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I

**Structural Beauty of Shells**

Beauté structurale de voûtes minces

Aesthetik der Schalen

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**SUMMARY**

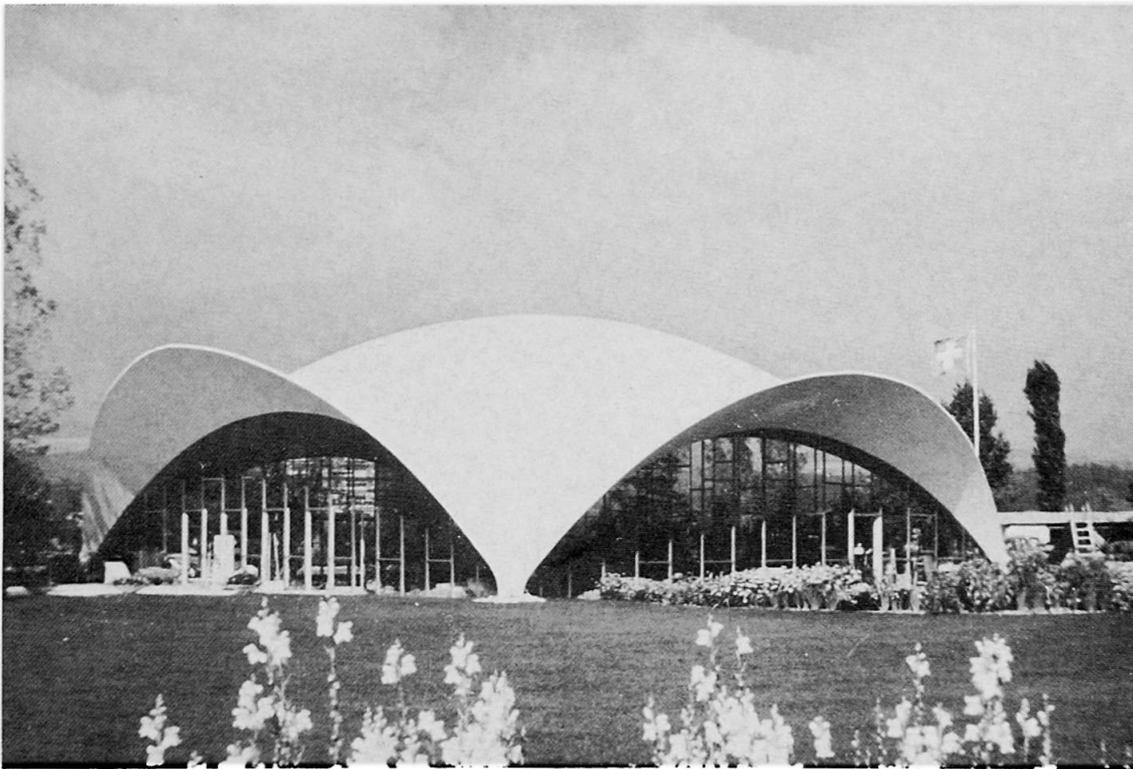
Freeshaped shellstructures following natural laws express by their lightness, simplicity and efficacy natural beauty.

**RESUME**

Les formes libres de voûtes minces expriment la beauté de lois naturelles.

**ZUSAMMENFASSUNG**

Freigeformte Schalenbauten, leicht, einfach und wirkungsvoll zeigen die Schönheit natürlicher Gesetzmässigkeit.



Garten Center Wyss Solothurn



Ausstellungshalle Kilcher in Rechterswil

### TWENTY-FIVE YEARS ATTEMPT FOR STRUCTURAL BEAUTY

Shell structures have an inherent capacity to express structural beauty. We all know the unsurpassed masterpieces of Felix Candela, where he for the first time expressed the lightness and elegance of shape with ribless shells.

