Material Innovation through Robotic Manufacturing.
The DFL experience.

The use of robotic manufacturing technologies is an emergent field of research and application in architecture and building construction. Unlike other digital manufacturing technologies, the use of robots introduces a higher level of geometric and operational flexibility. This communication will present the DFL* and its research activity in the field of robotic manufacturing processes applied to architecture and building construction. Three projects - the Hestnes Column, the Nasoni Keystone and the CorkCrete Arch - will be shown in detail to discuss how material sustainability and design innovation can be addressed by using such technologies.
*The DFL - Digital Fabrication lab is the research group of the CEAU/FAUP dedicated to explore the use of computational design and digital fabrication technologies in architecture.

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