

Sensory Space: Temporary Occupation

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Abstract: The paper sets out to explore the role of the non-visual and somatic senses in the design process. It examines the importance of the interaction between body and built form in our perception and understanding of architectural space. It sets out to investigate spatial progression through a series of environments exploring textures, sounds and properties of light to form a textural narrative.

Particular sites are mapped through drawing that are understood through our somatic senses, looking at marks and movements of inhabitation, understanding space through pace, texture, and sounds to look at the way bodies interconnect with building. The paper draws on inter-disciplinary methodologies from scenography, dance and drawing. It investigates new ways to map the experience of space forming a series of choreographed events and activities.

Exploring interior and exterior space through inter-disciplinary practice allows individuals to move between and across disciplines and in so doing question the ways in which they work. This paper shows how different methodological approaches to space can inform new ways of thinking about the occupation of site. The paper builds on previous research and will describe an on-going project at the University of Portsmouth, now in its third year, where students work together with dancers, artists and scenographers to investigate new methods for exploring space.

inter-disciplinarity promotes friction, aiming to challenge and transform the practices that become engaged in its processes.¹ Peculiar to inter-disciplinarity, Rendell clarifies, is the willingness to 'call into question (...) the way we do things' as well as 'what we call what we do', in an attempt to overturn what is established and conventionalized.²

Key Words: Inter-disciplinary Practice, Drawing, Movement, Mapping Experience, Scenography

Introduction - The Somatic

The Somatic is understood to carry our perceptions of space through touch, seeing but also the memories we carry in our body actions, emotions and awareness residing in systems of belief and decision-making, remembrance and evaluation³... Lived body-space incorporates not only habituated movement in general but also modes of walking, turning, reaching in performing particular acts: body-ballets.⁴

Our bodies are in constant dialogue with our surroundings. Our understanding of space is predicated on this engagement 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 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.

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 way of recording. 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. 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.⁵

150 architectural students, 23 interior design students, 12 lecturers and 5 artists took part in the project, the student group was broken down into 5 different studios and each studio assigned an artist.⁶

The Project

The project is phenomenological in its approach and sets out 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. It aims to explore different perceptions of space, to explore space through the body, gesture and mark. Students were given a range of sites containing a journey through a series of connected spaces: exterior space, threshold and interior space. All their findings were to be assembled as a 'diary'.

Design students tend to rely on graphic representation. They bring a limited palette to their drawings using ink pens with fine tips, clutch pencils. Representational practice within design education relies heavily on CAD drawings and the production of unpopulated plans, sections and elevations. The project sets out to challenge this convention. Students also, rely heavily on precedent research taking images of finished buildings empty of the user. These design tools tend to stress the end object and do not take into account process, experience and the end user, the human content.⁷

Drawing is gestural, tactile in its process and asks for the students to engage with their own experience to respond to the site. Drawing forms a direct link between what we think and what we sense.⁸ Students were encouraged to use a wide range of materials to draw with, from their bodies, through dance, to masking tape, tipex and post-it notes. Drawing practice is being used to question how we as designers engage with representation and through this to generate and explore a new drawing language to talk about and represent topology of place. Drawing within this project is being explored in its 'newly complex' form as described by Michael Ginsborg in the preface to 'What is drawing?' where he describes drawing practices that have now left the page and are no longer dependent on their earliest material form.

To challenge the way we work students were firstly asked to experience a series of interconnected spaces and secondly to notate their findings. To extend students thinking on drawing they were introduced to a range of contemporary artists who use experimental means to express experience within their drawing practice. The work of artists Joseph Grigley, Robin Rhode, Claude Heath, Jordan McKenzie and Jon Adams were shown to them to illustrate how they have used their sensory experience to explore their work.

Joseph Grigley is an artist who became deaf in childhood he uses fragments of overheard conversations in his work, post-it-notes become replacements for sound and are used as a way to communicate to others. Robin Rhode draws with the whole of his body, his work leaves behind the traditional notion of drawing as he makes his work in response to an event. A wall

or a car park can become the background as he sketches out a performance. Claude Heath experiments with the relationships between sight, touch and mark, he makes his drawings with a mask over his eyes as he searches for form without sight.⁹ Jordan Mckenzie marks and maps the traces of human existence through continuous gestural marks creating a 1:1 experience of space. He explores mark making as a process of mapping the body within space, a way of tracing its movements.¹⁰

Drawing practice allows the students to physically engage with space, through the gestural act of the hand, their bodies and it asks them to explore space more intimately. It creates an investigative space privileging process over product.

