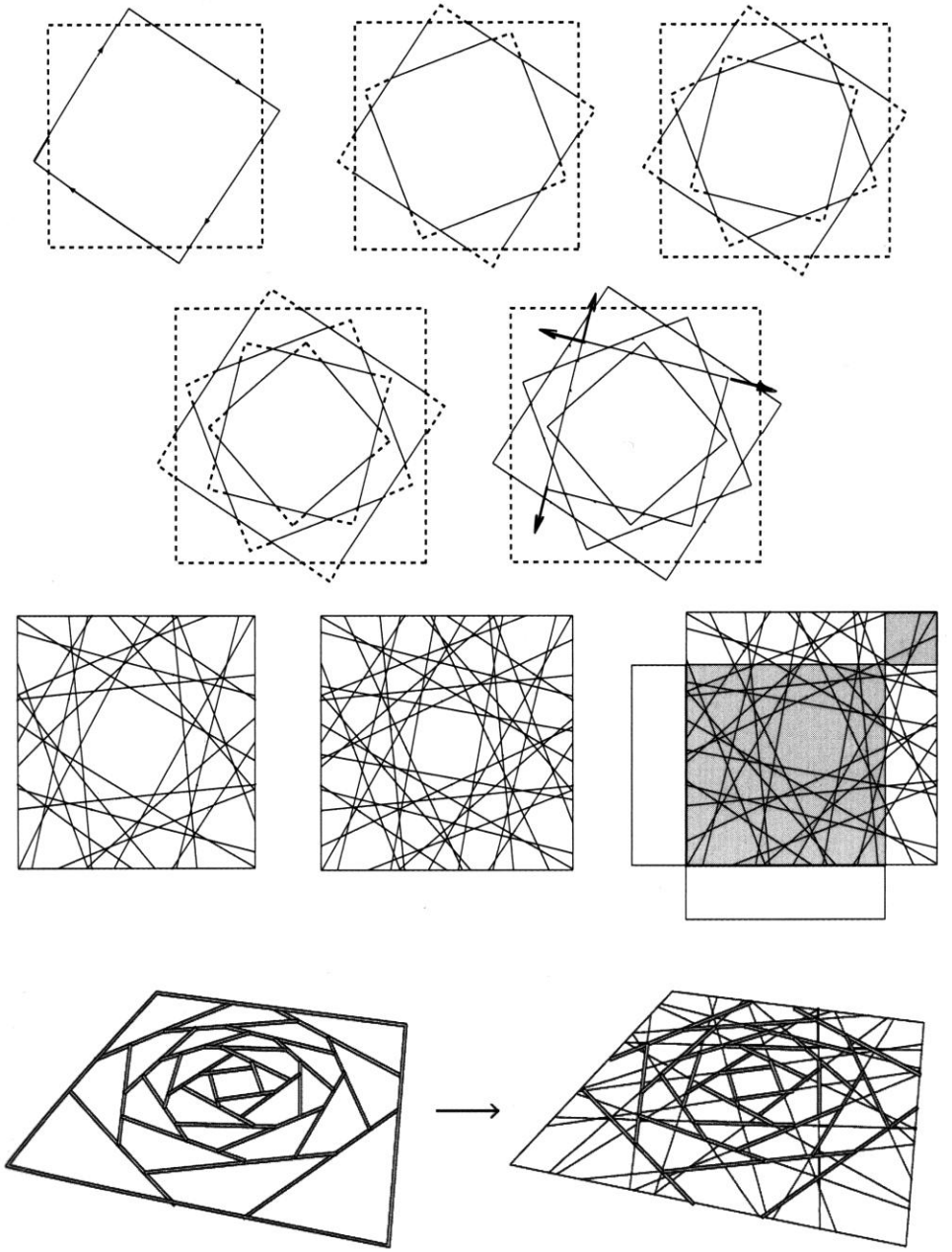




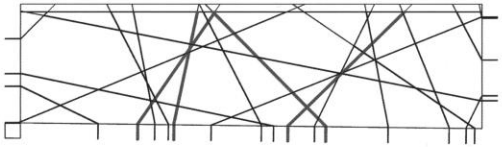
Entwicklungsschritte

"Cecil Balmond describes geometry as traces of moving points and widens the concept of geometry. However, Cecil`s concept of geometrie is difficult to apply to architecture because we need to incorporate it with social systems and specific forms of living and life "

