

A Brief Genealogy of Smooth Surface in Design

AnnMarie Brennan

This study traces a selection of historically significant smooth surfaces within industrial design and looks at how these complex geometries were transferred from drawing to machine tool. One of the biggest problems in the postwar period for the design offices of car and airplane manufacturers featured the challenge of accurately transferring complex curved surfaces from blueprint or model to digital form, (referred to as the blueprint-to-computer challenge). It was during this process that many of the digital tools involving curves and surfaces was invented, and subsequently embedded within software used in architectural design today.

This paper is a brief history of some crucial tools which contributed to the fluid relationship between form, production, and capital. By re-examining smooth, aerodynamic, and streamlined objects within design history, we can understand how these forms were tied to: their method of manufacture, fluid methods of valuation, and current architectural configurations of digital design.

Biography:

AnnMarie Brennan teaches architectural theory and design subjects at the University of Melbourne. Her research focuses on 20th and 21st century architecture with a strong interest in machines, systems theory, media, jokes, fictions and the political economy of design.