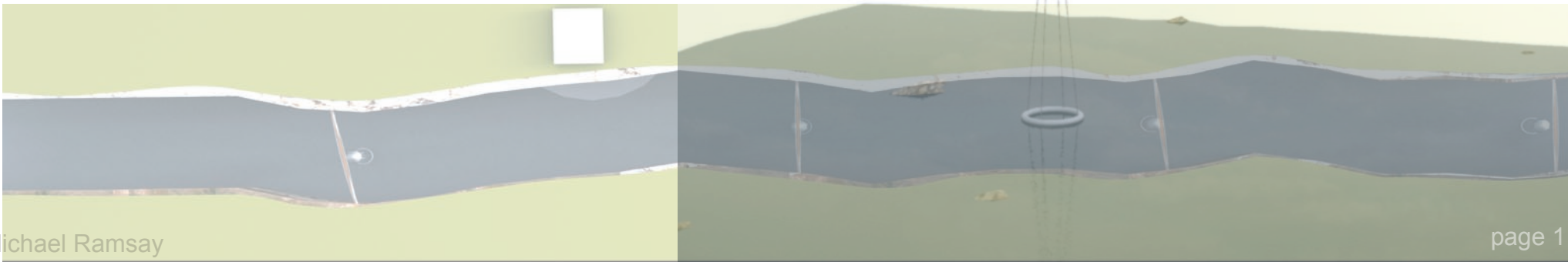
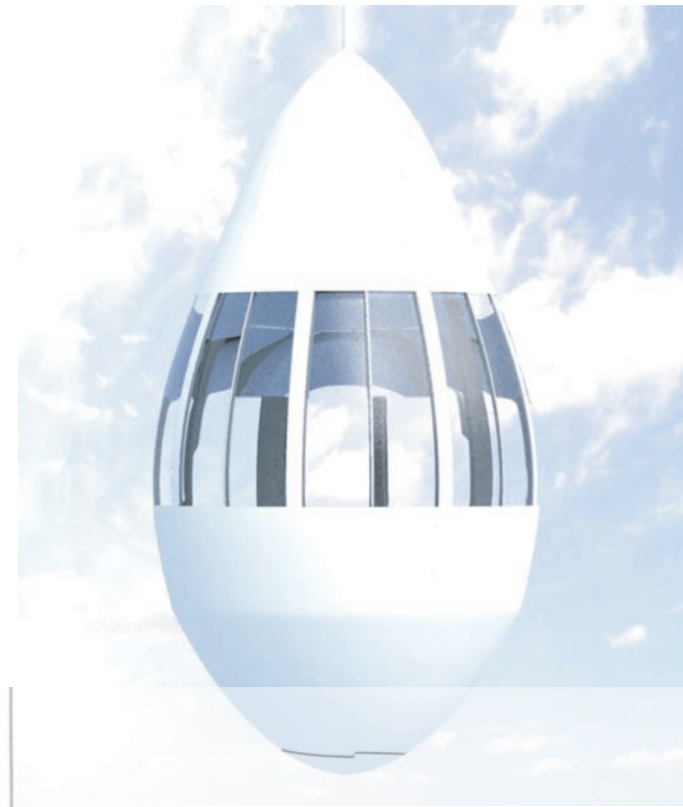


Arch 384 Competition Entry Essay. AIA Home on the Range, 2004

If the modern architectural experience is one stimulated and based in the architecture of the past then why continue to try to re-define the role of architecture in the modern world? Specifically; as the world changes and the needs and wants of the population follow what role should architecture play? Does architecture simply provide the stage for the advancement of modern culture and social change or does it need to be an evolving entity unto itself? Does architecture serve society best by maintaining a familiar stance that breeds comfort and support or does architecture need to be more involved? If architecture is a true "art" then should it not perform the same role as painting, sculpture, music and photography, writing and performance, scrutinizing, analyzing and commenting on the world? The AIA has asked that the entrants of the home on the range competition design a housing type that takes into account the needs of a modern society and utilizes modern materials, building techniques and attitudes toward the role of architecture in modern society. This desire would seem to support the idea of architecture as an active player in the evolution of our culture and, aside from the use of common methods and common elements, the role of architecture needs to be pro-active. The lesson learned from the architecture of the past is a lesson of growth and change, of striving to push the perceptions of what architecture is, what its role is and how it can influence the way society lives. This competition presents a great way to examine the role of architecture in modern society and to show, through comparison, how architecture can achieve both a functional design but also a design that pushes the idea of what is normally perceived of as a social responsible building.

