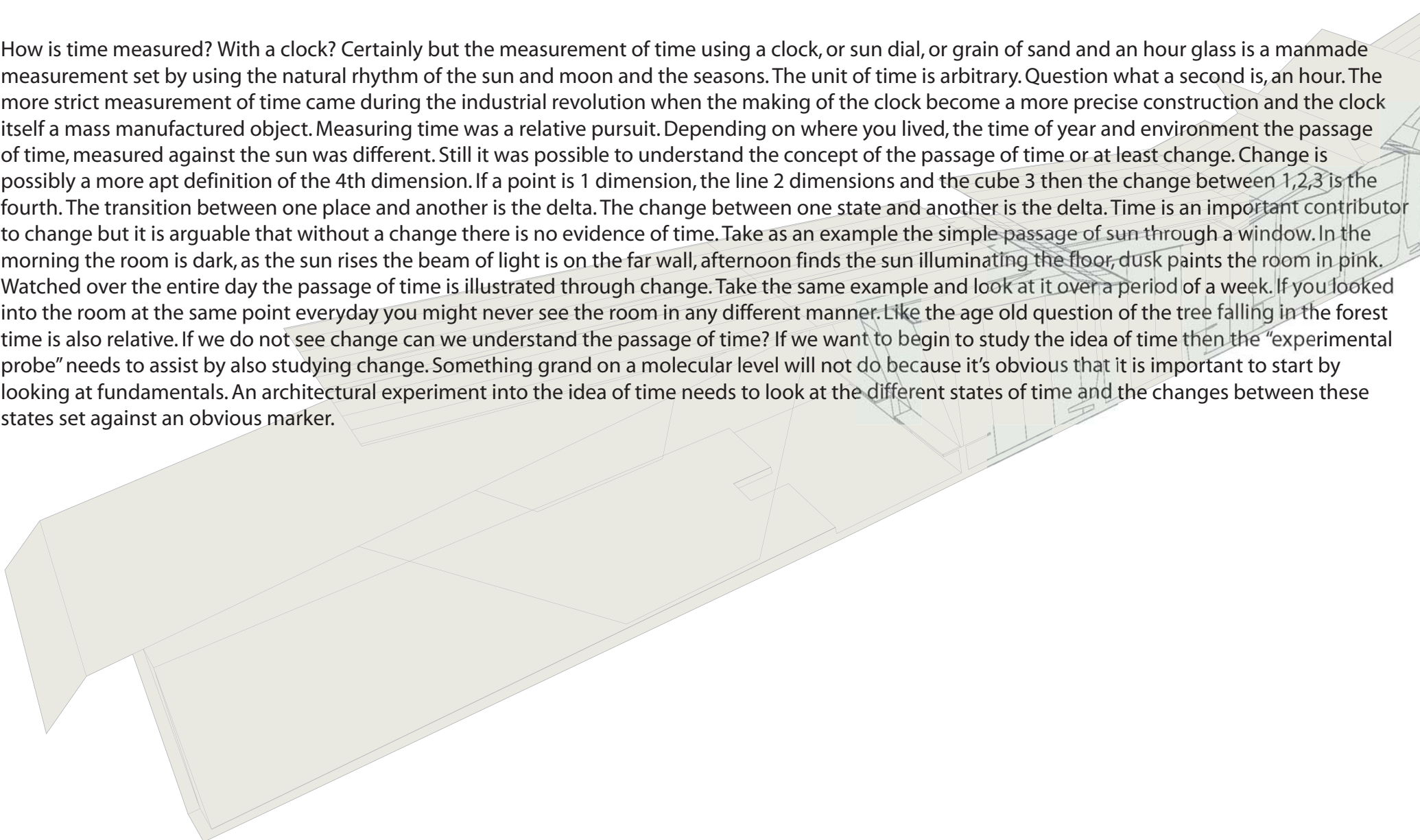
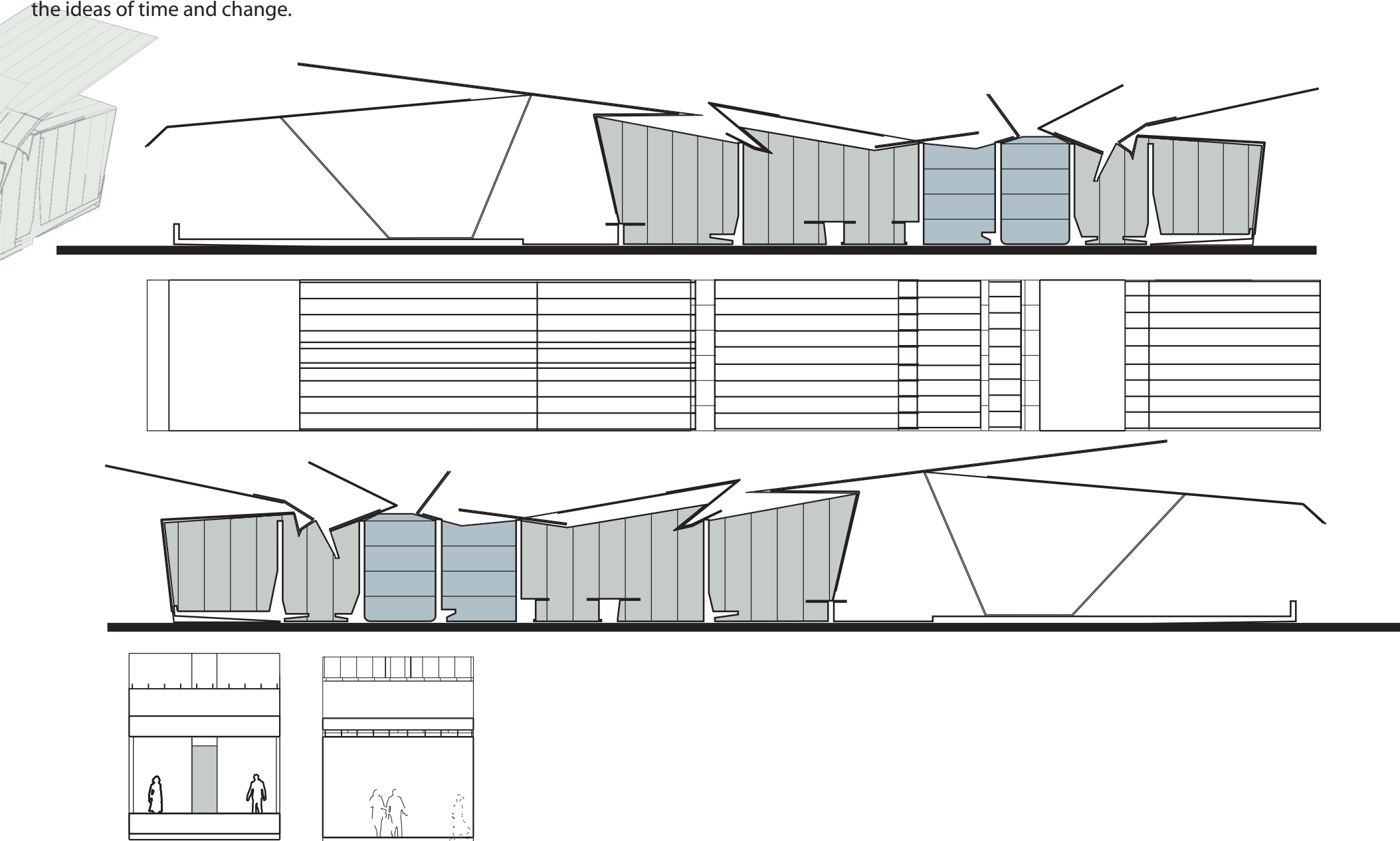


Steven Holl's introduction to this competition mentions Einstein and Newton, a book about quantum mechanics and string theory by Brian Greene. What, if any, idea or opinion Holl has on this topic is not evident from his introduction. Holl then goes on to suggest that a small house could be an experimental probe into the fourth dimension; assuming that the 4th dimension is time. As the 4th dimension is a theoretical intangible it is not possible to see how a confident determination of this fact can be made. However a beginning must be made so accepting TIME as the 4th dimension it is possible to begin a discussion of what an "experimental probe" could be

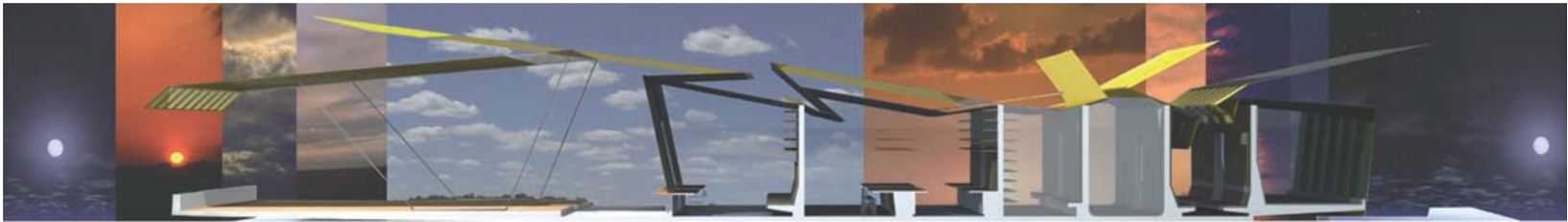
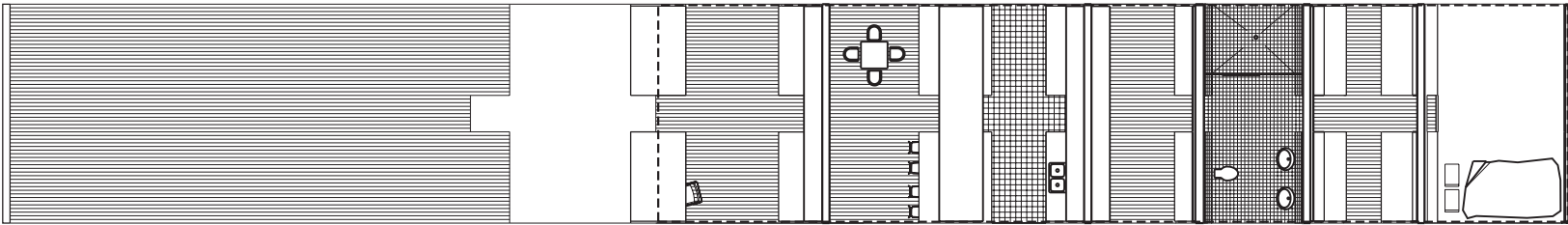
How is time measured? With a clock? Certainly but the measurement of time using a clock, or sun dial, or grain of sand and an hour glass is a manmade measurement set by