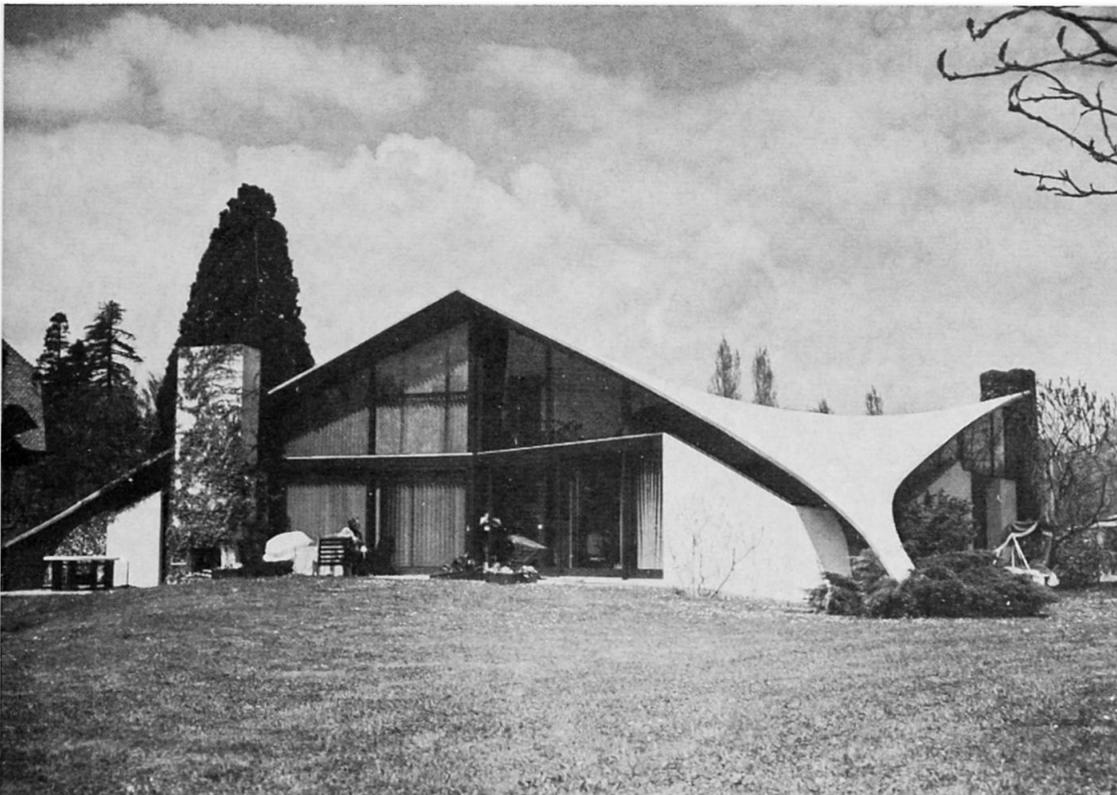
The author, in 1954, discovered the virtually unlimited potential of non-geometric shell-shapes, which especially pleased him because of their high aesthetic value.

He had the opportunity to realize quite a number of new shell-shapes for all sorts of buildings: representative buildings, garden centers, churches, theatres, stations, markets, restaurants, even industrial buildings. The enclosed pictures give some examples.