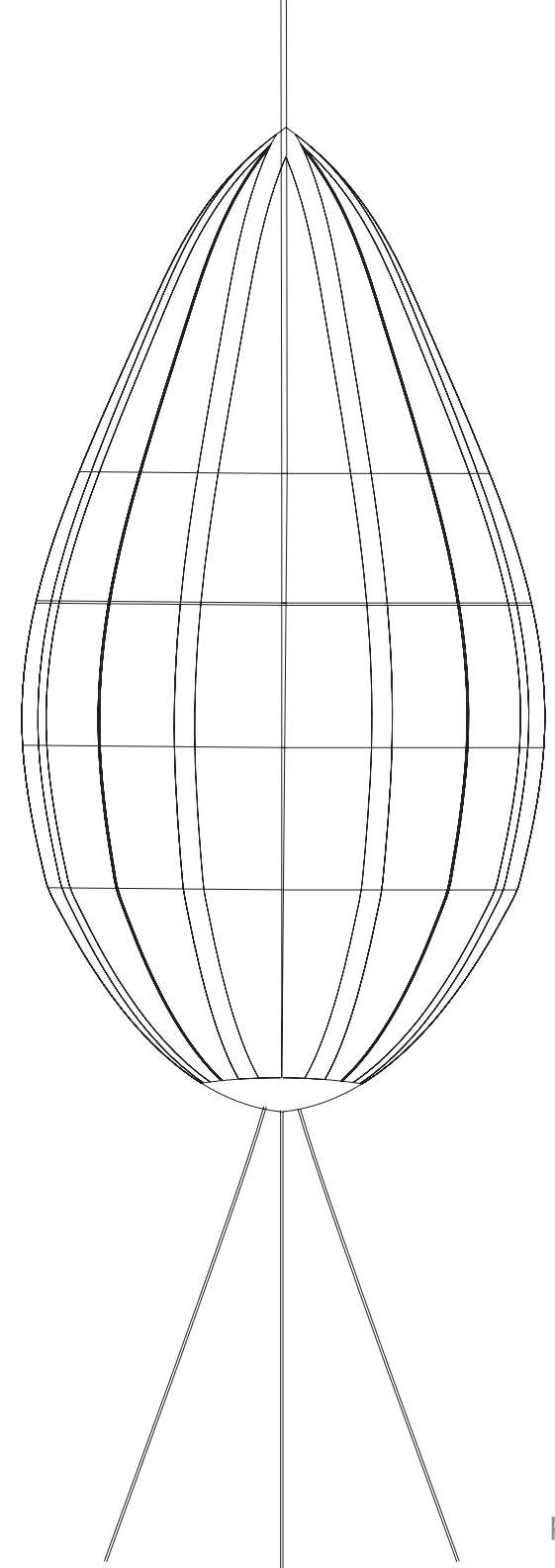
Through the use of setting, form, material, structure and program this design illustrates the intention of the designer. The design is meant to be a commentary on the role of architecture, the socially accepted ideas of modern living and the use of socially conscious building techniques, materials and systems.



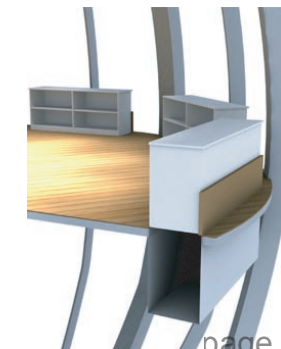
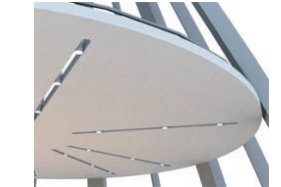
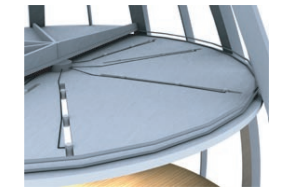
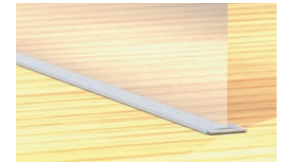
It is important to first look at setting as it is one of the most relevant questions facing society at the moment. Urban sprawl is an ever increasing problem. Once suburban developments were considered the desirable location for those that could afford it. Suburban developments provided commutable homes with rural amenities. Now the suburban development has become a monster; continually moving further from the center of the city and quickly becoming the cheap alternative to the even increasing cost of in town living. Aside from physical location the use of natural resources, or manmade abandoned resources such as old factories, bridges etc, is also a highly under utilized in modern design. Instead of following the common practice of inexpensive developments moving further from the city there is a need to look at other settings and situations. What if the spaces between buildings were used support homes. What if instead of moving out we moved down. Simple geo-engineering and reuse of existing sites could facilitate the underground house or structures supported like bridges. The geo-engineered house not only comments on the common approach to building but also benefits from the natural advantages of the material. The buried house uses less electricity for cooling, reduced use of insulation materials and many other benefits. The suspended house can utilize wind power, solar panels, the benefits of a reduced footprint etc. There is an obvious benefit to looking at different settings and different ideas about what is an efficient use of our natural resources. By first assessing site we can take the first step toward responsible and forward thinking architecture