using the natural rhythm of the sun and moon and the seasons. The unit of time is arbitrary. Question what a second is, an hour. The more strict measurement of time came during the industrial revolution when the making of the clock became a more precise construction and the clock itself a mass manufactured object. Measuring time was a relative pursuit. Depending on where you lived, the time of year and environment the passage of time, measured against the sun was different. Still it was possible to understand the concept of the passage of time or at least change. Change is possibly a more apt definition of the 4th dimension. If a point is 1 dimension, the line 2 dimensions and the cube 3 then the change between 1,2,3 is the fourth. The transition between one place and another is the delta. The change between one state and another is the delta. Time is an important contributor to change but it is arguable that without a change there is no evidence of time. Take as an example the simple passage of sun through a window. In the morning the room is dark, as the sun rises the beam of light is on the far wall, afternoon finds the sun illuminating the floor, dusk paints the room in pink. Watched over the entire day the passage of time is illustrated through change. Take the same example and look at it over a period of a week. If you looked into the room at the same point everyday you might never see the room in any different manner. Like the age old question of the tree falling in the forest time is also relative. If we do not see change can we understand the passage of time? If we want to begin to study the idea of time then the "experimental probe" needs to assist by also studying change. Something grand on a molecular level will not do because it's obvious that it is important to start by looking at fundamentals. An architectural experiment into the idea of time needs to look at the different states of time and the changes between these states set against an obvious marker.



