Architecture Research Office

A Conversation with Stephen Cassell

Oz: We have defined process in our theme statement as a design methodology which translates conceptualized space into physical environments. What we are interested in are more experimental processes that challenge that relationship between the idea and the built thing. Or better yet processes that stand in place of concepts. Your project for Artists Space in Manhattan, The Paper Wall, speaks to this notion of experimenting with process. How did that project come about and what was the initial idea?

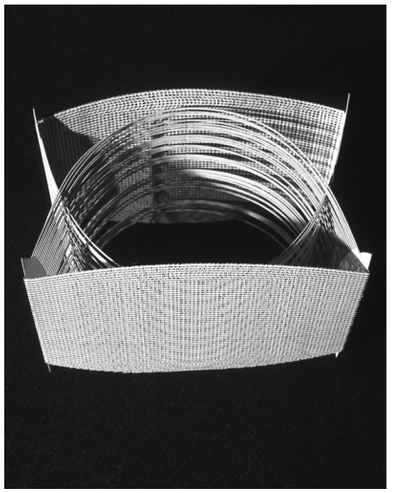
Cassell: The project came about because of two things, one, we were working with a grant from the New York Council of the Arts exploring the relationship between CAD [computer aided design], CAM [computer aided manufacturing] and craft and the other was being asked to do an installation for Artists Space in Manhattan. So we decided to combine the two works and look at the relationship between CAD/CAM and craft. The idea behind that is there starts to be an intuition when you have that immediate feedback between thinking and making.

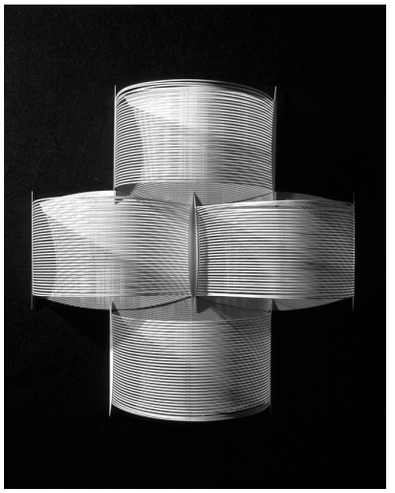
So was the idea of a wall always there or did you look at other possibilities for Artists Space?

It started out just playing around with the laser cutter doing very simple cut studies with different materials on the laser cutter. When we were asked to do an installation we talked about these different ideas and the wall came up as a way to give a very narrow frame for our investigation. The wall had to do some simple things. First, stand up or rather try to stand up and second, to divide a space. It seemed like if we left it wide open we one, wouldn't get it done or two, get anything out of it. So it [the wall] was really just a limit to focus our work and experimentation.

So when you went to place the paper wall in the space, what was the thinking there? What was the process of siting the project without any real sort of context?