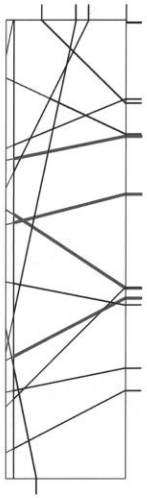
Toyo Ito



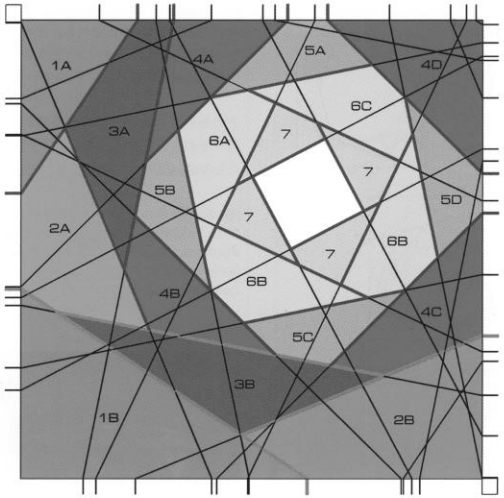
Oben: Rotation des Grundrasters Unten: Half to a third algorithm line pattern and cladding studie



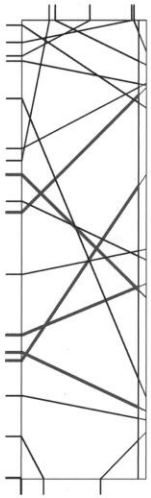
Wall A



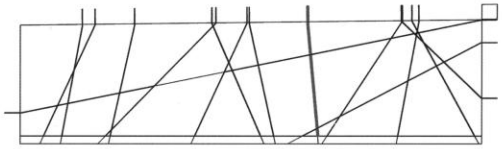
Wall B



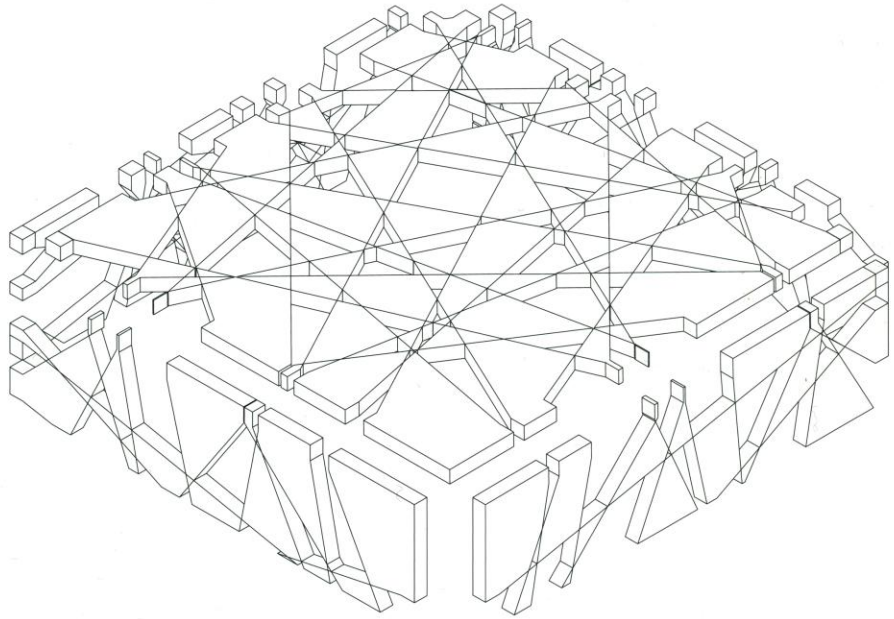
Roof Plan

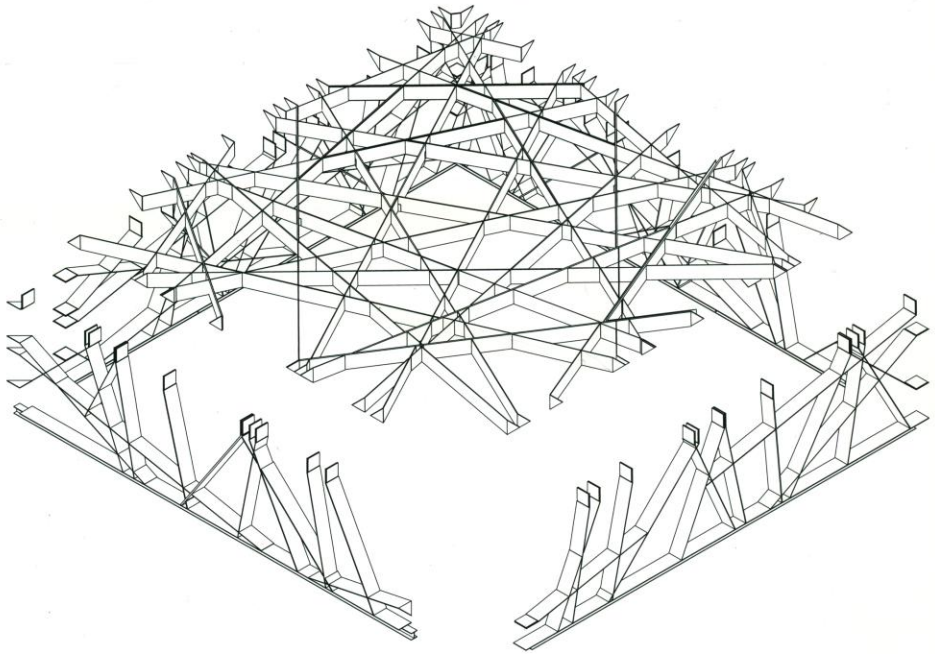