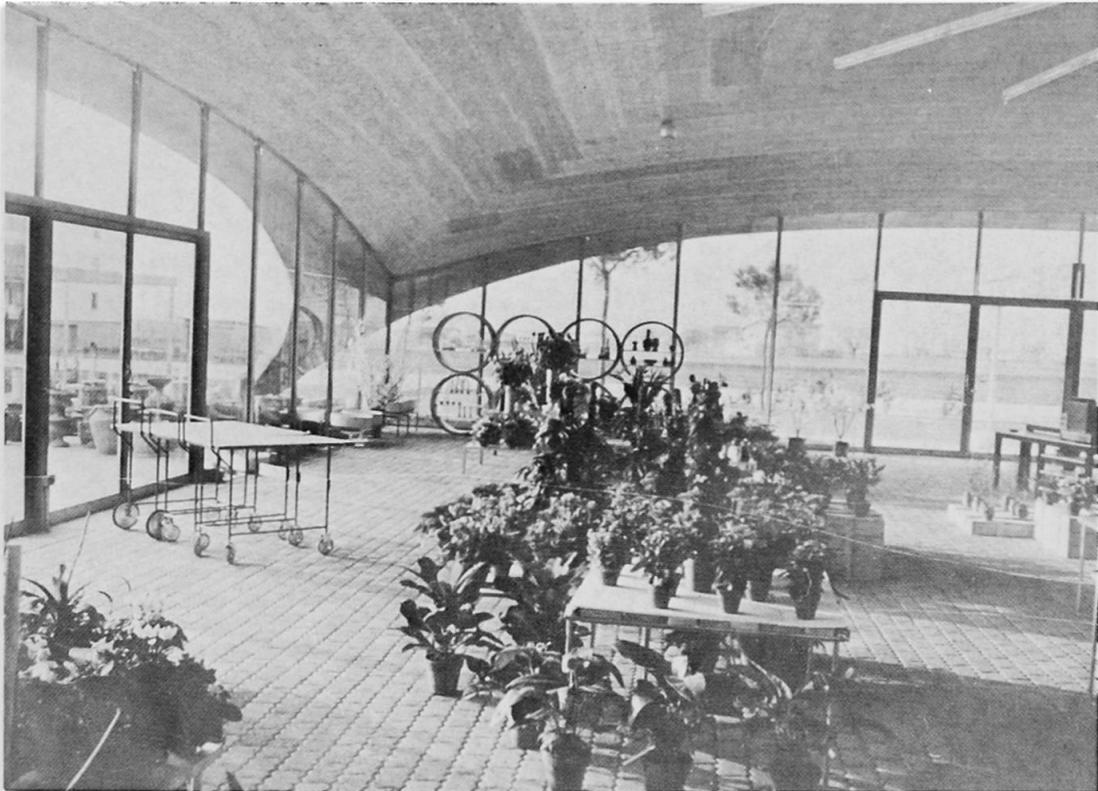
As Prof. Leonhard in his general report states, in the design of a building, some rules have to be observed: for instance, good proportion, simplicity, honesty, etc. The same rules are valid when designing a building with shells.

The foremost task lies, in the opinion of the author, in leaving off everything that is not necessary. A well-shaped shell is such a dominant structure, that it needs no addition of other dominant elements. On the contrary it forbids them. The shell is the supporting structure and the space enclosure at the same time. So it cannot be but honest. It fits very well in natural environments, as demonstrated for instance by garden centers. If placed in a reasonable distance from cubic buildings, it can also fit into urban or other manmade surroundings. It sometimes gives a desirable contrast.