Drawing offers and has always offered artists a very particular kind of work space, one that is often of such modesty of scale that it belies the possibilities that lie within it, and in which difficulties seem more amenable to resolution than elsewhere. It is a liminal space where transformations seem to emerge with more fluidity, a space where the 'what would happen if?' questions are asked material in hand, and may or may not, be accompanied by sets of conditions about how, or when, they might be answered.¹¹

The Method

All five studios worked to the same brief but were led by an invited artist. The workshop was structured around the following outline, it firstly asked students to experience their given spaces and then to find ways to express their findings through drawing and mark making:

- Orientation and site exploration, experience of space in relationship to self.
- Drawings creating a narrative through the space.
- Investigation of the site in relationship to self and others.
- Drawings in relationship to space and movement, how space is used.

Initially students spent time orientating and exploring the site. They explored a journey through the space from the 'exterior' to the 'interior' and back out again. Students did this individually and in silence finding a route through the space that had a personal resonance. They were asked to think about changes as they walked through their route, thinking about temperature, the smells, the tactile qualities of the space, the qualities of the sound, the taste of the air. They recorded their initial experiences and responses to the site and identified transitional places in the journey. They made drawings in relationship to their own experiences that included marks, words, rubbings from surfaces to describe the journey.

The students then created a narrative of the space through revisiting and exploring their routes. The project referenced Zumthor's 'Atmospheres', and asked students to engage with titles as the body of architecture, exploring the temperature of space. The sound of space, what sound does the room make? The temperature of space, how hot or how cold and what is the colour of space? They were asked to think about the surrounding objects, what is the space filled with? And how do people move in space? They engaged with the tension between interior and exterior – the thresholds, the crossings, transitions, boundaries, where does space end and begin? Levels of Intimacy – proximity and distance. The light on things – light, shadow, shade to understand the play of artificial and natural light, shadows.

Students began to explore the spaces using themselves and the group as a resource. They were encouraged in groups to use each other to measure out the spaces, feel the space through arms, legs, height and stretching, they extended their ideas of measurement to the

acoustics, light, and the hardness of walls. Finally, students were asked to look at the way people use and connect with the space. How do people walk, through, and inhabit the space? How do they touch the space? How do people come together or separate and observe how people respond to each other within the spaces. Where do they sit, stand, talk to one another? They looked at the compression and expansion of how people move together and are forced to touch and negotiate space. They were asked to consider the negative and positive volumes of space that form as people move.¹²

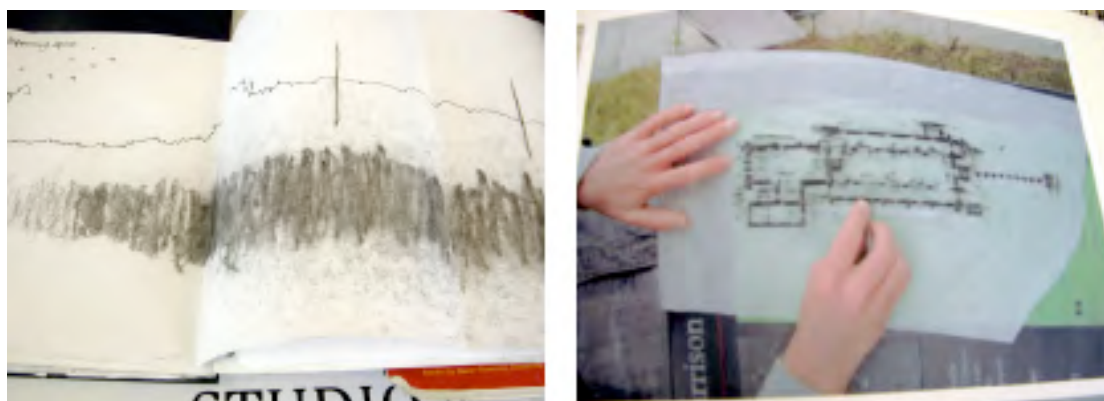
The students set to work in their groups with a common aim, but their methods varied depending on the artist who was guiding them. Each group then worked with a dancer, scenographer, or artist to raise and develop inter-disciplinary questions relating to site, bodies, buildings and space.

