Introduction

Memory is integral to the way we construct our identity and provides a wealth of experience and material for creative works that are readily available to artists regardless of age, background or life experience. Memory is 'essentially an unstable and variable phenomenon that, nevertheless, has been captured, represented, tested and contested in multiple ways in contemporary art' (Gibbons, 2007, p.147). The science of memory itself is in an emergent state as it increasingly draws upon the rich multidisciplinarity of psychology, neuroscience, computational science and philosophy (Dudai, Roediger & Tulving, 2007). This provides artists, educators and students with a rich critical dialogue to engage with.

From the perspective of the lecturer who designed the project and an educational researcher, this paper investigates *The Space of Memory* - a first year undergraduate project that draws on the processes of contemporary creative practitioners to explore spatial memory as a catalyst for creative works. Using memory in an art school setting provides opportunities to consider a wide range of ideas with an emphasis on the spatial and temporal to engage students in learning. This approach models a discursive creative practice and through informed responses to project work encourages the development of a critically aware art practice.

There is a growing body of literature seeking to better understand effective tertiary teaching in creative disciplines. Recent publications have highlighted signature pedagogies in art and design that include emphasising experimentation and experiential learning (see for example Clarke & Cripps, 2012; Shreeve, Sims & Trowler, 2010). We discuss these elements in relation to memory and engage in an action learning process that explores pedagogy and curriculum in a sculpture studio class. Action research is often implemented by teachers who aim to make judgements about how to improve their teaching practice (Kemmis & McTaggart, 2000). We propose to critically reflect upon how pedagogy and curriculum can be designed in ways that lead to the educational ideal of engaged and transformative learning for students.

The Space Of Memory Project

The Space of Memory project emerged from a pedagogical approach emphasising meaning making. The theoretical position of this pedagogy is underpinned by contemporary notions of transformative learning which can be defined as a process of adult education 'by which

previously uncritically assimilated assumptions, beliefs, values, and perspectives are questioned and thereby become more open, permeable, and better validated' (Cranton, 2005, p.630). Learning happens when humans have opportunities to elaborate existing frames of reference, learn new frames of reference, transform points of view and/or transform habits of mind (Mezirow, 2012). The *Space of Memory* project is designed to engage students in all aspects of this kind of learning.

This project involves two distinct stages that are revealed separately allowing students to experience the process and develop ideas without specific endpoints in mind. This encourages them to take risks and be open to chance through exploration of process and materials. It is widely accepted in the creativity literature that risk taking and exploration are desirable attributes for creative practice. Notably Hetland, Winner, Veenema, & Sheridan (2007) list them as two of eight core habits of mind that are being cultivated in studio learning.

The design of this project is primarily inspired by the work 'The Educational Complex Onwards: 1995–2008' by American contemporary artist Mike Kelley. This work stemmed from Kelley's critique of Repressed Memory Syndrome that was popularised in the 1990s and now largely contested. Kelley used this work to pose 'questions about the nature of domestic and institutional space and its role in the formation of a human subject' (Vidler, 2000, p.161). This is a particularly useful example of a practicing artist's work as it introduces students to the notion of using art as a tool for cultural critique. The construction of Kelley's ideas as a three dimensional psychological diagram is an instructive model for creative practice as is the range of sculptural work he made in response to it.

Stage One

Students are shown a series of images of models made by or inspired by architects and contemporary artists. These images include models from le Corbusier to Australian artists

Callum Morton and the early works of Ricky Swallow. The final images are of Mike Kelley's 'The Educational Complex Onwards: 1995 – 2008' (Figure 1).

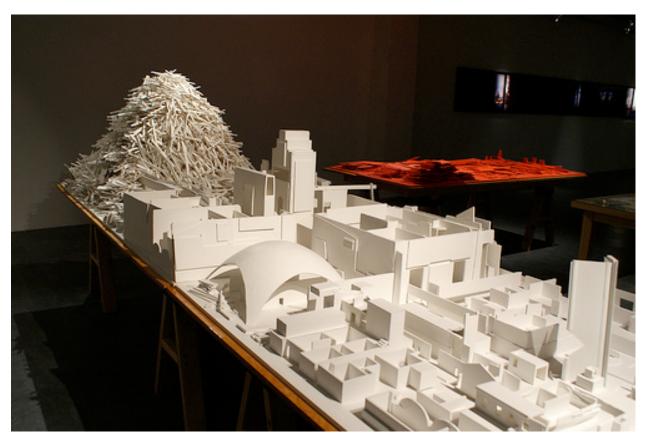


Figure 1: Educational Complex Onwards: 1995 - 2008 (exhibition view), Mike Kelley, Wiels, Brussels (B), 2008 (Photography: Marc Wathieu)