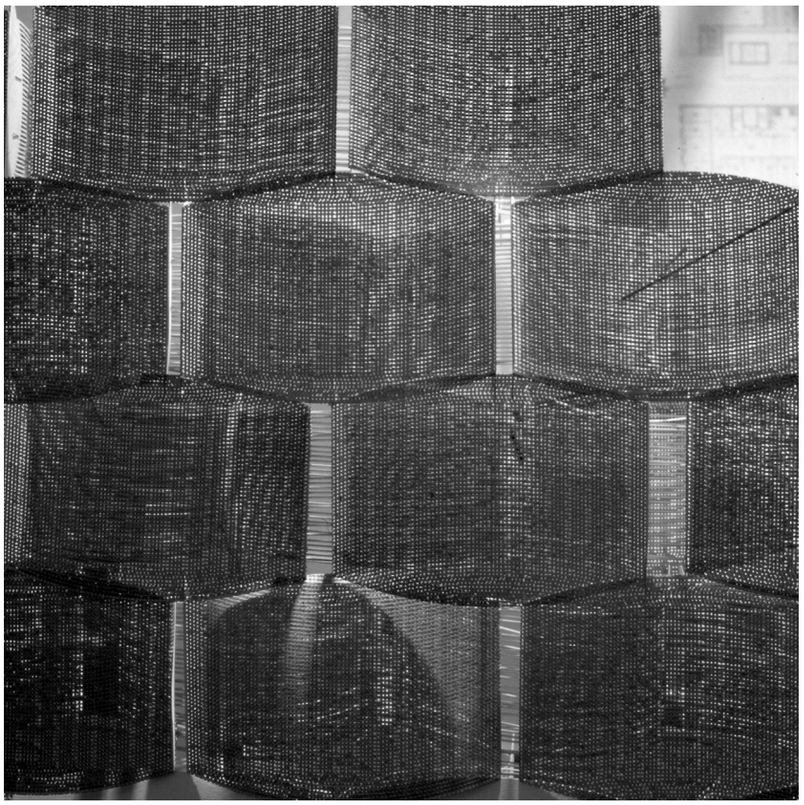
There are a couple answers to that. The original context, because of the nature of working on the thing we went through a lot of variations just to get the thing to work. So I guess you could say the original context was the back of our office. We probably went through six or seven different directions before we had it down. At that point, the laser cutter is great, but very slow when you do very dense patterns and by that point we realized we had to run the thing twenty four hours a day just to make the opening [of the show]. We had some grand ideas of context by varying the density and the opacity, and like architecture school all that went out the window when we realized it took twenty minutes a block to make.





So the use of CAD and CAM technologies seems to provide a different type of intuition in the work that is more of a mechanical intuition. What role do these technologies play in the rest of your work? What sort of potentials do you see there?

There are a couple of things that happen. What started to happen with the paper wall is that there is such a direct feedback between coming up with an idea and fabricating it; you begin to develop a much stronger intuition with the material, therefore allowing you to do some transformations to the material. So, paper doesn't act like paper any more because you can cut it so finely. There's a realization that the technology allows for a transformation of a material. And the other is really starting to understand how working can set up at least in parts of projects, mini projects where you can begin to develop a very high intuition with the projects because of all the different variations you have worked though. We've been doing that on a bunch of projects, usually small projects, that we develop forward working with some of these technologies. Some of them are more of a success than others. But I think there are other possibilities that we've talked about like mass customization where you can allow, unlike the orthodoxy of modern architecture in the 1920's when customization allowed the strip window for different building types, the idea of mass fabrication which allows for mass customization. With mass customization you can make each part subtly different because you can work with an algorithm in the computer and each part gets fabricated directly. That only works at a certain scale to be successful.



Were the ideas explored during the Paper Wall reinterpreted for other works or has it even become a project unto itself within the office?

It's not really a project unto itself, but it's definitely a lot of ideas. It has carried on into other projects, some directly and some indirectly of things that we figured out that didn't get used. That's really a product of how we set up our office where there are always these ideas that are material and programmatic that can jump from project to project.

We see the wall showing up as a diagrammatic element in a lot of your work, especially in the Colorado House. Can you talk about the idea of the wall as a diagram and how that was manifested in the Colorado House?

For the Colorado house it was really walking onto the site and having this idea of parallel walls start to frame both the shape of the landscape and the views beyond. What becomes really exciting is how it ends up manifesting itself completely different then some of the initial sketches or ideas and it really started to have a life of its own in terms of framing views and how it started to weave itself into the landscape. Also, the formal language that started to develop. I think usually what happens when you start to have an initial idea like that if its a good idea it takes on a life of its own and develops its own logic.

In that regard, the diagram becomes embedded in the work, but then how does it maintain its autonomy? How does the idea read as a diagram but at the same time have the flexibility to adapt to a specific context?

