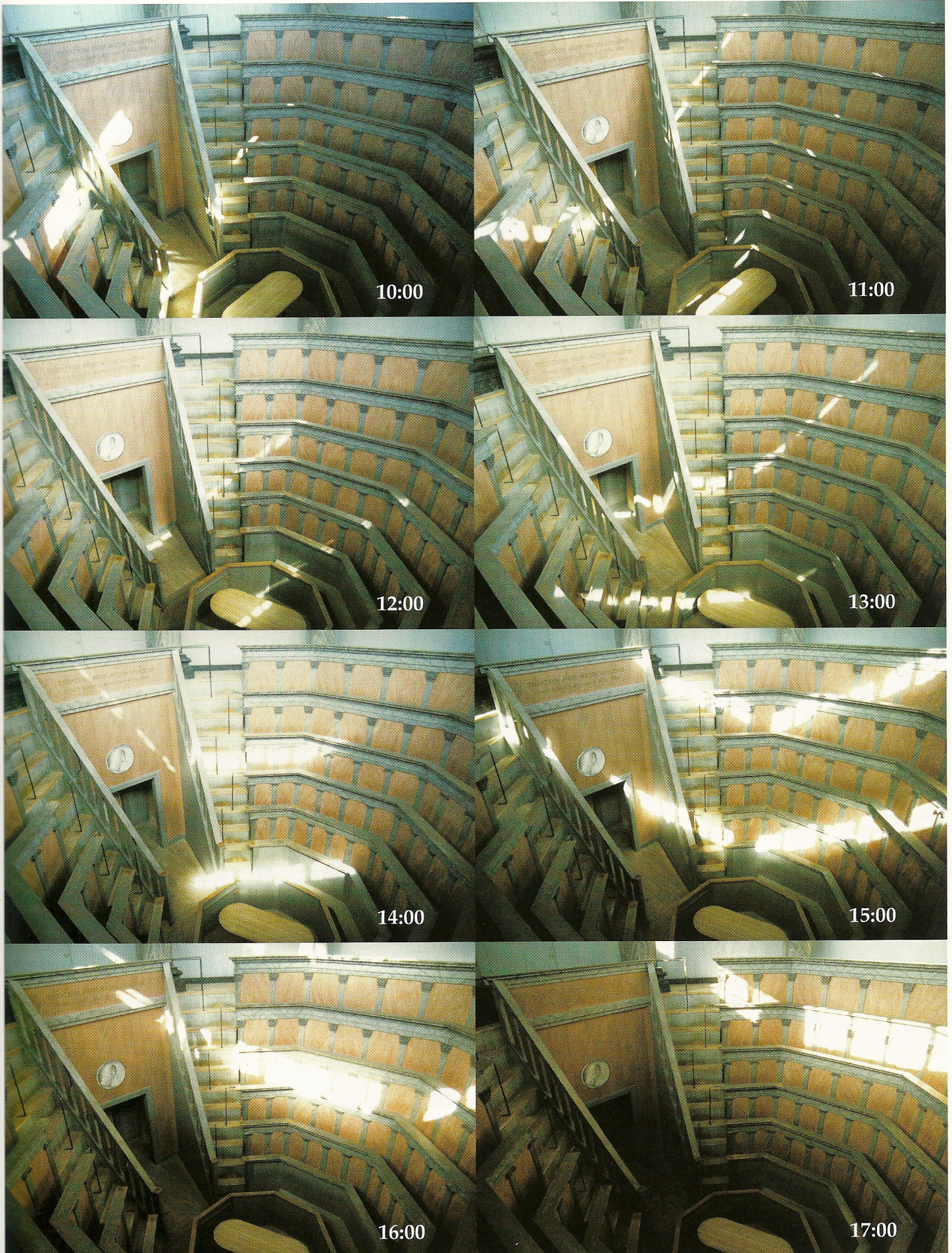




△ Exterior view showing the two rows of clerestories.