Kelley's work consists of a fastidiously executed model of all the educational buildings he attended including CalArts where he completed his art education. Kelley reconstructed his architectural memories into a large rambling maquette that includes cut-aways into rooms, solid blocks of sections of buildings he couldn't remember and detailed versions of buildings and rooms he had frequented. He saw these models as 'a memory map of the "geography" of his education' and as emblematic of the impossibility of truly recalling spatial relations in his personal life (Vidler, 2000, p162). This spatialisation of memory sustained Kelley and at the time of his untimely death in early 2012, he had been working on a mobile facsimile of his childhood home for the 2012 Whitney Biennale (Swanson, 2012).

Students are also introduced to psychoanalytic ideas in *The Poetics of Space* by French philosopher Gaston Bachelard and encouraged to consider how they might 'read a room' or 'read a house' (Bachelard, 1964, p.38). After a short discussion, students are asked to construct a model of an architectural space from memory. By using Kelley's work as a new frame of

reference, students can elaborate existing frames of reference by constructing their own models from personal memories. Students are encouraged to consider the model as a work in itself and to complete it within a week without visiting the building. As plans are drawn, the lecturer initiates a dialogue with students about their chosen spaces and why particular architectures are being explored.

The aims here are to briefly contextualise the use of the architectural model within the history and practice of art and design and provide some material ideas on how to approach construction. The structure and materiality of the model is not prescribed and students are encouraged to use a range of materials and processes, use workshop equipment if necessary and to consider various types of finishes. Models can be made out of cardboard, pasteboard, foam core, plywood or any other materials students feel are appropriate.

Stage Two

A week later, students are introduced to the ideas of the French social theorist Henri Lefebrve who believed that 'the spatial production of a society secretes that society's space...(and) is revealed through the deciphering of its space' (Lefebrve, 1991, p.38). Students are asked to consider their model as a research object with reference to the idea that space is socially produced. This is a significant moment as it introduces the notion of practice-led research in an appropriate and achievable way for undergraduates. Students are encouraged to consider a variety of ideas that could be contained within the model and its memories including social ritual, nomenclature and taxonomy of objects, narrative, psychological states, relationships to the body, materials and meanings in constructed spaces and the significance of architectural structures. Just as space can be seen in Lefebrve's (1991) view to be constantly socially reconstructed, students are encouraged to consider conceptions of space in relation to memory to be constantly unfolding and continually in flux. From these ideas, students develop a full-scale sculptural work.

Why Is This An Effective Spatial Practice Project?

This project is effective because it catalyses invention by activating very personal and specific memories as an accessible site and repository of untapped material for creative works. Over the past five years this project has consistently engaged students at a deep level and produced resolved, full-scale sculptural works. Furthermore, it provides direct experiences of embodied ways of knowing, brings together theory and practice and grounds students' art making in a contemporary context.

The Space of Memory project catalyses invention by encouraging experimental thinking and making. It is democratic in nature and draws upon a commonly available, yet individual and subjective, resource in the memories embedded within architectural space. The project encourages students to reconfigure and reconstruct memory in a similar way to which psychologists Schacter and Addis (2007) theorise memory. They assert that memory is 'not a literal reproduction of the past, but rather is a constructive process in which bits and pieces of information from various sources are pulled together' (Schacter & Addis, 2007, p.773).

Although the project does not specify what spaces students should investigate, they often choose a childhood home. This is a particularly powerful motif as memories are often contained within houses. As Bachelard wrote 'thanks to the house, a great many of our memories are housed, and if the house is a bit elaborate, if it has a cellar and a garret, nooks and corridors, our memories have refuges that are all the more clearly delineated' (Bachelard,1964, p.8). While this project does not promote psychological analysis through the models it is naturally restorative. Students begin to consider and process very personal and individual memories during construction by bringing old memories into awareness. As Jusczyk and Klein (1980, p.218) state, spatial maps of the constructed environment are the 'spatial contexts within which events occur, can be coded internally, and can subsequently be effectively retrieved or recalled'. Students are engaged in a process of materialising their psychological and spatial diagrams which often leads to shifts in perception about past experiences, thus initiating a transformation in subjective thinking and knowing. This enables students to become aware of their embodied maps and to utilize them for creative works.