Wall D



Wall C





Aufsichten und Axonometrie der Struktur

"The random pattern of the London pavilion, however, is both a product of the architects intent and an expression of engineer Cecil Balmond`s ideas about non-linear structure. “

Toyo Ito

Innenraum

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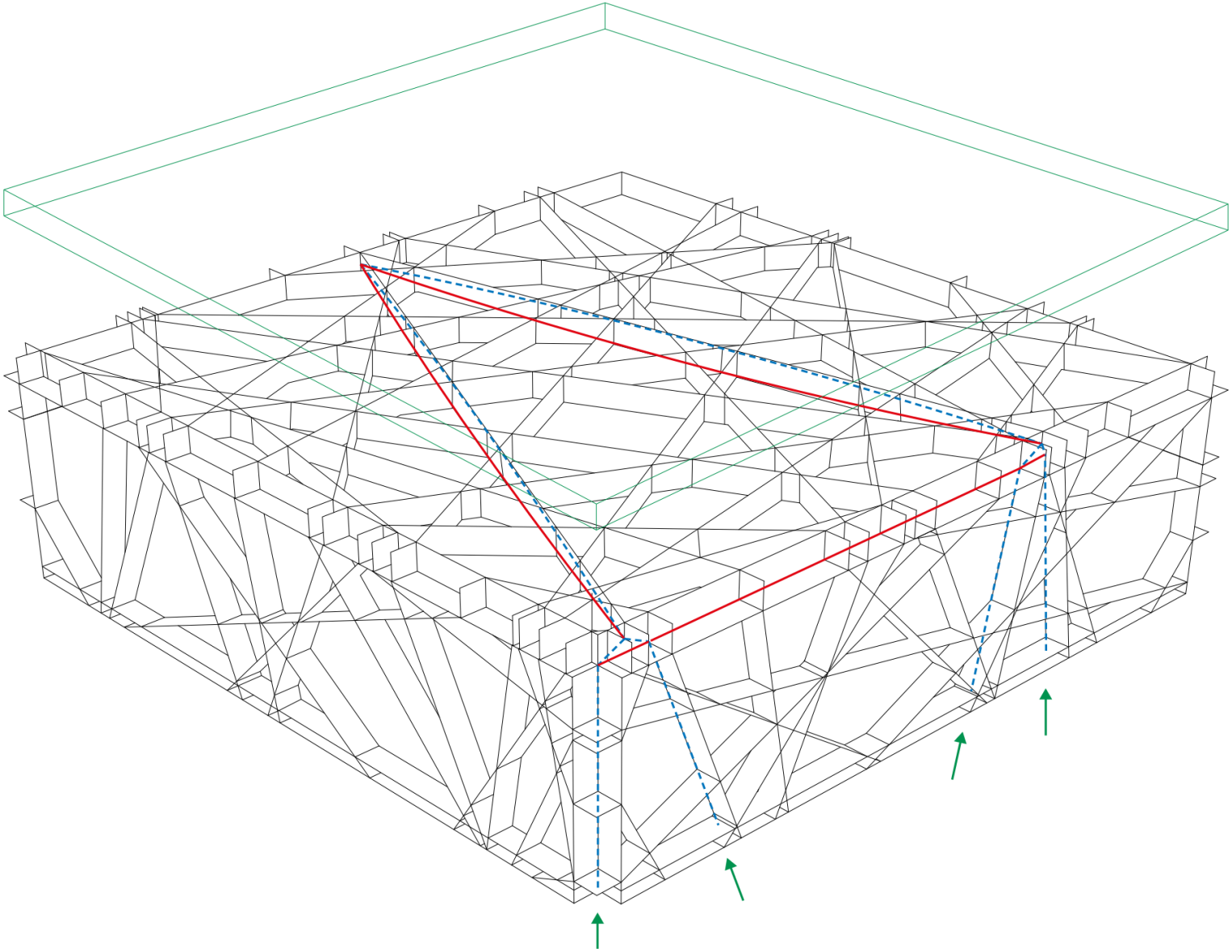