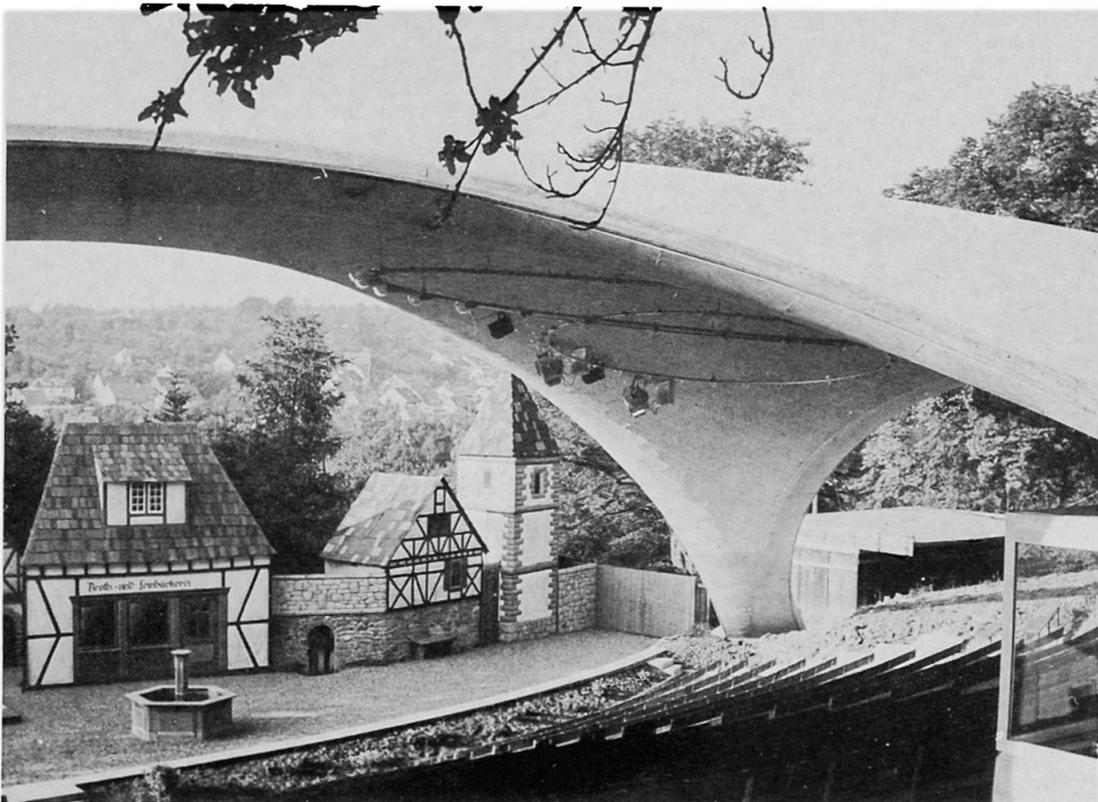
The shell technique of modern shapes offers very light structures of utmost simplicity. It will, because of its economy and beauty, have its place in future architecture, as the dome and arch structures of the past.