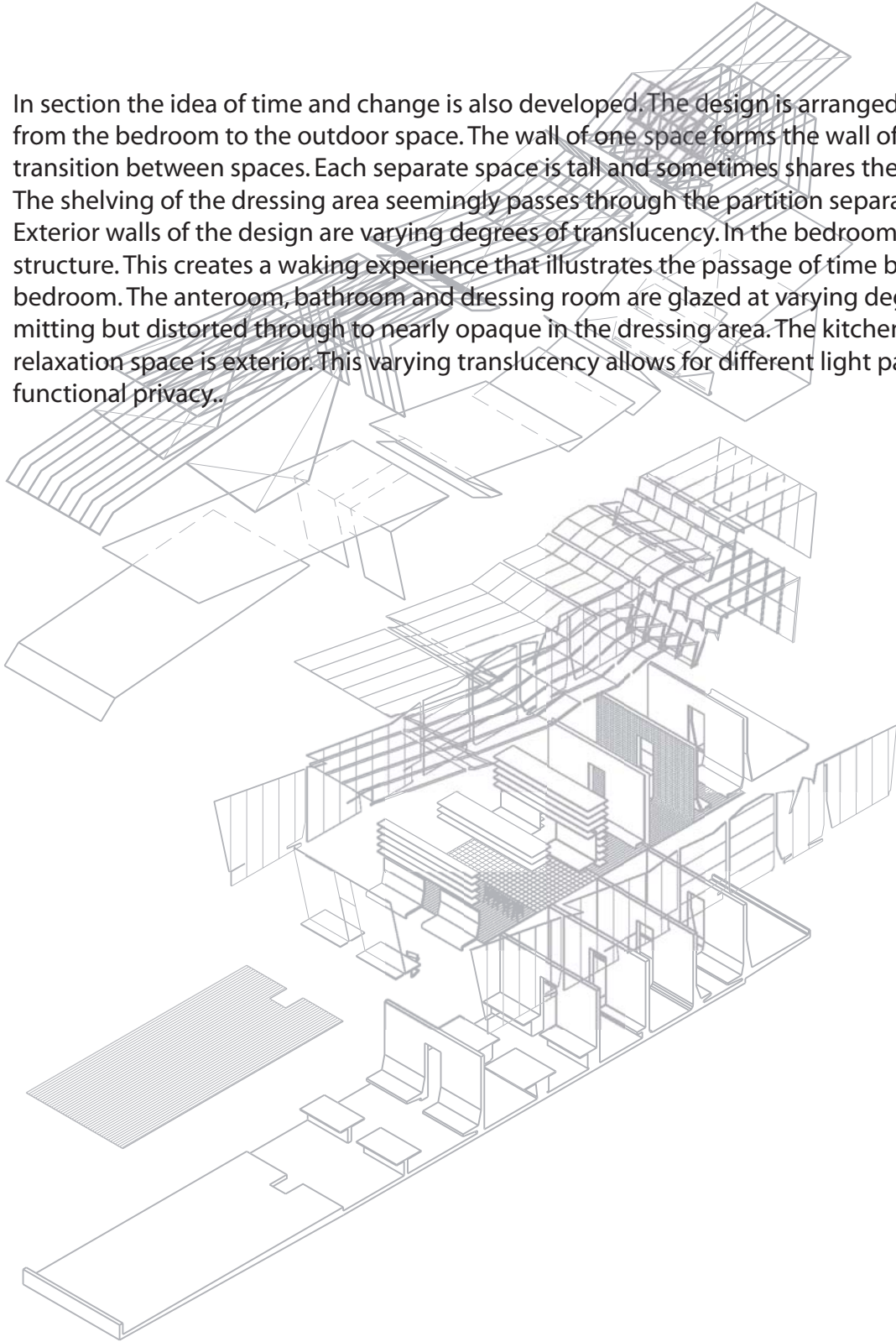
The simplest model of time that can be clearly illustrated and architecturally realized is line. The daily activities of the average person it is possible to also arrange them in a linear fashion. Along this line there are moments of isolation, privacy, production, relaxation and rest. Of course there are some incongruities where certain activities are repeated and do not follow a line such as hygiene and afternoon meals. However most of the things common to our daily ritual follow one after the other. It is important to not only look at this experiment as a whole, a line through the passage of time, but also as a series of points in contrast to the ones that proceed or follow it. Looking at the architectural elements used to explain this idea is the best way to explore the ideas of time and change.