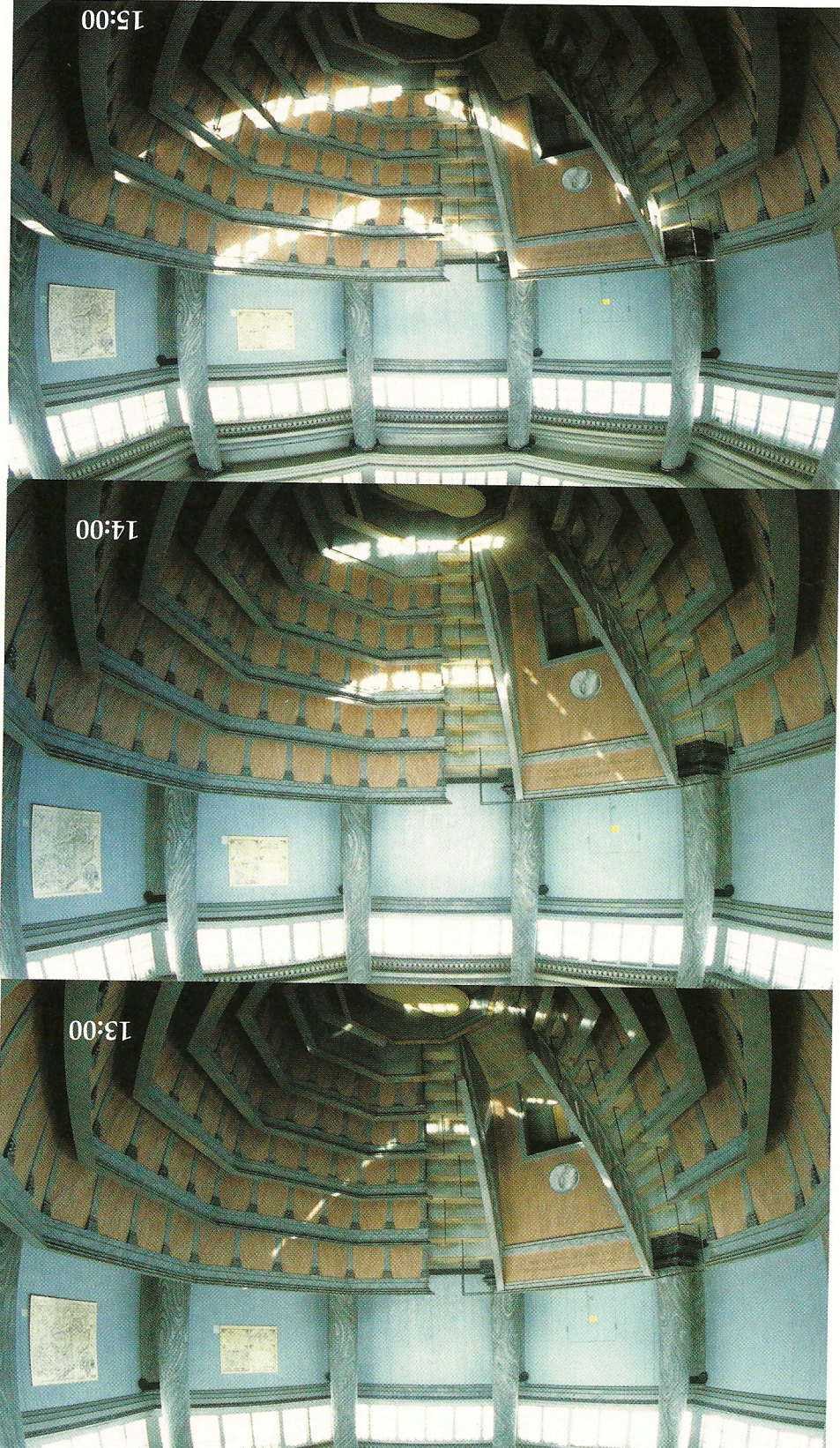


Δ Pictures of sunbeam penetration taken at one hour intervals, on 27 May 1997.