Methods of Investigation

1. Scenography, Andrea Cusumano and Alex Hoare

Sceneography describes a holistic approach to making theatre from the visual perspective. It is derived from the Greek sceno-grafika, and translated in common understanding as the 'writing of the stage space – l'écriture scenique'.¹³ It is the seamless synthesis of space, text, research, art, actors, directors and spectators that contributes to an original creation.¹⁴

Scenographic language explores the relationship of the body to space, it takes into account light, colour, text, actors, spectators, clothing, structure and space. It brings together the visual, auditory image and environments into one single artistic form of communication. Scenography focuses on the body, a theatrical performance can only take place where there is a meeting point between actors and audience.¹⁵



Students working with Alex Hoare

To start students thinking about scenography Andrea Cusumano, a scenographer/artist gave a short history of its development and introduced a number references such as the experiments of Jerzy Grotowski and Tadeusz Kantor. Cusumano talked about exploring space through the felt and with his feet.

The first time in a space is a glorious private moment, providing the opportunity to walk round, survey the space from all angles and consider which are the commanding positions for performers in relation to the spectator. Edward Gordon Craig's dictum that a 'designer should design with their feet as well as with their hands' emphasises the

*importance of walking and feeling the space, always looking to see how it can be moulded.*¹⁶

For this project the students used the site of the Garrison Church in Portsmouth, the church is part built and part bombed. The nave remains as one of the few remaining monuments to the war. The students entered the nave and then the Chancel and immediately sat in pews making small detailed drawings, the building dictated the way they worked, they were constricted in their movements, static in their seats. The cruciform plan dictated the narrative of the space both vertically and horizontally. The site is steeped in history enabling the students to explore the layers of stories that form the building today. The students were encouraged to use the history of the building, and how it has influenced what we see now

The scenographer works with the text, unpicking it to give new meaning to it. Students built on previous experience and played with text either directly through using words on post-it notes or through exploring the space of a book, tipexing/painting out text to re-invent and visually create new spaces on the page and within the text. Through working with the scenographic process we were able to take this process a step further thinking about the text as analogous to the brief, we could think about unpicking the text working with our audience the client to develop new ways of thinking about a site and the user. It allowed us to question how people might navigate and use space, to create new spaces at the edges, to explore the corner of the frame where action can unexpectedly happen.¹⁷

Students were also encouraged to think about narrative through drawing referencing Pamela Howard's storyboards. A scenographer will make collages and drawings of the spaces, drawings of the topology of the space to communicate and develop ideas, they create a space to tell a story to, the text informs the 'plan' of the event.

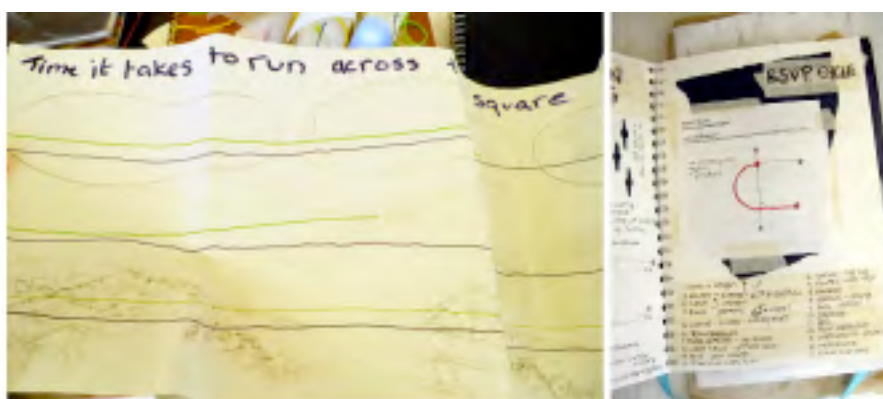
The vocabulary of design has many overlaps with scenography within this project we are interested in how bodies move in space, how they are lit and the colour of space, the text, and direction actors are given. It gives us a different lens a new perception into the way our bodies interact with space it encourages students to understand environments in depth, and allows them a broad pallet of possibilities of true engagement and recording of the space. We understand built space by being there and acting in it.