The plan is arranged as a series of daily events, tasks and amenities. Starting with the isolation of the bedroom at the far end of the building and moving first through an anteroom consisting of two facing banquetts used for contemplation or intimate meetings. This space serves as both a morning and evening space. morning as a place to compose and collect and evening as a final place of relaxation on a personal scale. Next is the bathroom with all the hygiene amenities. Then comes the dressing and grooming area preparing for the day. Next is food preparation followed by a space to eat in either at the bar counter in the morning or more formally at night at a table. Following this the two final spaces are both spaces for relaxation. The first is introverted gathering space enjoyed privately or as entertaining space for guests. It is larger and more accessible due to it's location in the home and the degree to which it is enclosed. The second addresses the outdoor environment reaching out into the site, bridging the line between the "experimental probe" and the contrasting site.



In section the idea of time and change is also developed. The design is arranged so that the partition separating each space is a continuous construction from the bedroom to the outdoor space. The wall of one space forms the wall of the next space sometimes sharing material treatments and forming the transition between spaces. Each separate space is tall and sometimes shares the amenity of the adjacent space; blurring lines of transition and change. The shelving of the dressing area seemingly passes through the partition separating it from the kitchen to allow the shelves to be used for kitchen storage. Exterior walls of the design are varying degrees of translucency. In the bedroom the exterior walls are translucent but the end wall is covered by the roof structure. This creates a waking experience that illustrates the passage of time by allowing only certain portions of the morning light to penetrate to the bedroom. The anteroom, bathroom and dressing room are glazed at varying degrees of translucency starting at semi translucent moving to light transmitting but distorted through to nearly opaque in the dressing area. The kitchen, dining area and work space are completely translucent and the relaxation space is exterior. This varying translucency allows for different light passage at the different times each space is used and of course provides functional privacy...



The materials used in each space are meant to add to the experience of the specific moment within the experiment. Sometimes these materials represent the idea of the experiment within the space, sometimes they are in contrast to it. The bedroom is almost completely padded in mattress like material, the walls, floors and amenity ledge are seemingly continuous; a contradiction of the space as isolation. The anteroom is warm and inviting with its carpeted floors that seem to become the banquet seating that flanks both walls. The bathroom is entirely tiled making for a functional space and a space that represents the smaller divisions of the experiment; the tile divisions represent the seconds that make up the minutes, the rooms are the minutes, the entire product the hours of the day. The dressing space is another warm and inviting space meant to, once again, be a momentary rest or room of isolation within the experiment. The kitchen and dining space is a mixture of clean functional materials like stones, and polished woods. A clean simple surface meant as a quick point in time juxtaposed against the slower adjacent space of work. The work space is a mixture of cold clean materials and warmer materials that support the activity of work or production and of contemplation or rest. The rest space is comprised of very mute, minimal materials that are meant to serve as a functional palate for whatever activity need take place; at a point where the experiment and it's boundaries begin to dissolve..

