Space and Place – Designed or Made?
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In the artwork installed in the Second Art and Science International Exhibition and Symposium is designed to explore touch-free interaction and position/location awareness within an installation space. The project also endeavors to bring certain cultural considerations from the actual situational aspects of the location where the artwork is installed. In any site specific art work, consideration should be given to the space, location and inevitably to the people, culture where the installation is made. This project was developed to have installations in Singapore initially. Other locations, such as Beijing, present a unique opportunity to explore how the change over time of the location provides a glimpse into the cultural and ethnographic character that has been developed within the population and how this is evident in the spaces and locations where the population lives. One aspect of such a project needs to be the consideration of how the space and structures came to be over time. How it's "authenticity" has been created. This becomes especially important in light of the massive changes that have occurred of the last few years while Beijing attempts to "remake" itself into a forward looking 21st century city of the future. These changes, suchas the bulldozing of the "hutong" neigh-borhoods that have come into existence over thousands of years, is happening in amazing speed. Where "restoration" is occurring, the older authentic buildings and houses are replaced with a facade of "traditional" looking structures, but with a loss of a true authentic character and a replacement with a "Disneyland" like experience of the local culture. What follows may not achieve the end goals, but may create something else entirely. The dangers that we can perceive are the loss of

authenticity and the glossing over of the true character of the city's neighborhoods. This loss of authenticity brings with it a loss of character and homogenization of the distinct cultural qualities that make a place, a neighborhood, a city, what is really is. A place comes to be what it is by the force of weight carried forward by the habituation of the people that live, work, play and otherwise create the place by the continual activity over time. If one walks through recent restoration projects in the hutong neighborhoods, such as that occurring in 2006 and 2007 along Gulou and Andingman avenues, we see that the structures immediately facing the avenues are pushed back to make a larger thoroughfare and the facades of these structures are "rebuilt," not restored. The facades suffer from an attempt to "retain" the character, but lose this, inevitably to the actual reconstruction.

The quality in buildings and in towns, cannot be made, but only generated indirectly, by the ordinary actions of the people, just as a flower cannot be made, but only generated from the seed.

Christopher Alexander
The Timeless Way of Building

Looking at other places in the world, especially to the USA, we can see the creation of facades that attempt to remake a authentic experience but where this fails to achieve the goal and where if one looks just a little deeper than the facade one senses that underlying what we see is simply a "set" as is used on the theatrical stage or in film production. The only thing in a stage or film set that is important is to see the facade, behind this facade is a rough structure that holds the facade in place and an empty lot lies behind. After all, if we only see

the place from afar, for a few seconds, what need do we have that it actually has any real substance or authenticity? Culturally, the USA is young, with no distinct cultural attributes that take thousands of years to develop. If we take a look at photograph in figure 1, we see what looks like an authentic, late nineteenth century or early twentieth century street scene in small town USA.

Figure 1. Mainstreet USA, Disneyland. Anaheim, CA, USA.

The houses and structures are made in typical prevailing architectural styles of the day, there is a "Queen Anne" house, a "Mansard Roof" house, and a theater in the center has typical architectural decorative elements. These architectural styles, it may be noted, were adopted in a time when the American society was trying to find its identity. These architectural styles were understood via the mass media of the day, the printed illustration. These styles were adopted from European architectural styles and had no actual "authenticity" in the newly created society. What we see in the photo is a recreation of a recreation, a simulated simulacrum. It looks real, looks authentic. But this is result of an incredible skill and craftsmanship.

In the US, like other places, that desire of the population to have a connectedness to a culture is prevalent in the society. This desire has been exploited and turned to commercially

oriented activities. In figure 2 we can see how this "typical historical" city street was actually created.

Figure 2. Model building for the design of Mainstreet USA, Disneyland. Anaheim, CA, USA.

The design of the "experience" of Mainstreet USA was done by very skilled designers who focus on the user experience and have successfully created immersive and sensationally engaging experiences. But, it is designed for a short time stay, for a family to bring the children for a day or two. They move on through the simulated city to the more viscerally engaging experiences of the rides and exhibits. If one stays for longer than a hour, then one sees that underlying this successful designed "experience" there is nothing of substance except a commercial goal of providing and entertainment experience – but only for a price! One should not understate the value of the entertaining experience nor the skill and talent that created the theme parks. The worldwide success of these is evidence of the appreciation that the public has for these entertaining experiences. But still, at the end of the day, the public goes back to their daily lives in their neighbourhoods.