Form is the next factor to consider. For obvious reasons the typical building form, be it residential or other, is something that is tried and true. Above the economic benefits of a simplified and standardized construction society has learned to live in the forms so common to our world. With modern manufacturing techniques new materials have presented that allow for a plethora of new forms to be realized cheaply and efficiently. These forms are now, more than ever, ones more suited to mass manufacture and assembly line construction. The goal of the architect to create a modular architecture or prefabricated living space can now be recognized more easily. Beyond the more popular formal work of Frank Gehry and Zaha Hadid there are modern groups of young architects working to create modular architecture out of different materials, both new and recycled, to create different forms. From simply moving away from the square and moving toward a form stimulated by use these young architects have moved toward a form that is an obvious response to the way in which we live and away from the way in which we “think” we should live. Aside from a form created responsively new forms are best suited to new materials and new structure

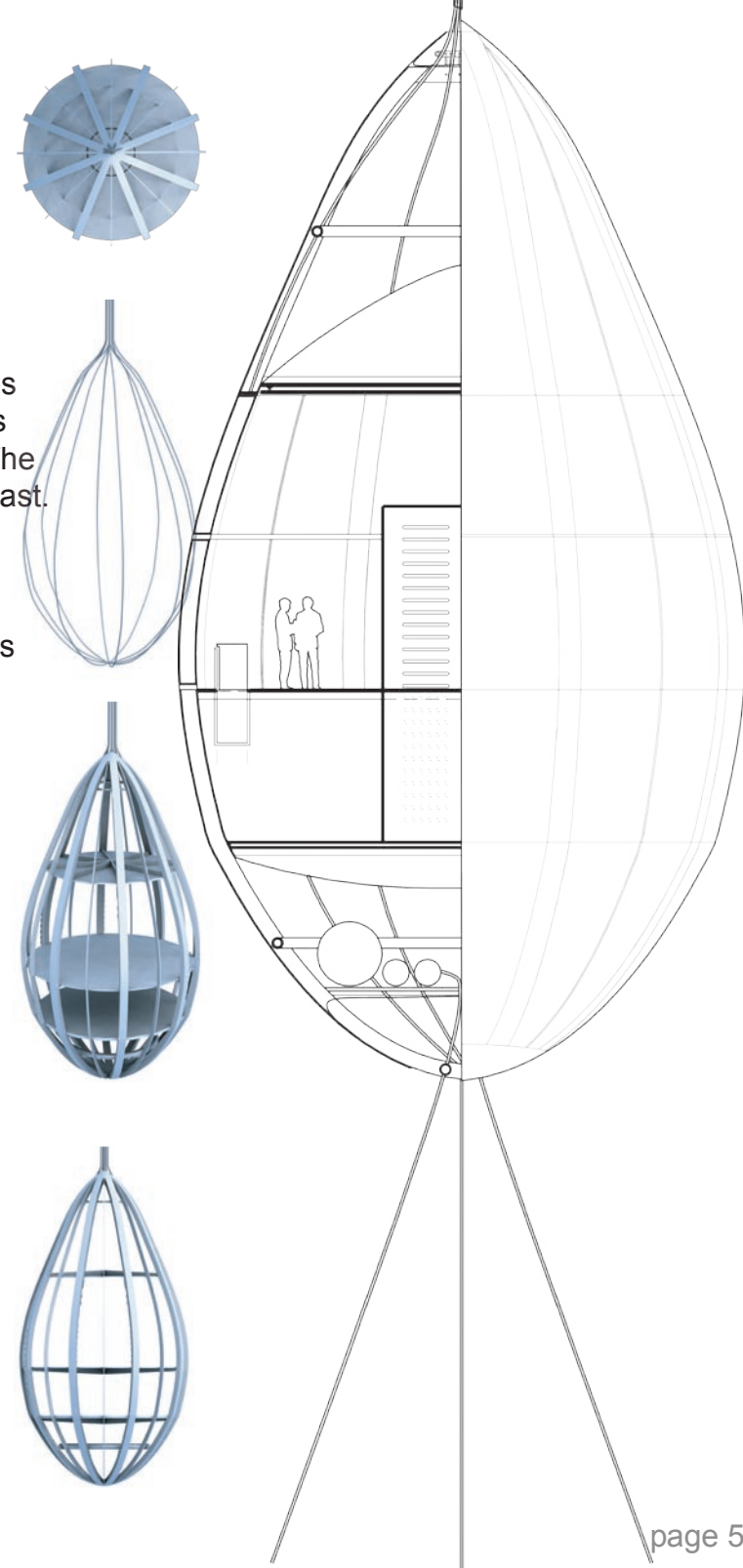
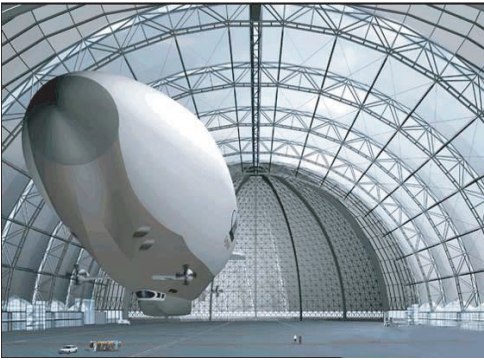