I think that there are a couple of answers to that. One, if it is a great idea it won't read as a pure diagram. In the end the best thing is to weave itself into the life of the piece of architecture and the life of the people inhabiting it and using it. So I think it manifests itself as a diagram in terms of how you physically occupy it, how you move through the spaces of the house and how it frames the landscape. Then, in a very straight forward formal way its a pretty clear diagram of a bunch of walls that you do read, but I think the importance for us is that we have a rigor with what we do, an architectural rigor. But, on the other hand it should be something that enhances perception and understanding of the architecture in more subtle ways. I don't want a client to walk in and say "Oh, I see...the walls" it should be "Oh look how I understand that mountain range in a way that I didn't understand before or in relationship to spaces and programs within spaces. It should be manifested in a more direct experience for the user.

I think that leads perfectly into our next question. One thing we are trying to explore with this theme is the inverse relationship that exists in the discovery process. As a designer you discover all of these spatial relationship during the process. Do you think that the user can discover space, after the fact much in the same way that the designer intends?

I think they definitely can, and that's really exciting. I think there is a series of things that start to inform each other at least for us. One, is really starting to understand both the physical site and the context and the conceptual context of a project. Also, the client, what is this piece of architecture supposed to do for them? From that it's really starting to come up with an architectural response to that, and that's the real process of discovery. There's a real feedback once someone starts to occupy the space, or once you start to talk to people or even explaining the design. It starts to re-inform what your initial conceptions are. And there's nothing better than once a project is done, a year or two

later, going back in and starting to see the connections, seeing the people using the house and telling you how they use the house in ways that you completely expected.

There is a similar discovery in the Colorado House, There was an understanding of the views that were framed and an understanding of how light would move through at different times of the year and different times of the day. But at the same time we're discovering things for ourselves that we never expected to happen that people tell you. If you knew everything before hand its no fun what so ever and you're a lot better than I am, as an architect. That process of discovery after you have put the building up for people to use, hopefully there is a discovery for those people using it and a discovery for me as an architect to really find things I didn't expect that can weave into the next project.

This feedback you were talking about leads into our next question. There is an emotional response that occurs in the perception of a work that relates to the notion of memory. How did you approach this notion of memory in a project like the Education Center for the Vietnam Veterans Memorial? When you say emotional response, and memory, can you tell me a little bit more?

I guess in a memorial project it seems as though there would have to be an effort to approach people's emotional reactions.

I think, certainly for the VVM and the education center, this is something that we though a lot about for a couple of reasons. The site, being adjacent to the memorial is something that works so effectively with memory in really powerful ways. You go to the memorial and you see people touching names who knew people on the wall, which even if you don't know somebody who is on the wall there is still this really powerful experience. So the idea in the education center was how to not shortcut what was so powerful in the existing memorial and how to add on to that without overwhelming the existing memorial and the strength of memory that is present there. We tried to do that by doing a couple of things. Creating a project where the idea of light becomes a more tangible material and explaining objects that would be within the space so the real materiality would come from the physical objects telling the story that deals directly with memory and everyone being of a very different understanding of what happened in that conflict.

Yes, I'm sure there was some opposing perceptions and viewpoints.