Schematische Darstellung des inneren Kräfteflusses unter vertikaler Last

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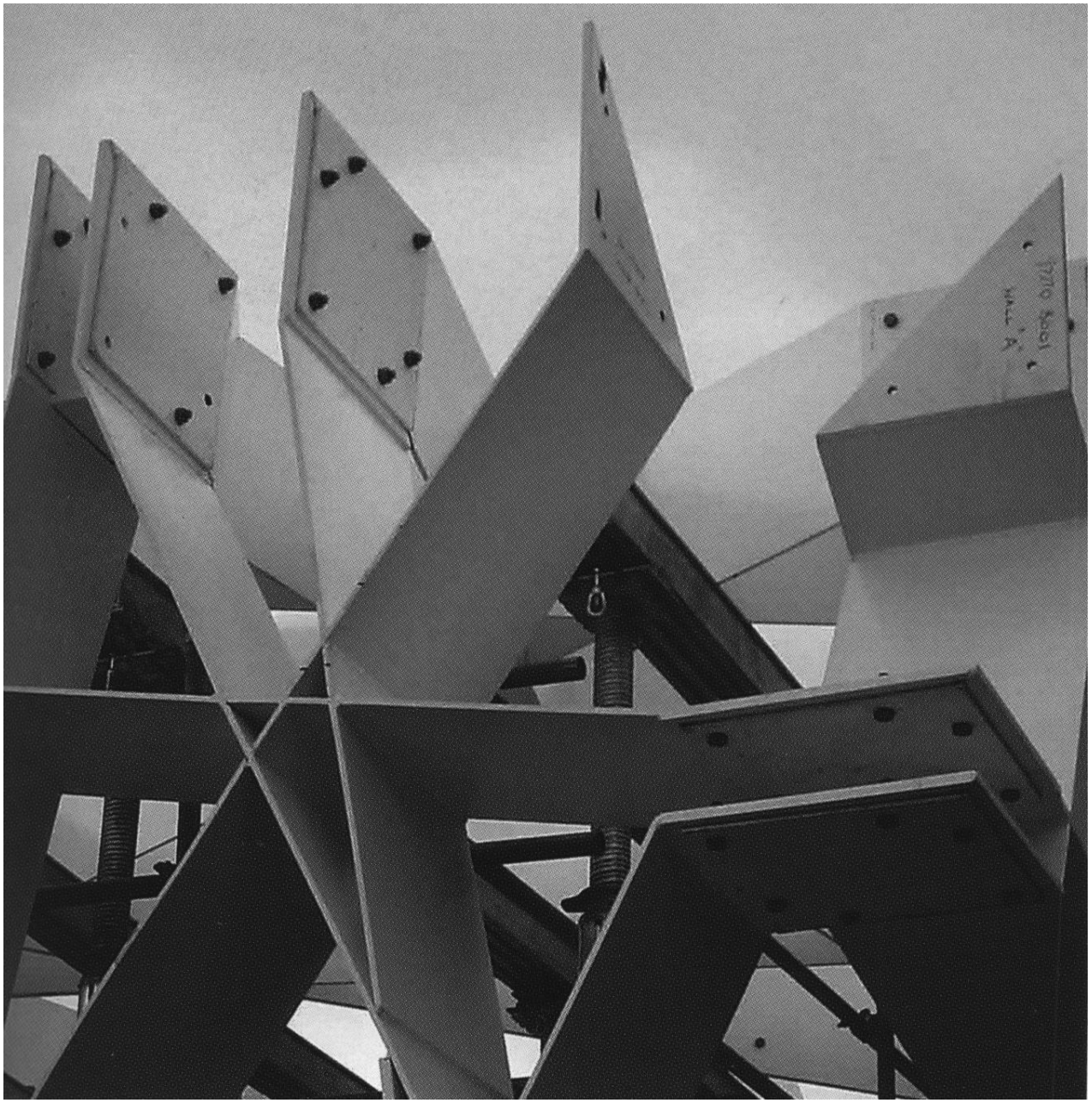
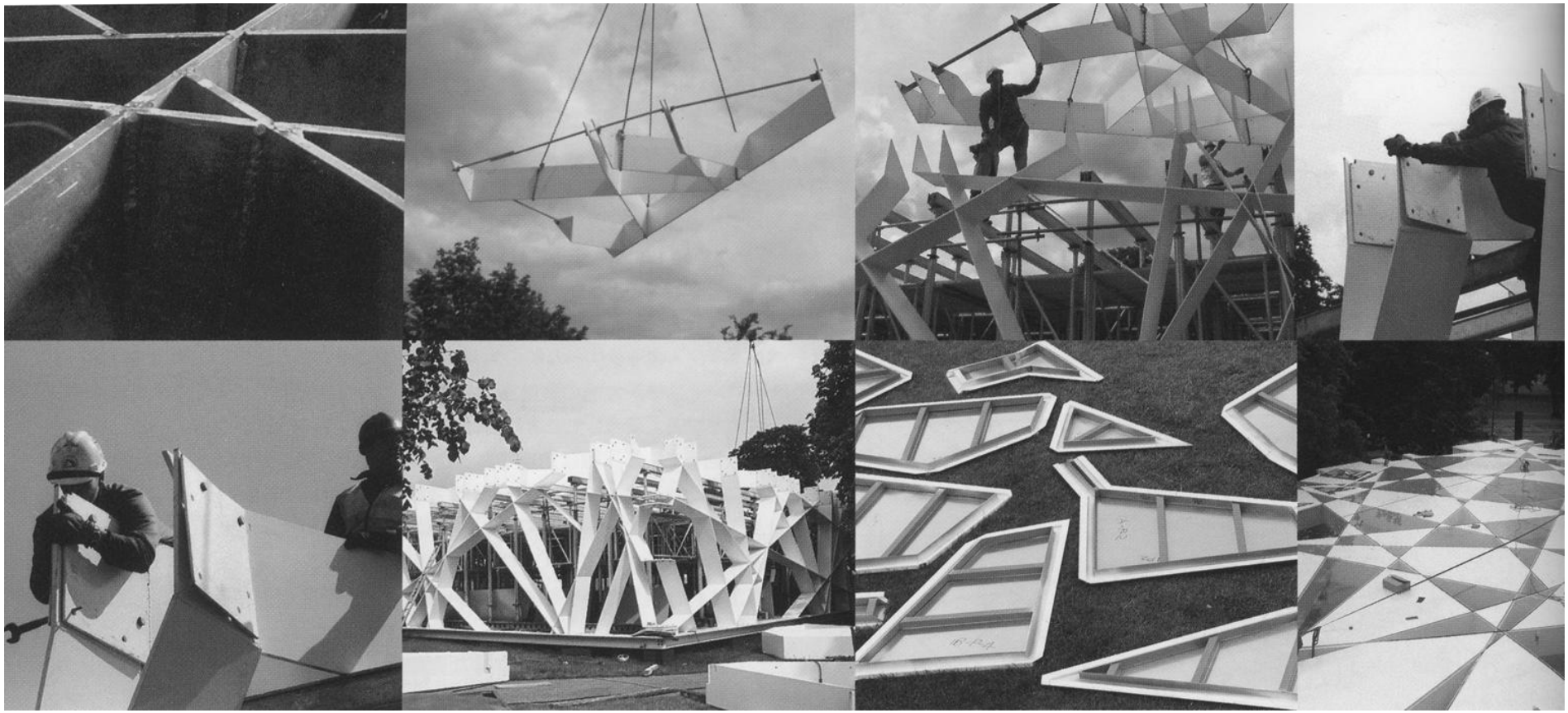


Schraubverbindung



Aufbau

"Structure and algorithm seemed to be matched, but they're not, they're a little bit shifted. That is the difference between structure and something composed by pure algorithm. “

Toyo Ito

Innen- Aussenraum