Other than becoming more cultural responsible by using modern environmentally friendly building materials the architect is given a new and wide array of choices when deciding what materials comprise their design. Not only do these new materials carry with them certain benefits like reduced cost but also can be used to create a decidedly more modern form, environmentally responsible project and socially active design. The decision to use plastics instead of masonry, recycled steel instead of timber and materials that benefit systems usage like low E glass is crucial in modern design. The use of recycled materials can also make for a socially responsible architecture. The work of architects like Samuel Mockbee and his class shows how the re-use of readily available materials can create beautiful conscious buildings. Not only are the materials recycled from what is readily available in the area but they are then comprised in a way that is decidedly modern and ingenious. The decision to use more modern materials also greatly benefits the creation of new forms. The use of plastics, acrylics, molded glass, steel and composites mean that the architect is now much more able to realize a form once impossible. This is where the form and function meet. The use of modern materials facilitates socially responsible architecture that is realized in an unencumbered way



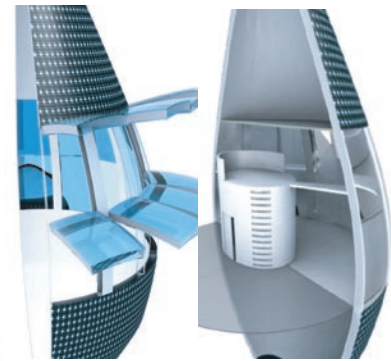
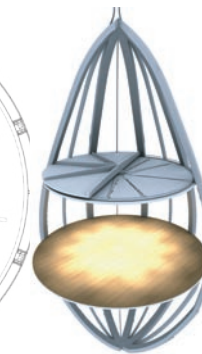
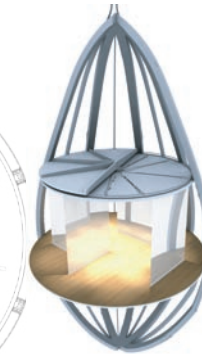
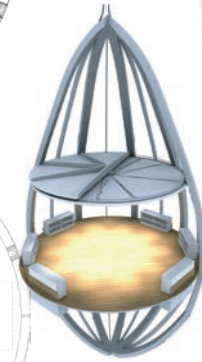
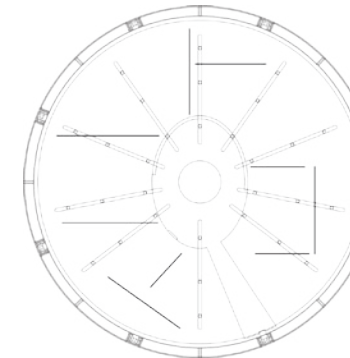
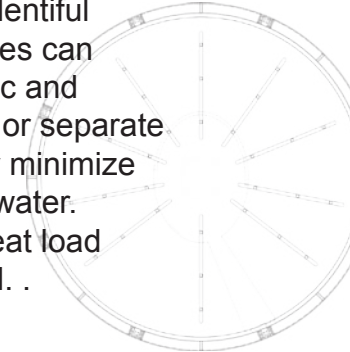
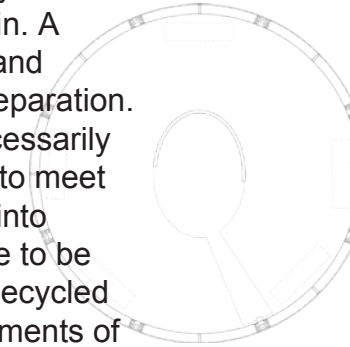
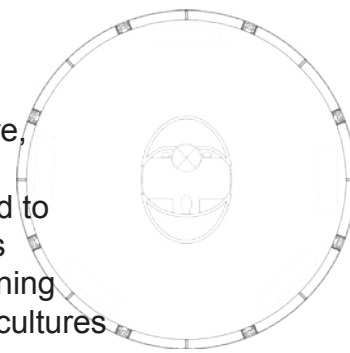
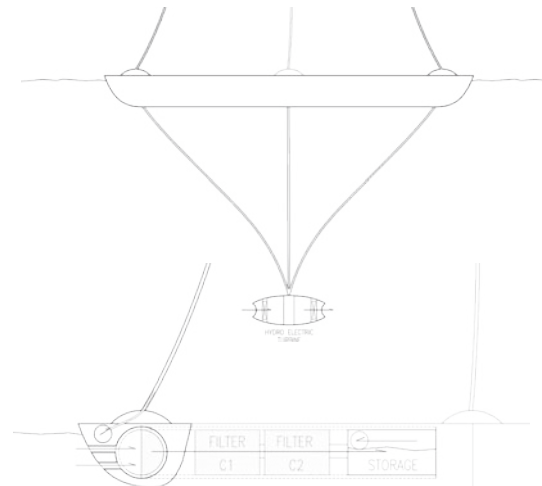
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Major advancements in structural technologies have also benefited the design of the modern building. No longer is the architect limited in creating only that which can be built through common methods. Along with the new forms and new materials has come the ability to build in new ways. Consistent development of new building techniques has allowed for the cost of building to be reduced. What was once a burden has now been turned into a boon. Rock and soil excavated from a site is crushed to form a stable foundation bed for new construction. Recycled steel from junked automobiles is cold pressed into framing studs. The line between engineer and architect has blurred as structural members serve two roles, the building support and the expression of it's form. The degree to which the limits are being pushed now is something unrealized in architecture past. Buildings are taller, thinner stronger. The architect, once again, is able to indulge in forms not possible. The structure of the building can be used to also benefit society as a whole. Aside from recycled materials new attitudes to structure and building allow for quick completion of projects meaning less disruption of neighbourhoods. New materials means less pollution and new techniques mean less waste product. The effort to not only build a design but to do it in a responsible manner, push the boundaries and advance modern architecture is facilitated through the modern engineering.