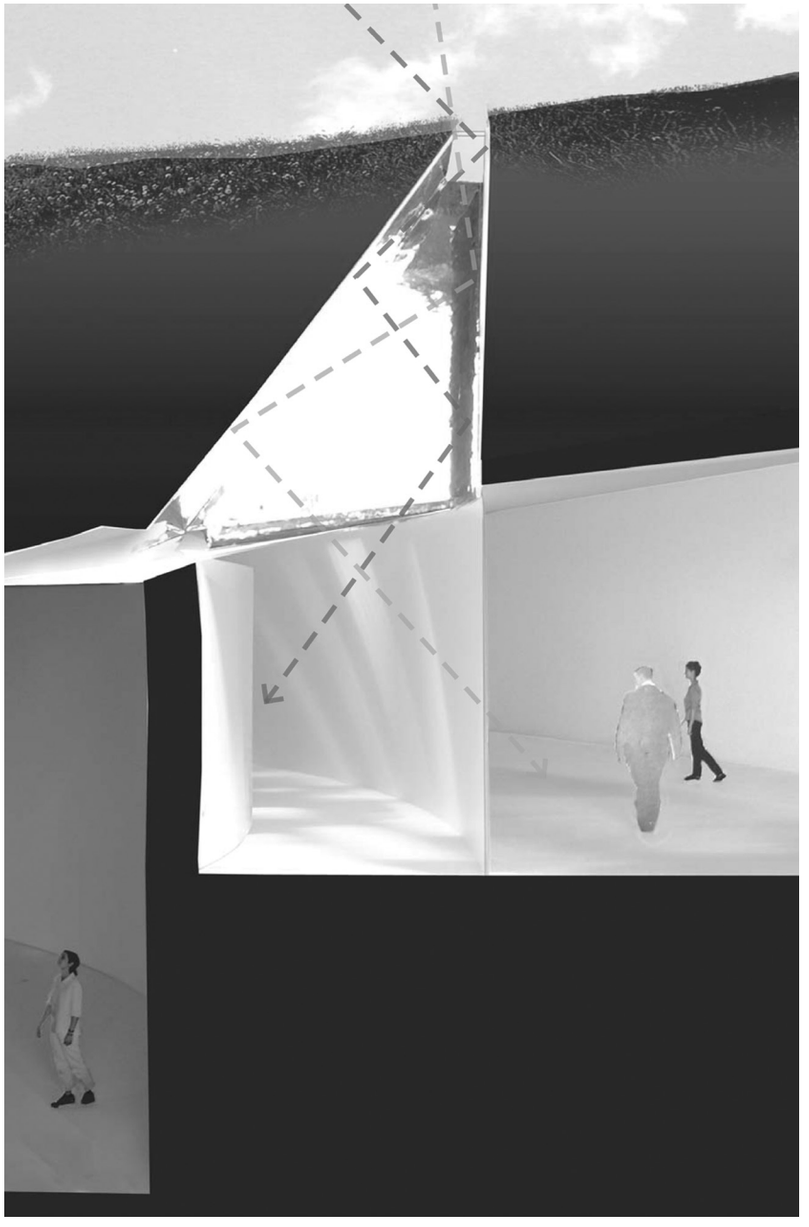
There were. So the question became, how do you establish a framework that allows for those different viewpoints yet stays powerful? In some ways it tries to set up a framework that allow people's memories to be engaged the way they want to and engage the history through objects within a place within the space. Heavy textiles create a spatial framework and a spatial procession ramping down through the space that would allow almost a narrative quality that would be different for each person

Can you speak more about how you came to be involved in this project?

That was a invited competition, we were short listed along with three other firms, we didn't get the job, Polshek's office got the job, but it was a part of a long process to start and pull a team together. [We went] to really powerful meetings with different veterans where they all told stories, stories which were incredibly moving. Really starting to understand the goal was the real challenge of this project and what we saw the goal of the education center to be. The goal to us at least was that the Vietnam Memorial which is fantastic and powerful is starting to change as more and more people are being born after the Vietnam War and more and more disconnection between the actual names of the wall and the people who are visiting it. Now if you guys visit, chances are you won't directly recognize someone's name. But you may know someone who knows someone. In fifteen or twenty years that will happen even more so. The power of the meaning happens because there is that connection. We were really trying to create a space that would create a framework that would allow one to fill in information. That meaning would still be there only in a different way and would not transform the memorial.

Once that competition was over do you see those ideas later? Obviously they flow into other projects and they still have a life and a pulse. Do you actively pursue them, do you take competition any further even after its over?

You have to put it aside for a couple of months—to chill out about it—because you stare at it too much. One thing we got out of that is how we collaborated with a lot of really good people on the project. Ralph Applebaum, who's a designer and Michael Van Lavender, the landscape architect, and Jamie Carpenter, the light artist, among other people in our office who came up with some really amazing engineering ideas to build underground with no manifestation on the outside in terms of vents and grills. That sounds pretty mundane but in that place its incredibly important.



