Memory and Touch  An exploration of Textural Communication May 7th 2008

Conference Paper: The Sensory Experience of Space

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Introduction

Our bodies are in constant dialogue with our surroundings. Our understanding of architectural and interior space is predicated on this although it is not always very obvious. We tend to think of it and record it as a visual experience. As a consequence, we analyse buildings and interiors through conventional visual representation, which does not take into account our other senses. We concentrate on what things ‘look’ like. We have been challenging this approach. By considering the interplay between our bodies and buildings, we can gather insights into the habitability of buildings and our environment, and how we occupy and understand space. To investigate this further we asked students to analyse buildings and how people use them through observing and engaging with dance and movement within a building.

In this paper we will be exploring our sensory experience of space, ways of expressing it, and to use this as a basis for the design process. Our movements through a building are central to the design process for architects and interior designers. We will consider the dialogue between built form; it’s textural and material qualities, and our haptic response to it. We aim to develop a new language of drawing that expresses students’ personal experience of space rather than a more delineated and ordered way of understanding space that comes from a more conventional ways of recording space. We are looking at the body and its dynamic relationship with buildings and discussing experimental ways of notation that incorporate the dialogue between body and building. We think of this as a creative process that develops with the involvement of dancer/artist/student. To understand how we experience buildings, by trying to connect the felt and the abstract, we have encouraged students to use themselves as a resource in a building. The buildings provide the frame to work within, the container and the contained.

We will describe an on-going project at the University of Portsmouth, now in its second year, where students work together with dancers and artists. It requires a process of loosen inhibitions, having to invite uncertainty, and allow for mistakes, or questioning when there is no clear path to follow. Design students tend to use drawing for analysis and are encouraged into accuracy. Their drawing boxes consist of the 0.1/0.5 ink pen a pencil and memory stick, they work with CAD. The output for their thinking ends up on a screen or a small-scale sketch
book. Very rarely do the students get the opportunity to ‘touch’ their process, the tactility of a drawing, its gestural and sensual qualities. We are interested in how experiencing space and exploring experimental ways of notating space come together and give a definition to a new space.

History/Process

In February 2007 we developed a student project in collaboration with a group of dancers, Signdance Collective and visual artists Jon Adams and Mitchell Bould, the project took place over two weeks in the School of Architecture at Portsmouth. It involved 120 architectural students and 30 interior students working with 3 artists, 3 dancers and 4 musicians.

At the end of the two week project the students produced a performance which took place over the entire building and the exterior courtyards. With the guidance of the artists, students were asked to focus on their senses and to creatively explore their own environment. The intention of the project was for the students to explore their understanding of how our bodies and space and building interconnect, how this connection can be explored through the performative nature of drawing, and how this exercise can be a precursor to Architectural and Interior Design. Working with disabled artists provided the opportunity for students to re-assess their attitudes toward sensory perception. Their insights were key to the project, for example, one of the dancers is profoundly deaf, has a highly developed sense of space using senses other than hearing. All students kept a visual diary. This would be a record of the development of the project including their progress within the group, and their own research into disability and experimentation with drawing and recording.

Performances included students wrapping themselves in detail paper, making themselves into a drawing, drawing on their bodies, using paper to make sound, shifting chalk around on paper. The drawings became gestural dances. The students used masking tape, cling film, string, rope, elastic, electrical tape, tracing paper, glass, maker pens, flour, charcoal to explore their ideas. The central atrium of the school became the focus for the performance and became animated through dance, improvised music, drawing and line. The 3-storey atrium was the canvass the vertical and horizontal planes were used.

The student project was then developed into a performance and exhibition for Architecture Week 2007, Dys-lineation. Mitchell Bould in collaboration with Jon Adams re-presented student work to form the stage-set to a performance by Signdance Collective. The exhibition explored drawing in relation to space and movement and our sensory experience of space. It aimed to create a sense of anticipated action of touch, drawing movement, the sound of space. John Adams collected words from meetings and workshops, and digitally created soundscapes.
The printed words were used as confetti during the performance leaving a messy residue. Signdance and the Luke Barlow Band interacted with the building, and the student work to interpret the discussions we had had over disability. The building provided the ‘set’ and the exhibition provided a set within a set.

Working with disabled artists was invaluable as it allowed us to investigate sensory experience, as well as issues of disability. There were problems too. The student project suffered from an overdose of aims that at times were conflicting.

This year we have continued the project, developing ideas from Dys-lineation. We concentrated on students’ diaries, and more directed workshops with invited artists and dancers, not attempting a performance at the end. For the two week project the students all inhabited and moved in the same space, and finished the workshops together lying down in a quiet meditation. It took place within the New Theatre Royal, Portsmouth.