2. Dance, Sacha Lee and Suna Imra



Student diaries working with Sacha Lee and Suna Imre

The dancers worked in the high street, shopping centres, the urban environment became the back drop for their work. Students working with the dancers were encouraged to work in small group to 'feel the colour and texture of the space' and then to make body movements to reflect these qualities. They were asked to write and draw their experiences, to draw each other and the relationship of people to space. The dancers used railings, fire stairs, benches, structural elements of buildings as their palettes. They wrote down their findings, annotating patterns of movement, thinking about their bodies in relationship to the surrounding spaces, their diaries became score like. At the end of the event their drawings were described through movement, crouching, lifting their legs, spreading their arms vertically and horizontally. They represented the actions we make when walking through space, the push of the body then hand against a door and the movement through. They interacted with the environment and became the observers of an external theatre.



Student diaries working with Sacha Lee and Suna Imre

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, doors, handles, handrails.

Scores

In small groups students went to explore and identify 'journeys' throughout the site. 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

The street became the acting and viewing space. With the help of the dancers, they explored the spaces through touch, and experimented 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. They explored space through rhythm and pace, running from one end of the shopping centre to the other, and negotiating with pedestrians going about their daily business.

Valuation

After the performances the work and the scores were assessed, and students discussed their experiences. The performance was re-presented in the central atrium of the School of

Architecture.

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. Their final dance became a performative drawing. Students engaged with the space through measuring pace, rhythm and movement.

3. Fine Artists, Jon Adams and R.A. Webb



Students working with Jon Adams

One set of students worked with Jon Adams an artist who deals with the challenges of dyslexia, and Aspergers Syndrome. Adams worked in Portsmouth Cathedral concentrating on sound, the sound the building makes, that people make within the space, of a door opening, people talking, echoes, the rhythm and pace of the building. Referencing Francis Alys, students began to think about the sound of the railings, of their feet, of people sitting. They investigated the history of the building through sounding out the difference between one part of the space and the other.

Adams encouraged students to explore space through taste and to represent these experiences through mark making, words and colour. He asked students to respond to their thoughts and feelings, to take note of them through any possible medium, they made large collective drawings that were split into parts, broken down, reformed and formed into new drawings. Their drawings became 3 dimensional and were represented as installations.



Students working with R A Webb

Another artist, R A Webb who practices as a painter worked with students to loosen up their drawing practice. He encouraged a sense of adventure and showed the students how feeling their way and getting lost in their work, can enable something to form that is beyond rational thought. This in Webb's view was critical to free the students from a static mind space, to a physical space through the action of drawing.

This group took a more phenomenological approach, and were given words to work with, macrocosmos, microcosmos, threshold, dialogue, to provoke their imagination. Webb worked with the students swinging back and forth between intuition and the rational using this process as a tool to transform the creative act of drawing.

Students were also challenged with more open-ended questions such as, Where is the beginning and ending of Space? In the centre of a piece of work someone had accidentally walked across the paper leaving a footprint. The footprint had a pattern like the stone floor surrounding them, its edges and rhythm stimulated enquiry into the beginning edge of the paper/floor, and the unsolved ending of the footprint leaving the page/space. They discussed the possibility that this element of serendipity may well be more interesting and could be reigned in and used to stimulate and enhance meaning, thus opening up the possibility that something outside their control could have value.

A reductive controlled approach to drawing was discussed with another group of students dealing with a micro cosmic view, citing Giacometti as an example emphasising the tightness of his drawings, driven by obsessive rubbing out and a high level of critic. This seemed particularly important discussion to students who were reluctant to rub out or make changes.

Design students commonly reference art practice, art works, as a source for their work but rarely do they use or understand its terms of reference.¹⁸ Students appropriate images to give meaning and to substantiate their ideas. Through working with the artists the students were encouraged to engage more closely with arts process, developing ideas, shifting and moving their work so their drawings remained in flux. For design students who can work quite clinically with their drawings it was a challenging experience.