What we take out of that really excited me about that project, there's a complicated relationship between the program, the goal of the institution, commissioning the complexity of the site both physically and conceptually and politically and the architectural response to that. The response tried to make it seem effortless. Here, there was no line between exhibit design, the architecture and the landscape and there's a much more seamless integration of ideas and to me that is something we are trying in bigger projects. There are specific things that will come out of it, like how light is pulled underground both technically and physically. It will probably be the last oval project we ever do [laughs].

So the institution of the competition, of course, effects the architectural process. How did the Vietnam Memorial differ from the Eye Beam project where the institution was all about new media, new information and images?

In some ways they were very similar because they were both things you can't really define. One interesting thing about the Vietnam Memorial proposal was people's notions about the Vietnam War. Once again they became really inflamed, because we were working on it over the summer right when the whole John Kerry and "switch boat" controversy flared up. That was literally a non-issue when we started the competition and by the time we finished it, it was front and center on every newspaper everyday. For us, maybe different from other people, we are very much trying to come up with an architecture that comes from the specifics of the institution, site, and tectonic method. Coming out of that in each case is very different. The Eye Beam and Vietnam Memorial are similar in the fact that there is no agreed upon definition of what the Vietnam War meant. In the same way there is no real definition of what technology is in relationship to art. Both of them are trying to create a framework that allows people to read into the definition and allow that definition to evolve over time. Conceptually it has been successful, but in some ways there is a relationship between them. In some ways, they are radically different because there is such a different problem, such a different conceptual framework.

Changing gears a little bit, one thing we wanted to touch on was your education, it seemed like you came out of Harvard when there was a shift from hand drawings to the computer. Then you worked for Steven Holl, who does all these amazing watercolors, and in an architectural milieu of computer generated images by Hadid and Libeskind, what did you take from working in Holl's office and its effect on your own process and how did that inform what you do today?

I used the computer only a little bit when I was in graduate school, when I was an undergraduate not at all, it was

not there. I worked for a while after my undergraduate degree and then at Steven Holl's office before I went to graduate school. In graduate school I started to play with some ideas of designing algorithms to help design and some early CAD/CAM concepts. Some of what I learned in watching Steven Holl and his watercolor process was that he ventures and develops ideas and gives them room to grow. It is respective of the media in which you are testing those ideas. Steven has this amazing ability to throw any ideas down on watercolor paper. He lets it sit long enough so that he doesn't criticize it too much. Later he develops it some and then it's more of a good idea or bad idea rather than being so hypercritical early on that some things seem less feasible from what normally does get done. I think that is irrespective of technology. What I learned when we did the transition working in photoshop and illustrator and CAD is that at a certain point when I learned enough and I could work fast enough at CAD, I started to have an intuition that is some ways was very similar. There was a very different medium, but the intuition of drawing through a problem was still there and what was different was how, in terms of the pencil and the paper, the specifics of the medium can start to shape your ideas. The specifics of the software whether you do surface modeling or solid modeling leads you towards one direction or the other.

There are preconceptions that we deal with as architecture students, as to what the design process has to be. Do you have any thoughts on exploring other media during the design process.

One of the great things about school is being able to try all these different ways of exploring ideas. Every semester you have to be reflective of what was successful. Some things were really successful and other things were real bombs. Gradually, as you try to test these different media you start to see which ones work for the way you individually think. Personally, I have a couple of different things I always like [such as] going to the shop and making something whether I was in school or now, it was just building a wood model. Using strange or straight forward materials as a way to develop an idea you can't quite articulate verbally. You definitely know something is there in your fingers. Drawing through an idea once again develops the ideas more; you can draw enough to pull it out in Illustrator or AutoCad. Part of everyone's career search is what method is best for them and their ideas. I think the great thing about architecture is that there's no right answer and even though they can be radically different from one person to another they are all equally valid as long as you pursue it with rigor and intensity.