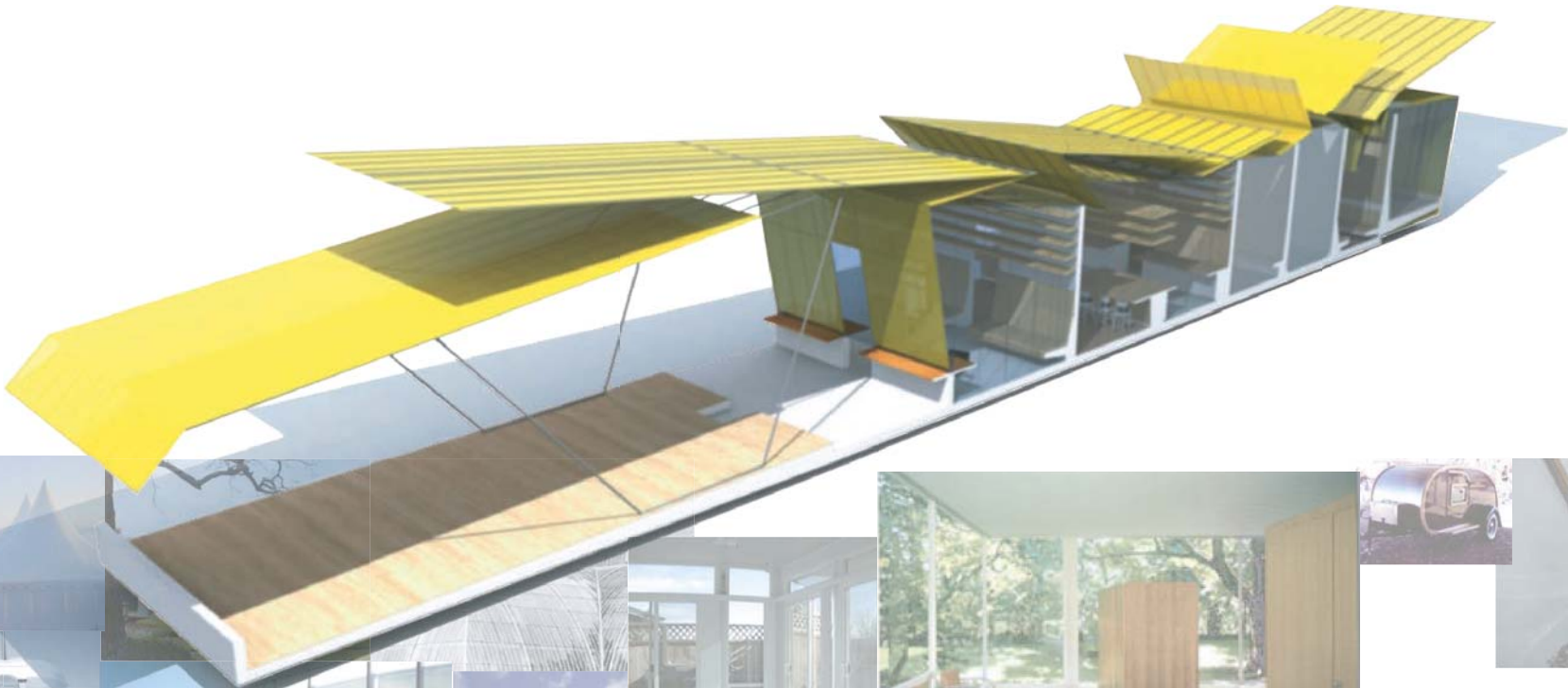
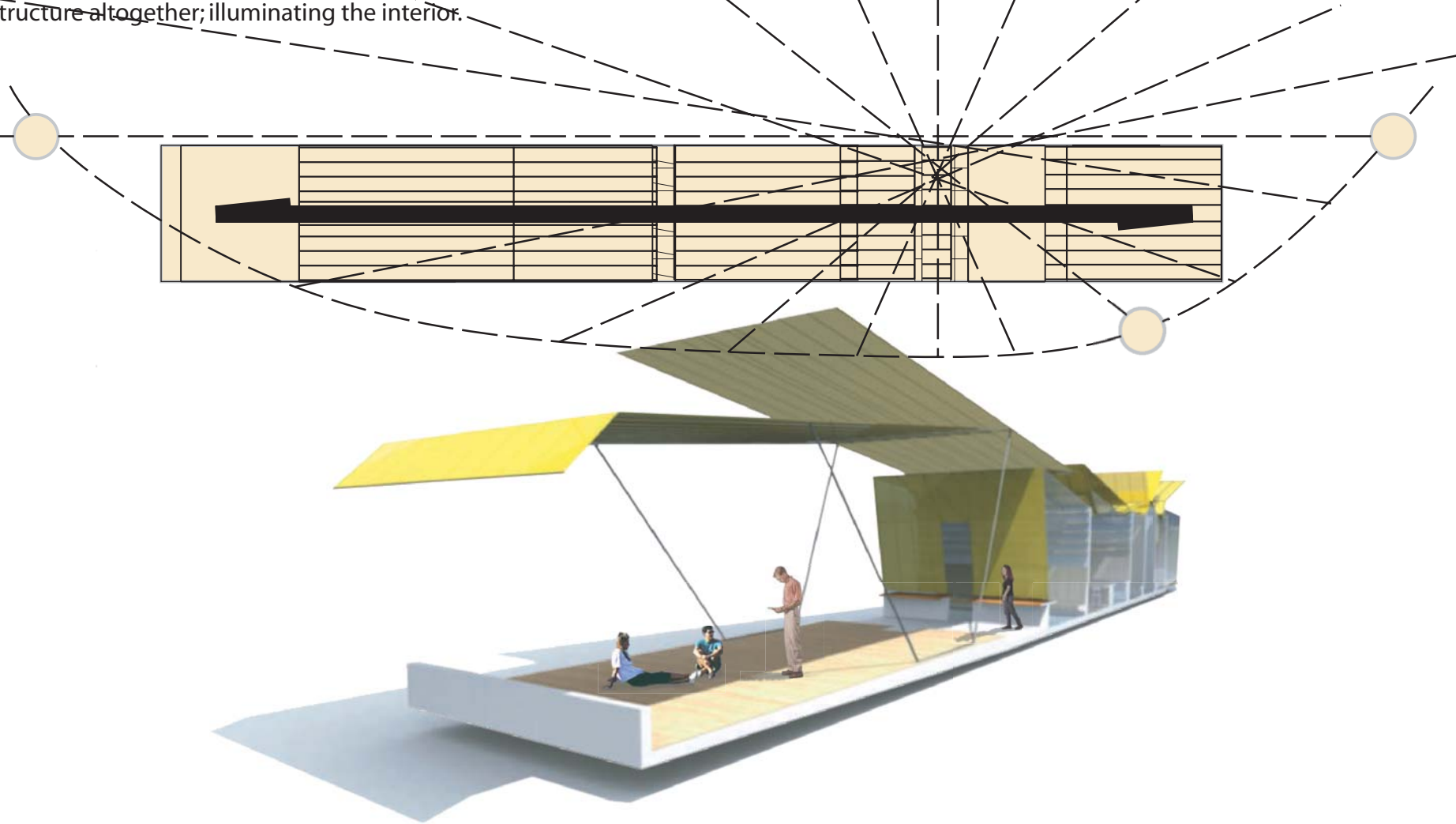


PHOTO: PETER G. PALUMBO

Finally the supporting structure plays an integral and important role in this experiment. If the experiment is meant to explore the concept of time through understanding change then there needs to not only be a way to experience this change but to measure it by some constant. Although varying from region to region the movement of the sun in the sky is a common, daily occurrence. This fact was not lost on ancient cultures and the sun dial was developed in order to use the sun as a means of telling time. The roof structure of this project is meant to act as the tool for measurement. The roof becomes the constant. Like the sundial the roof provides a way to measure the movement of the sun and use this movement as a way to experience a change even if no physical change occurs. Functionally the roof structure provides shade, shelter and another way to divide and mediate the different interior spaces. At points the roof structure reaches high in to the sky. At others it wraps in to the glass roof providing a cradle for reflected light. Still in other places it allows for light to penetrate the structure altogether; illuminating the interior.



If time is truly the 4th dimension then before we can understand the relative concept of time we must understand how we experience it. If everything is static then does time progress? Can time be going backward, standing still or speeding forward if we have no way of measuring it? It can be said the true 4th dimension is change or at least a combination of change and time; one being inseparable from the other. If we are to design a house that is an experiment into the 4th dimension then it needs to explore change against the measured constant. A simple house with a linear progression can allow us to understand change over a period of time measure by using the sun and the house itself.

Michael Ramsay

