The Transformable Observatory
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The term 'transformable' is used to describe buildings that are being reshaped to respond more effectively to different forces. These forces can be defined by functional, contextual, or environmental changes that can affect the purpose of buildings. Focusing on environmental issues, this thesis will explore the potential of developing a structural mechanism that will be responsive to its context, both within and beyond its boundaries, in the manner of a living organism.

The site selected to develop such a concept is the Punto Moreno Glacier located at the South Patagonian Icefield in Argentina. The extreme conditions of the area challenge the transformability of a scientific observatory, which will be required to modify its shape on a frequent basis according to the glacier's movement. The project will act as a metaphoric representation for vulnerable locations that will be forced to adapt to the effects of climate change. It will inspire future developments to consider their potential for transformation, in order to respond more effectively to the functional, contextual, and/or environmental challenges that may impact their very existence.

An evolving structural mechanism that continuously adapts to environmental conditions.

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