**Project**

We continued to look at two main themes:

- The first, to investigate how we use our five senses – sight, touch, hearing, smell and taste – and our bodies as a whole, to define the space that surrounds us, working with dancers and artists to explore and experience space in a very different way beyond our more standard architectural methods of representation.

- The second, to explore ways that bodies and architectural space intersect, and how we can use this connection creatively through drawing. Working with the artists, students explored space through the act and gesture of drawing, investigating new ways of marking and visualising space that develop through describing and representing movement in space.

We asked the students to produce 2 artefacts:

1. **Diary/Sketchbook.** Documentation of their personal process through A visual diary/notes documenting their experiences, including photographic documentation, drawings, marks in sketchbooks or loose paper, photocopies of book/internet research

2. **Three dimensional object** that represented their experience, carried out after the theatre exercise, as a way of connecting back to architectural and interior design.
The students were asked to bring a range of materials, pens, pencils, charcoal, tape, rope, varying sizes of paper but their main resource was to be the use of their own bodies in relation to the building.

The New Theatre Royal provided a stimulating series of contrasting spaces to respond to, and we could make take advantage of it being a place for performance. Students were asked to work out a journey through the Theatre Royal imagine ways of interpreting the journey, finding out how to convey what is special and unique about it, and how the character of the spatial sequence influences our perceptions. The Theatre Royal was a particularly good building for the exercise as it is not only full of contrasting spaces, but has rich textural surfaces that exist through it’s history and particular function as theatre.

Dance Body Space

The dancers worked with reference to Lawrence Halprin’s, RSVP cycles, Resources, Scores, Valuation and Performance. Students were encouraged to carry out exercises with an underlying structure, both to loosen their inhibitions, and to start understanding space directly through their bodies.

Resources
Through group exercises they worked together and discovered for themselves ways of communicating through movement in space and movement in relation to others by using the site to gather a palette of ideas such as the seating, stairs, handrails.

Scores
In small groups students went to explore and identify ‘journeys’ throughout the building. We had previously allocated areas where contrasts exist. They identified and defined them in detail for themselves, where the journey could be expanded to become a narrative. Then they wrote menus, or list, very pragmatic about a journey, in conjunction with their scores.

Performance
Each group of students gave a short performance, in-situ; of their interpretation of the spaces they had been studying. The whole theatre became the acting and viewing space. With the help of the dancers, they explored the spaces through touch, and experimenting with their own movement, taking into account the shape of the sequence of spaces they had chosen, how that influenced them, and consequently provoked bodily responses.

Valuation
After the performances the work and the scores were assessed, and students discussed their experiences.
The dancers started the first session on stage, as it was the only space that allowed 60 students to warm up. The sessions began with the students lying in quiet meditation on stage breathing and experiencing their bodies. They then warmed up more physically loosening their bodies. This was then followed by a series of exercises to support the students to communicate non-verbally with each other. The students then went off into the theatre to explore their routes. They worked to roll, jump and bump their bodies through the spaces. The more adventurous used their voices to sound out the varying resonances of their spatial journeys. They allowed the spaces to inform the colour and texture of their movements.

It became quickly apparent during the first day how the building was set up for performance. At times the student ‘dances’ quite literally reflected this as they took their cues from the building extending their arms in the air as they arrived at their destination spot. As the students became more accustomed to the stage it stopped being central to their experience and they began to ask questions about who was performing, drawer, dancer or audience.

The students warmed up on the second day by working with drawing and dance. The dancers drew through their body movements improvising, making marks, repeating, working in relationship to each other. They worked together contained on the stage with the drawing as the boundary and at other times contained within a 2 metre square marked out with tape on the floor. Students drew the dancers and wrote into the drawings their responses. From this they made scores, lists of movements, which they then practised. At the end of each session they performed their journey. Audience and performer become intertwined. The dancers encouraged the students to pick up and draw on the language of the building, to take on and describe through their body movements the texture of a wall, the colour of the space, the sound of and rhythm of the stairwells. They used handrails to move on and around.

It became clear when talking with the dancers that the language of dance closely mirrored the language of drawing, pace, movement, mark, rhythm, layering, space repetition, gesture, colour, texture.

Drawing Movement Space

In terms of drawing and experience it took students a while to settle into their ‘drawing tools’ and to expand beyond their normal palette. The first day was about orientation, navigating through the complex routing structure of the Victorian theatre. Each route, each entrance, the finishes, the heights of the ceiling, the quality of the surface finish all reflect the social level of the person entering the building.
Students initially walked their ‘routes’ in silence allowing their thoughts, feelings, and emotions to surface. Emphasis in the workshops was given to students making drawings in relationship to their own experiences, making space for them to explore their own narratives.