Conclusion

Drawings made in all 5 groups emphasised the mapping of people in space, the relationship of people to buildings, exploration of personal narratives. They explored the body actions, the rituals that we bring to space how people use space, the emphasis being on the contained rather than the container. Through engaging with our felt knowledge, the known and unknown contained within our somatic experience we have begun to engage with the typology of space on a deeper level. As Bloomer and More make apparent we learn most of what we know and feel about the physical environment through haptic perception.¹⁹

Scenography opened up the potential to start to explore text, the script as part of the site. Thinking about a play, layering a new play/narrative into a site bringing into question the text both that, that is analogous to the brief and the stories that exist within a site and how it is used and the impact that this may have on a design. Through examining the histories of the site and the wider community designer begins to have an understanding of place to enable more considered interventions that connect people to their surroundings.²⁰

Dance enabled the students to move and engage with their environment through thinking about the way we move through and negotiate space, the 'body-ballets' we make; the ritual patterns of movement, memory and action that we carry and embody to support ourselves. By lying on the floor, jumping and running students noted and marked the way they move through space it enabled them to make new movements to use the haptic experience to respond to their site, to make bodily drawings.

Fine Art practice emphasised the flux of drawing and drawing as a place of personal investigation. It made apparent the different use of drawing, exploring for the sake of investigation, making use of the unexpected, of memory and the imagination.

The project has allowed for inter-disciplinary exchanges, the juxtaposition of one discipline to another, allowing for new stories, histories to develop, growing from the felt experience. Working with scenographers, dancers and artists emphasised the personal, the felt experience to give the student a new way of thinking about site, describing and drawing their experiences and engaging with the body in space and leading to new ways of recording.

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 and scenography 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.²¹

The project is part of an ongoing investigation and this paper a stage in that process. The next stage is to use the work to establish new working methods to explore experience as a tool for design. The project has developed and grown through experience and is now at a point where we are starting questioning the process more critically.

*Physical work, movement, and intimate contact with the built and natural landscape give people the opportunity to formulate knowledge about places that cannot be gained by singularly visual means (...) a variety of forms of place learning will be increasingly important resources in design pedagogy if we seek to move away from emphasis on architecture as object. Broader inquiry may also reveal new knowledge about place experience as a resource for planning and design in a culturally complex world.*²²

Endnotes

¹ Rendell (2006) 'Art and Architecture, A Place Between', p11

² Araujo (2007) 'Haecceity Vol 03, Pattern', p17

³ Tilley (1994), a phenomenology of landscape, Places, Paths and Monuments, p12

⁴ Tilley (1994), a phenomenology of landscape, Places, Paths and Monuments, p16

⁵ Baker, K and Mitchell, B. (2008) The Sensory Experience of Space, P2

- ⁶ The project has been jointly developed with Kate Baker, Architect/Lecturer, Portsmouth University
- ⁷ O'Neill. (2001) Corporeal Experience: A Haptic Way of Knowing
- ⁸ Naginski. (2003) What is Drawing?, p 153
- ⁹ Heath, www.claudeheath.com
- ¹⁰ Mckenzie, www.jordanmckenzie.com
- ¹¹ Ginsborg, (2003) What is drawing? P12
- ¹² Project brief written in conjunction with Alex Hoare, artist/scenographer
- ¹³ Howard, (2002) What is scenography?, p 125
- ¹⁴ Howard, (2002) What is scenography?, p 130
- ¹⁵ Howard, (2002) What is scenography?, p11
- ¹⁶ Howard, (2002) What is sceonography?, p11
- ¹⁷ Howard, (2002) 'What is Scenography?', p xx
- ¹⁸ Dwyer (2007), Across/Between: Art into Design, p1
- ¹⁹ O'Neill, (2001), Corporeal Experience: A Haptic Way of Knowing, p 4
- ²⁰ O'Neill, (2001), Corporeal Experience: A Haptic Way of Knowing, p10
- ²¹ Baker and Mitchell, (2008) The Sensory Experience of Space
- ²² O'Neil (2001), Corporeal Experience: A Haptic Way of Knowing, p3

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