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Finally and maybe most importantly is program. If architecture is meant to inspire, and push boundaries then it must do so from the inside as well as the outside. Asking the end user to try to live in a different way, to try unfamiliar concepts and to accept a program dictated by the architect is not an easy task. Our modern lives conform to situations that are familiar. In most homes a kitchen, living room, dining room and bedroom is arranged in a way that is accepted and familiar. Different cultures may have variations on this arrangement but house to house they are similar. By re-thinking the way in which we live we are able to re-design that which we live in. A living room can become a living space taking on all facets of recreation, eating and sleeping. The kitchen can change into work space when not needed for food preparation. Rooms can be created out of materials that are adjustable, movable and do not necessarily follow the definition of a typical partition. All things in the home can be modified to meet the needs of the moment. Past the way we live in our house we must also take into account the way in which our houses "Live" in the world. No longer is acceptable to be a consumer home without giving anything back to society or the environment. Recycled materials, responsible site usage and cultural awareness are very important elements of a modern home. A program that also looks at the usage of raw resources and plentiful energy sources must also be a factor in the design of the modern house. Facades can be made to generate energy, through the use of photovoltaic cells. Hydro electric and wind turbine energy can allow the modern home to give back to the energy grid or separate from it altogether. By recycling grey water and on site collection we can not only minimize the energy needed to provide and collect but the energy needed to treat waste water. Working with materials and natural ventilation, as well as site, we can reduce heat load and gain as needed instead of relying on mechanical methods of climate control. .



In conclusion the modern design or modern building should be an active contributor to our modern culture. Through setting, form, use of material, structure and program the modern design can achieve this. Not only does the modern design have to serve it's architectural intent but it should also strive to be a responsible entity in our modern society. What has been learned from architecture of the past is what it has given us today. Advancements in all facets of society has allowed for a continued progression forward. Architecture has continued to evolve and push boundaries sometimes leading some times being driven by other contributors. . .

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