

RESPONSES TO CLIMATE AND CULTURE

Manilow Residence

James Dalton

University of Illinois at Chicago

Abstract

"The Greek Word *techne*, which in most cases is inadequately translated as 'trade, skill, or art', was in antiquity a term far removed from any material connotation. 'Techne' originated in an atavistic human instinct: to want to know; to design creatively on the basis of knowledge; to produce manifestation of an idea." (Blazer, 1999)

Architecture is increasingly becoming a collaborative event. The question that lies before us as practitioners and educators is to what end do new mediums serve the habitable environment. How do powerful digital tools engage the process of imagination, fabrication, and ultimate manifestation? Whether computers can or will think on their own remains an open question, and the corollary issue now pushing the envelope in architecture is how they are emerging as design collaborators (Giovanni, 1999).

The apparent dematerialized digital world will ultimately through its comparative tools or intrinsic properties allow for the seamless convergence of ideology and the built form. Through the interconnectivity of architecture, engineering, and the craft of making, it has become clear that the discourse between these realms is a critical tool in the execution of any achievable form. Through concurrent work within the context of professional and academic practice, myself and others are exploring the resolution of form, materiality and ultimately validity, choosing to solicit the digital realm as a vehicle of exploration. Architecture is recasting itself and becoming in part an experimental investigation of topological geometries, partly a computation orchestration of robotic material production and partly a generative, kinematical sculpting of space (Zellner, 1999).

While working within the juxtaposition of individual methodologies, it has become clear that the ultimate convergence of a solu-

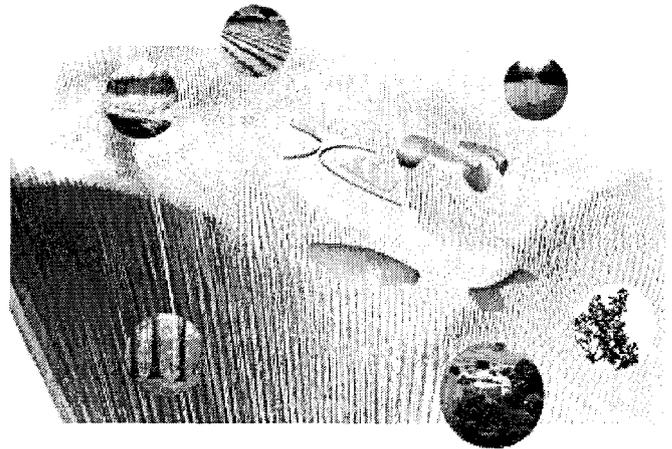
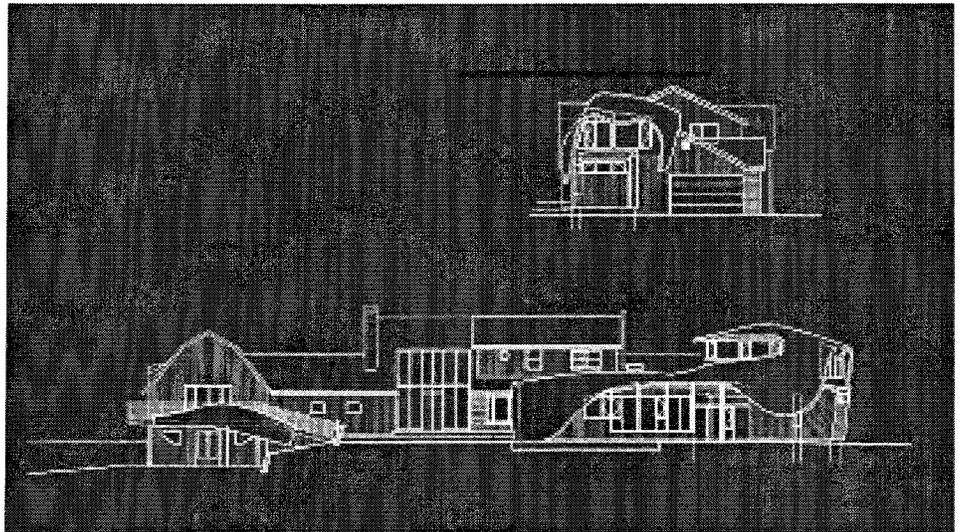


Fig. 1. Collage (Image Courtesy of Garofalo Architects) Introduction; The Architect's Project Brief Douglas Garofalo, Garofalo Architects.

tion responds to tectonic parameters as well as an idea that evolves from the digital realm. The use of tectonics as a tool for communication will ultimately evolve onto itself so that it will inform architects as to the parameters of a solution set through more precise digitalized exploration. Translation of an idea to the built reality must pass through the filters of engineering, fabrication, craft, ecology, and ultimately ground this dialogue in the ethical issues of building. This paper will define the methodology of communication between the digital and material world to arrive at what is ultimately a more informed solution. The power of an idea can and does permeate the complete evolutionary process if given the appropriate vocabulary, language and opportunity to communicate.

This series of additions to a rambling former farmhouse sits on seventy-five acres approximately sixty miles north of Chicago. The project is meant to produce a comfortable retreat from the city for an extended family, and must have a range of qualities that embrace animated gatherings as well as moments of solitude. In a sense, the program is analogous to a small village where everyone knows everyone else, but where privacy is possible.

*Fig. 2. Elevation Studies
(Image Courtesy of Garafalo
Architects).*



While the intention of the addition is to form a small, defined village, it is equally important to open the complex to the four present landscape types: forest, prairie, lawn and picturesque garden. These landscapes form a surprisingly hybrid landscape considering the rural surroundings (Fig. 1).

The strategy for the various pieces, which include bedrooms, bathrooms, sunroom, screened porch, observation tower and a modest animal barn, is akin to setting stones in a riverbed to affect the flow of water. In this way each piece directs movement and view. More critically, these additions need not aspire to the quaintness of the red, barn-sided host (Fig. 2), nor become invisible in the landscape, but acquire certain properties and performance criteria of each (Doug Garofalo, Garofalo Architects, 2002).