As China moves towards the market economy, this danger of falling into recreating a simulacrum of the traditional Beijing hutong neighbourhoods is very real. The loss of the real authentic character that has taken

thousands of years to develop and replacing this with "Disneyland" style hutong neighbourhoods will not carry forward the essential character and quality. This quality of place cannot be designed; it can only be developed indirectly, through the living and habituation by the people that create the place. It ambiance is the result of people using it, doing things in it, going about their daily lives.

Figure 3. The "siheyuan," Beijing.

The "siheyuan" - the four sided courtyard style house - that makes up the hutong neighbourhood developed from the ways in which the culture developed. This includes the social interaction of extended families and the social interaction with the families in the surrounding area. This cannot be designed. It develops from an innate character that has taken thousands of years of cultural development. As an outsider, with a deep appreciation of the culture of China, I see this danger of "recreation" of these sites as failure to recognize the inherent value that is carried even in the rough and tumble quality of the decaying structures. While it is easy to recognize that services such as sanitation and safety are important, there is still a need to remain true to the real and authentic character that has taken so long to develop and bears the weight of countless generations that made the city what is.

Figure 4. An entrance to a "siheyuan," Beijing.

There is a beauty to these buildings. This quality comes from its use and cannot be designed or "recreated" in an authentic fashion, even by the most skilful artisans and designers. To attempt to recreate this runs the danger of creating a "Disneyland like" Chinese experience. A place that is meant for a temporary stay for entertainment only. Then the visitors go home to their real lives, houses and neighbourhoods.

The installation "periphery" has been developed to capture site specific qualities using interactive media technologies.

The desired result of this project is to create an experience that brings out in each site, qualities of the location – those aspects and ambiance that are created over time, altered, yet still "visible" from an understanding of place, culture and situation, visible from the "periphery" of our vision of time and space.

This installation has been developed specifically for the selected location where it is installed. In this location, the place has a history. It was once a primeval forest that was inhabited, where people have lived over many generations. It had a neighbourhood and this was removed to make way for progress.

The viewer interacts with the images by moving their hands or relocating in the area in front of the screen. The viewer's position and motion will be captured using a computer vision system and processed in real time to alter the images on screen. Imagery in the installation has created that is drawn from the actual installation site.
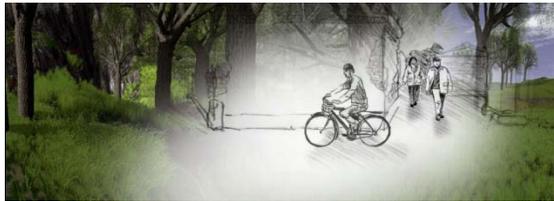
Figures 5 and 6. Artwork samples from the installation

In the installation, the images are created using various artworks, 3D terrain models, photography, video or hand drawn images. These have been selected for the appropriateness to the "site" and the culture where the installation is situated.

When the viewer enters the space, the screen is filled with an image of the area in the space behind the screen. This represents the present. This image is offset into the space but is of the actual location itself.

Figure 7. Installation view prior to moving into the active space.

As the viewer comes closer the vision sensor system detects their presence and begins to bring in the "past" through the periphery of the image space. This reveals the site as it was prior the present revealing the past around the periphery of the image.

Figures 8 and 9. Installation view with viewer in the active space and interacting with the system.

This media art work can open a way to see the site as built up, not by just the organization of the space, but organically by the people who inhabit the space. The project explores interaction methods while keeping a focus on the content, on the qualities that are develop with the site by generations of people who live there.

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The Interaction and Entertainment Research Centre at Nanyang Technological University was established to encourage interdisciplinary research from diverse disciplines and areas at the intersection of Art, Science and Technology. The Centre is an open research space for NTU researchers, international scholars, designers and media artists to collaborate on experimental and cross disciplinary platforms for research and development with a focus in interactivity, entertainment technologies.

Current projects include research into Augmented Reality with a specific goal to capture new methods of interaction that include, real time motion capture and gesture recognition, body language and facial recognition, in an effort to realize natural human interaction with virtual characters and objects. Within the AR research, our work is moving toward marker-less, or feature based tracking, sensor based tracking and fast processing of large scale model or character that have interaction capability and real world spatial awareness. The Centre also focuses on sensor based interaction methods that allow haptic responses and control of environmental elements such as lighting, projections, autonomous robotic performers within theatrical, dance, and artistic installation and environments. The third stream of research focuses on animation technologies. In the Computation Arts Group, we are working to develop automated process for traditional cell animation to allow for faster production and realization of animated content.