Material properties assessed on site

- Hemispherical-hemispherical Reflectances 35%
- Hemispherical-hemispherical Transmittance 18%
- Painted grey marble imitations 18%
- Painted red marble imitations 18%
- Grey painted walls
- Window

Δ Pictures of sunbeam penetration taken at one hour intervals, on 27 May 1997.



Building description

Built in 1663.

Class area/Floor area: 0.40% - 50%

Height floor at dissection table - 1.5m

Number of standing spectators - 100

Climate

Uppsala is located near the Swedish coast about 65 km north of Stockholm. Uppsala is of the temperate north-west coastal type, although more continental than the west coast climate. The average temperature is around 4°C in winter and around 16°C in summer. During February there are on average 10 cloudy days per month, whereas during the year there are on average 150 totally cloudy days per month. On average of about five to seven days per month. During November and December are only about two clear days per month.

Client

The Swedish National Board of Technical Buildings Uppsala (Statiga Akademierna Uppsala AB). The building is managed by Statiga Akademierna Uppsala (Statens Fastighetsverk), P.O. Box 2263, S-103 16 STOCKHOLM.

Architect

Olof Rudbeck (1630 to 1702), Professor of Medicine at Uppsala University, designed the building. Author of the book *Atlantica*. Rudbeck here claimed that the four-volume work *Atlantica* was identical to Plato's submerged Atlantis, consequently the ancestral home of all culture and knowledge.

Monitoring organisation

Chalmers University of Technology, Department of Building Services Engineering and The Monitoring Centre for Energy Research, S-412 96 GÖTEBORG, Sweden.

References

- Andersson, H.O. and F. Bedaride. *Swedish Architecture - Drawings and Building Project Group*, 1985.
- Engström, J. 1983, 1986. *The Building of Gustavum C502, Uppsala* (in Swedish).
- Statens Fastighetsverk, Uppsala, Sweden.
- Information Office, Uppsala University, Uppsala, Sweden.
- Sörbom, P. 1995. «Renaissance Pseudo-Intellectual Fanatic».
- 54-64. SAAB Information Office, Uppsala, Sweden.

Acknowledgements

National funding for the monitoring Department of Energy Efficiency, Swedish National Administration of the and Industrial Development (NUTEK) from the Swedish Council for Building Research (BFR) is gratefully acknowledged.

Circular clerestories create a uniform and glare-free environment for an anatomical theatre

Anatomical Lecture Theatre, Uppsala, SWEDEN

Olof Rudbeck designed and built this anatomical theatre in 1662 to 1663. The octagonal room is daylighted with two circular arrays of clerestories which admit moderate quantities of glare-free daylight, except when sunbeams penetrate and animate the space.

A unique building designed by its main user

The Anatomical Theatre in the *Gustavianum*, the former main building of Uppsala University, is one of only three remaining 17th century anatomical theatres in Europe. It was designed and built in 1662 to 63 by Olof Rudbeck, professor of medicine and a universal genius.

The anatomical theatre was given the form of an octagon and the interior design had an educational intent, since it was furnished with stylistic elements from antiquity that an educated young man should be aware of. The interior of the theatre consists of an upper part

(crowned by the dome) which is shaped like the round Ionic temple of Plato's description; and a lower part, the theatre itself, which resembles a Roman amphitheatre described by Vitruvius. In an architectural sense the Anatomical Theatre can be seen as a temple to our knowledge of Man and Nature.

The anatomical theatre itself can accommodate about two hundred standing spectators on five levels. The arrangement of these five viewing levels is, like that of the Coliseum, decorated with the classical column forms. Starting at the lower level and moving up the pilasters, painted in grey marble imitation, are the Tuscan, Doric, Ionic, Corinthian and

The octagonal ceiling with the two arrays of clerestories photographed from the dissection table.

▼ The clerestories seen on a sunny day.

