Parametric Design Towards Animated Architecture
Impact of Animation Software on Architectural Design Process

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Submitted to Department of Architecture
on September 29, 2001 in Partial Fulfillment of the
Requirements for the Degree of
Master of Architecture

Abstract

Recent popularity of animation technique among designers and architects is not without reasons – beside the generation of realistic cinematic walk-through and real-time full-angle visualization of a virtual design, its relatively ease of production brought by various revolutions in the development of hardware and software tools also renders it both an efficient and economical process available to us. However, its applications seem to concentrate on presentation or representation which hardly contributes to the actual design itself. It is thus the concern of this paper to look beyond those sleek images and uncover the true value of these animation packages.

To animate means to give life. Architecture can never be animated by means of traditional animation. To give life to a product one must first study its process. Parametric design is thus adopted in this paper as an investigation of techniques of applying these animation tools in hope of providing new meanings to architecture. Research on both current software tools available (in this case, Maya) and previous relevant examples by various architects is indeed necessary in the analysis of design possibilities. As such, this dissertation intends to examine various techniques using the capabilities of animation software Maya in the development of architectural responses to a site through linear/nonlinear process of analysis and formal research based on various programmatic and environmental forces, i.e. parameters. This would then lead to a study of the extent of originality and objectivity in the process of searching for an animated design.

Our technology is ever advancing and it is infeasible for this paper only to evaluate the latest device for it will soon become obsolete. The idea is thus to begin from a detailed study of current development and extend to a general discussion of the impact on the design process and the role of designer and computer. In all, the value of design that is originated from the contribution of the designer should not be lost, while an attitude of flexibility and an open mind should be adopted in receiving new mediums and thus design possibilities.