Working with architectural models and envisioning the spatial relations of past memories encourages students to translate ideas by producing resolved, full scale works relating directly to their bodies. Working at this scale can be very daunting for first year students. This learning

experience, however, scaffolds students through a making process that paradoxically allows for creative risk taking within a safe environment. It also appears possible that if a student gains access to sensory experiences occurring within particular spatial structures, this basic structure potentially becomes part of the translation. The body becomes the student's frame of reference because as Merleau-Ponty (1962, p.144) states 'the body is our anchorage in a world'.

This is particularly evident when students produce work that is scaled for the human body. For example, Carmen Reid's work (Figure 2) is based on the memory of a shed on the family property in Tasmania. The work produced for this project consists of a platform constructed from reclaimed timber with a small window at head height on a swinging stand.



Figure 2: Space of Memory project work by Carmen Reid, reproduced with the artist's permission.

Cath da Costa's work (Figure 3) reconstructs a bathroom scene with a full scale bath and shower curtain. This work is drawn from her childhood memories of suburbia.



Figure 3: Space of Memory project work by Cath da Costa, reproduced with the artist's permission

Beau Emmett's work (Figure 4) consists of a series of platforms constructed from roughly sawn timber that support and constrain a full-scale ant mound. This work combines memories of the landscape with the construction of a new family home.



Figure 4: Space of Memory project work by Beau Emmett, reproduced with the artist's permission

This direct experience of embodied ways of knowing is a rich activity for students. Research into embodied cognition asserts that cognition can arise from bodily interactions with the world. Thelen, Schoner, Scheir and Smith (2001) believe that when beings interact with their environment they form a matrix of sensorimotor capacities in the body that determine emotion, language and memory. These in turn affect how individuals function in their environment. Artists commonly recognise the benefits of embodied knowing believing that 'we tacitly accrue practical knowledge through embodied relations with the world' (O'Connor, 2007, p. 126). Observations of students reveal that the act of recollecting a past experience of space and then reactivating it through embodied making processes stimulates learning and engages students at a deep level.

Another highly effective aspect of this project is its ability to bring theory and practice together. Students experience philosophical modes of thinking about space to help them consider memory as the 'intersection of mind and matter' (Bergson, 1910, pp.13). Giving pertinent examples of philosophical thought provides students with conceptual ideas that have potential to weave directly into practice. Ultimately this has the ability to profoundly transform students' ways of experiencing the relationship between theory and practice through making.

Teaching beginning artists within a transformative framework involves providing a range of methodologies to generate ideas and develop art works. The project is the final in a series of first year sculpture studio classes designed to stimulate students to produce works and lay the groundwork for the development of an individually driven practice. By working from critically oriented contemporary artists such as Mike Kelley, students can learn the discursive basis of such work and be inspired to ground their own art making in a contemporary context.

Conclusion

This paper forms the first phase of an action learning cycle. We have described and analysed a first year sculpture project that we believe helps undergraduate students understand and directly experience core concepts of spatiality and creative process in ways that promote transformative learning. Using our observations of students in the act of learning, we have reflected upon the fact that the embodied process of materialising constructed spaces from the past provides access to detailed information that would otherwise not be readily available. Bringing embodied knowing into the foreground of practice provides students with a wealth of material and process to activate a critically aware art practice. Interestingly, graduates who completed this project five years ago are still working with *The Space of Memory* processes they discovered in first year art school.

The second phase of this action learning cycle, which will be reported in separate paper, will investigate the effectiveness and impact of the pedagogy and curriculum from the student perspective. In sharing this project we hope to inspire undergraduate educators to reflect on their pedagogies in similar ways and to explore curriculum materials they believe promote transformative learning.

University rhetoric across the sector is making claims for quality education focusing on active, transformative learning. We believe this project goes some way to meeting this imperative by promoting conditions for learning that are ideal for students to actively construct the skills and knowledge they need to become practicing artists and to profoundly transform their ways of knowing, thinking and doing now and into the future.

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