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Parabolic Perception: A Form-Finding Study of the Acoustical and Structural Benefits of Parabolic Design Inspired by the Works of Antoni Gaudi and Iannis Xenakis

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A form-finding study of the acoustical and structural benefits of parabolic design inspired by the works of Antoni Gaudi and Iannis Xenakis.

"There are no straight lines or sharp corners in nature. Therefore buildings must have no straight lines or sharp corners." - Antoni Gaudi

"Any musical piece is akin to a boulder with complex forms, with striations and engraved designs atop and within, which men can decipher in a thousand different ways without ever finding the right answer or the best one." - Iannis Xenakis

**Xenakis:** form finding model for the Philips Pavilion

**Gaudi:** form finding model for the Sagrada Familia

**Parabolic Perception**

Large Scale Parabolic Testing

Small Scale Parabolic Forms

Examples of Parabolic Design

Parabolic Ceiling of Sagrada Familia

Cross Section of Aisle

Sketches of Parabolic Design

Cosmic City, 1963

Le Diapole, 1977

Polytope de Montreal, 1967

Large Scale Parabolic Forms

1.1

1.2

1.3

2.1

2.2