



Precedent + Initiative in Architectural Design:
Re-visiting Detached Single-family Housing
Competition Entry for Living Smart Design
Competition in Portland, Oregon
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“The works of the past always influence us, whether or not we care to admit it, or to structure an understanding of how that influence occurs. The past is not just that which we know, it is that which we use, in a variety of ways, in the making of new work... The typology argument today asserts that despite the diversity of our culture there are still roots of this kind which allow us to speak of the idea of a library, a museum, a city hall or a house. The continuity of these ideas of type, such as they are, and the esteemed examples which have established their identity and assured their continued cultural resonance, constitute an established line of inquiry in which new work may be effectively grounded.”

The Harvard Architectural Review. Volume 5. Precedent and Invention. Between History and Tradition: Notes Toward a Theory of Precedent. John E. Hancock.

To learn from the past requires critical understanding of not only how the works of the past influence us, but also how we have influenced our work in the past. Our living environment has evolved over the history of humanity. Throughout history, architecture has been an expression of humanity's aspirations and dream. More so now than ever, our pursuit of the ideal lifestyle portrayed by mass media gives form to the shape(lessness) of our cities. If the art of architecture is considered to be a mirror of our culture, then as designers we must ask whether our designs reflect who we are today. Immediately after WW II marked the production of the first American suburbs. William Levitt started to develop housing at a scale that had not been seen before. Factories were transformed for civilian purposes for the first time in history – “factory under the sky” - in the production of new communities like Levittown (see title image). The manufacturing approach to housing had the same shortsighted goals as

other industries: maximum economy and maximum efficiency. Nondescript cookie-cutter housing transforms America into *Generica*¹. Amidst today's complexity, the detached single-family housing typology with its roots in the dreams of the post-war era is an overly simplistic equation that results in housing solutions that are 'detached' from our present cultural and environmental needs. The front lawn is perhaps the most distinctive elements of North American detached housing. At its best, the lawn provides a politely manicured separation between neighbours. At its worst, the lawn transforms into a vacant no-man's-land of suburban detritus. In an age where our houses are sold by the square foot with little regard to design, the lawn represents an extreme devaluation of space. A social, economic, environmental and aesthetic devaluation that we now recognize as unsustainable. Through the re-evaluation of the omnipresent front lawn, the design proposal for narrow-lot infill housing in Portland seeks to establish a new housing typology that is reflective of the needs and desires of its inhabitants and their community.



1 Hydroponics rooftop garden Montreal

Consuming an estimated 40,000 square miles of land the front lawn of today is a product of our success in the field of agricultural engineering rather than the diligent hard work of dutiful citizens. What was once the American Dream is now the *magnificent American Obsession*². By

bringing the 'lawn' to the roof it establishes a new datum of elevated activity and social functions. From hydroponics roof gardens to mini golf, the new "white space" on the roof allows individual customization. Manufactured housing ceases to be mundane: the possibilities for personal/collective expressions on the fifth façade of the house are limitless.

¹ "Generica" – writings on the American City by Sanford Kwinter, Daniela Fabricius in *Mutations*

² Robert Fulford's article "The Lawn: North America's Magnificent Obsession". Published in the July-August issue of *Azure* in 1998.

The artificial sustenance of velvety grass across the entire North American continent (even to the U.S. Embassy in Saudi Arabia) generates millions of dollars in the research and development of agricultural technology. Genetically modified strains of grass and pesticides pose major threats to our ecological systems: toxins seeping into our groundwater supply; diminishing species count due to reduction of appropriate habitats; wasting valuable clean water for lawn maintenance; just to name a few.



2 Aerial view of roof garden of the Chicago City Hall.

Is grass all bad? The answer is 'no'. The cultural value of grass is undeniable. For generations the front lawn provided a backdrop for family life, a field of play, a site for imagination. More so now than ever, people look to the physical environment to provide them with a kind of continuity. A simple re-arrangement offers a sustainable solution, both by human and nature's standards. A lawn-on-the-roof protects the house from sun's destructive rays, making the roofing material last longer. Green roofs also provide excellent storm water management. If implemented on a large scale, as envisioned by Chicago's mayor Richard Daley, there will be significant savings on regulatory fees and

flood damage. On a smaller scale green roofs offer humans free evaporative cooling in the summer and insulation in the winter, as for birds and people alike: an attractive green sanctuary.

Since WWII, we have witnessed a paradigm shift: The front lawn – once impregnated with the aspirations of the American Dream – has become obsolete. Blanketing more area than the farmland for wheat, corn or even tobacco, the significance and meaning of that space between house and street has been the topic of debates for scholars, environmentalists and house owners alike. This housing prototype proposes a rethinking of the often un-programmed, ambiguous space separating the public and private realms and its role in housing design. By simply bringing the lawn to the roof, we evolve to a new housing typology that is responsive to the needs of species of all kind.

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