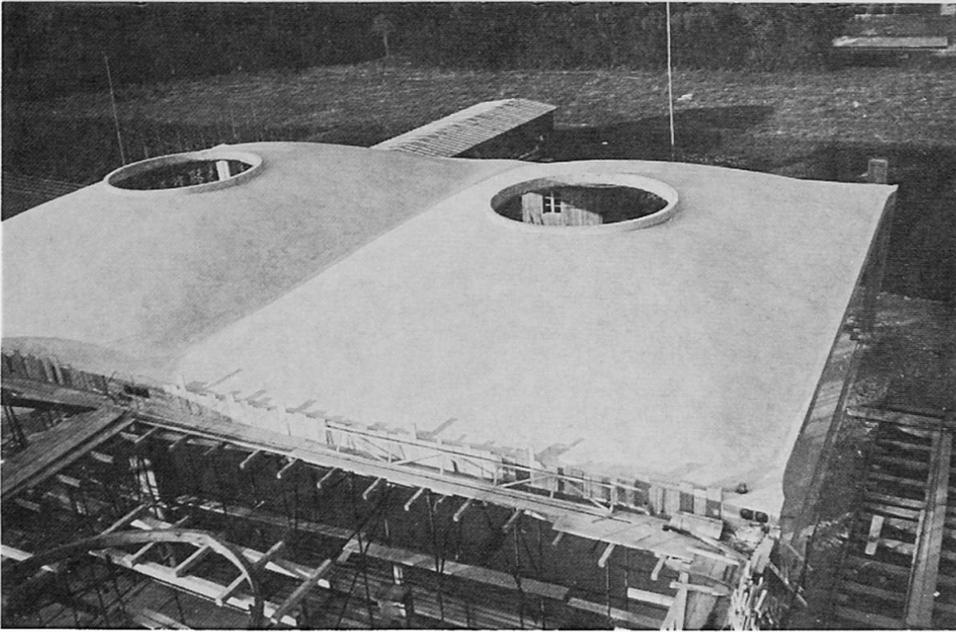
Wohnhaus Camoletti in Collonge Genf



Garten Center Bürigi, Camorino



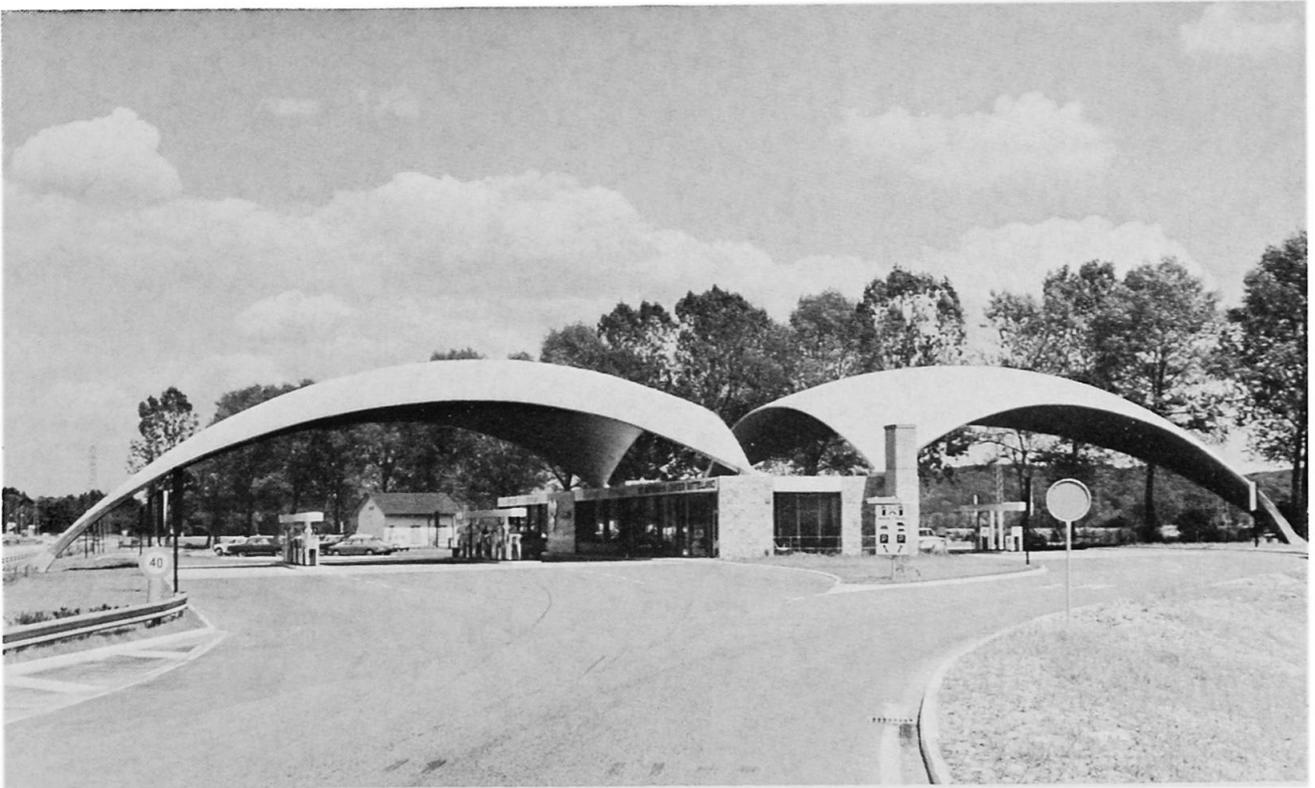
Freilichtbühne Naturtheater Grötzingen



Buckelschalen Blaser Hasle-Rüegsau



Töpferei Artisans Clause in Ponthierry Paris



BP Tankstelle Deitingen



Garten Center Clause St Appoline Paris