The second session allowed students to settle and to begin to go beyond their preconceived ideas of drawing and to start to explore mark making and their bodies in relationship to space. Students were asked to create a biography of the space through drawings expressing their sensory experience. This encouraged them to use their bodies to explore and measure space, and to explore the texture and temperature of the spaces with their whole body. They were encouraged to listen to sounds inside themselves, within and outside the room. What sound does the room make? How might smell be recorded? What quality does it have? Students explored space with veils, voiles across their faces. They began to respond to their gut feelings, to lie on the floor, to be like a ‘dead’ body. Map out their bodies. They measured and drew the building. They began to ask questions about how they could draw, mark the relationship of the experience they’d had in one space compared with another.

In the final session students explored drawings in relationship to self and others creating some form of exchange. The group was used to measure out the spaces, feel the space through their arms, legs, and height. They were asked to understand ideas of measurement of the acoustics, light, hardness of the walls. As an integral part of the exercise students constantly referred to the scale of the human body in space. Although it is useful to carry out measurement exercises, it was also useful to think about scale by inhabiting a space and testing it by less conventional ways. How many paces rather than how many millimetres? How do we adapt out body language to fill a space? Rolls of paper could be used as the measurement as well as the recorder.

**Drawing Dance**

Students were encouraged to undertake a deliberately exploratory, open minded and receptive approach to their drawing, letting go of preconceptions, abandoning ‘known’ drawing language, working away from a given logic/pattern and allowing their drawing to be as sensitive, and ‘raw’ a process as possible, inviting uncertainty and broaching the possibility of getting utterly and delightfully lost in a drawing – in order to acknowledge and enjoy drawing as a personal sensual response.

Artists used various approaches to encourage the students, such as drawing on sheets of paper measured to the size of their bodies, drawing movement rather than the body, using the action of mark making on paper as expressive, and using words. Students undertook a series of exercises focussing on sound, sound they made through interacting with the building, or working blindfold and listening, and then recording sounds through making marks on paper as a score. The usefulness
of repetition was explored. Understanding the rhythm of our bodily presence, such as the sound banging on railings. Repetition of journeys overlaid was explored, drawing to the beat of the building.

‘... students began to develop ways and means of connecting with their actual personal experience of space rather than delineating and ordering spaces as a contained quality with crystal clear boundaries. The architectural repercussions could be very interesting – the emphasis on the contained rather than the container.’¹

From Drawing to Design Proposition
At times the drawing began to take on their own textural qualities, becoming objects in themselves. One group of students set up a ‘landscape’ drawing along the front of the stage which became overlaid with marks, surfaces, textures, signs, symbols and text. The drawing was cut up framed and reframed to form fragments. As time progressed it became torn, ripped transforming into the 3 dimensions and becoming body like. The resulting drawing offered the possibility of starting points for the design process, departure points for building propositions.

At the end of the project students made a three dimensional object that represented their experiences from their investigations over the days in the theatre. This was an important connecting exercise, to distil their findings, and channel them through three dimensional representation, toward a tangible design for their next project, which was for the architects to design a dance studio as an addition to the existing theatre and for interior design students to look at the re-inhabiting the building immediately adjacent to the Theatre.

Conclusion
Why is this important?
The exercises helped the students to have an understanding of space and building that is felt, and goes beyond the cerebral. We believe that in a digital age, through this method we can develop insights into our understanding of space, and this mysterious area where we experience the textural qualities of a space through our haptic understanding, and links us to our surroundings, and record our emotional responses. These perceptions are important in the design process, where we don’t have much of a language to record and develop them. Dance very directly connects the body and space and the container of the space. Using artists for guidance allows students to explore space beyond the conventional methods, to be able to make use of personal experience of a space or place as part of the design process.

¹ Mike Grimshaw University of Southampton, Winchester School of Art
It should help us as designers to anticipate how people will respond to architecture and interiors.

Students were reluctant to move away from conventional drawing, and abandoning a known drawing language. They were also reluctant to be involved through dance and movement. Once students had broken down those barriers, they were empowered to have a much greater range of expression that involved their own feelings and emotions. It provided the possibility for interpreting them, and making use of a sensibility and awareness within the design process.

**Artists**
Trish Bould
Alex Hoare
Mike Grimshaw
Jon Adams

**Dancers**
Suna Imre
Sacha Lee

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