LINGER, SAVOUR, TOUCH.

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ABSTRACT:

Today digital technology presents opportunities and possibilities that a quarter of a century ago would not have been out of place in sci-fi films or in the imaginations of inventors. But today this digital technology is a reality and its progress has been rapid; questionably too rapid for us to keep up with. This advancement has made our planet appear to be smaller, more accessible, and globalisation is evident in every part of our lives. Is this a good thing or are we turning our backs on the principles that we not so long ago deeply valued; regionality, skill and longevity and replaced these with speed, homogeny, expediency and globalisation? Is this apparent technology overload desensitising us and our lives...do we behave differently to the pre-technological humans of 25 years ago? This shift in the way we live our lives has been facilitated and nurtured by the rapid and wondrous development, use and reliance on the computer and all that it can offer in every sphere of our existence, from shopping to socialising, design to construction, information to communication. But the computer cannot make a judgement, it cannot tell us if the shoes we purchase on e-bay will suit us, if the match.com date is our soul mate or if the space we have designed is an uplifting, comfortable or inspiring to inhabit. Architectural education is one realm where this advancing technology has been fully embraced. The majority of students have been born and educated within this new and developing technological environment, they are familiar using it and comfortable within its realm. But do the design proposals that are produced as a result of an immersed technological process provide true representation of architectural proposals? Can a design process that combines technology alongside an 'old school' traditional method of design together with hands on experience provide an enriched learning environment and result in a more holistically explored and communicated architectural outcome?

INTRODUCTION:

We are moving too fast...fast lives, fast cars, fast food.....and fast architecture. We are caught up in a world that allows no time to stop and think; to appreciate and enjoy all the really important things in our lives. This paradigm shift in the way we live our lives has been facilitated by the rapid development, use and reliance on the computer and all that it can offer in every sphere of our existence. Technology has opened doors that twenty years ago would have been inconceivable; and in the realm of architecture we are now witnessing the results that the use of this new technology; within the architectural profession; has had on our built environment, some good, some not. As we are participants of this 'new beginning' we must enjoy its seemingly unfathomable potential but be cautious of what is dose not embrace.

Architectural education is one realm where this advancing technology has been fully adopted and students are encouraged to embrace it in both process and presentation; producing digital models, fly through visualisations and animations. But do these results provide a true representation of the architectural proposals or a utopian vision- sanitised and without texture or emotion?

How can this 'fast life style' where everything appears to be instantly available; embrace the less tangible but crucial qualities that make architecture. Can one's emotional response to proposed designed space; smell, touch and acoustics; be explored and developed alongside the visual? It would be foolish to imagine that removal of digital and electronic tools would either be possible or sensible; more appropriately, how can they help to facilitate explorations that will produce architectural proposals that have truly considered the experiential qualities, embracing these 'fast' mediums alongside a more craft driven approach (figure 1). Can architectural education utilize the possibilities of current technology and at the same time embrace the skills and patience that are essential in the production of an architecture that is not only visually explored but also sensually realised?



Fig. 1 Exploring atmosphere; N Mclachlan 2011

SLOW ARCHITECTURE:

'Architecture has the capacity to be inspiring, engaging and life-enhancing. But why is it that architectural schemes which look good on the drawing board or the computer screen can be so disappointing 'in the flesh'?' Eyes of the Skin by Juhani Pallasmaa Pallasmaa's statement challenges the domination of the visual over the other sensory experiences. His words are key to the direction and the formulation of studio design briefs for third year undergraduate students at the Mackintosh School of Architecture. The programme's intentions are to question the prioritisation of visual experience in the conception and making of buildings through investigations into the multi-sensory realms of architecture. Recognising the context within which we now live, the computer and all it has to offer us cannot be ignored, in fact its possibilities are fully embraced but this is alongside a carefully balanced series of workshops and projects to give a breadth and depth to proposals that embrace the possibilities of technology alongside the textural and sensual

qualities of the architectural proposals.

The program introduces the students to the concept of Slow Architecture, and encourages them to explore the potential of this Movements philosophy; sustainability, localism, materiality, construction and permanence; and to investigate these Figs. 2 & 3 Feeling the space; themes through a number of



I Humphris & B Williams 2010



complimentary design projects.

The program assumes the premise that speed driven architecture can result in a visually dominant result, one in which the spaces created are viewed rather than felt, therefore the projects require 'Slow' haptic response.

SLOW BRIEFS:

The ambition of the program is to encourage students to develop a process of working that holistically considers, explores and concludes with an outcome where all facets of the architecture have been regarded. The idea being that the 'human user' is placed centrally within the design explorations and the understanding of the sensual experiences created by the proposal are embedded in the process and the outcome, and so complimenting the still valued visual experience.

As designers of the brief we studied the concepts of Slow Architecture and recognised that the philosophies that the Movement adhere to were very similar to our own thinking about how we wished the students to consider the user, the building, the context and the proposal. By adopting and developing the philosophies of regionality, sustainability, materiality, construction, craft and permanence, this gave a connection to human experience through referencing to, and careful consideration of these values.

The use of technology is an integrated part of the process but not an exclusive tool and students are encouraged not to become reliant on one medium. The majority appear to find security within the digital medium and the program is designed to move them out of their comfort zone to challenge and explore their ideas through a variety of different explorations and experiments. It is difficult to describe how technology is utilised without understanding the rationale behind the program, and through this explanation, the integration and exploitation of technology is revealed.

There were 3 components that are felt to be vital with regard to the structure of the program. *The brief, the site and the process.*

Each of the three elements require to be carefully selected, constructed and designed to work together in harmony, with the belief that the correct balance of the three components will propel the students into an exploratory process where the design of the sensual, felt experience within their proposals will be developed beside aesthetic concerns and the more pragmatic design issues such as environmental strategies and technology. All facets once considered will collectively work together to produce a result where spatial and experiential outcomes compliment technological strategies. Students are encouraged to research and develop their thinking through thorough experimentation, with many of the projects and workshops working not with the hypothetical but actual life experiences.

THE BRIEF:

The brief is constructed in a position mindful of the design proposal ambitions surrounding the specifics of the housed activity, and of the context in which proposals will be based. Each brief confronts and tackles real issues, and specific activities that have been selected to be studied. The activities that are chosen have particular relationships with the human senses, for example creating music, growing and cooking food, or making art. All offering

different challenges yet similar in their need for particular and specific spaces to house and enhance the performance of the activity.

As well as the 'particular' 'special' spaces that are required to be included in the proposal, where the control and provision of an unambiguous environment is required, the everyday more prosaic spaces are also considered – where human experience and comfort are also explored, be it when the participant is sleeping, working, washing, resting walking or eating; inside and out, with community and solitude being considered in order to develop an architecture when the human experience is realised and enhanced in the various designed spaces.

Selection of an activity is carried out in conjunction with the consideration of site; the two are intrinsically linked. As the program requires the design of two buildings, these are both considered simultaneously.

The bi-project structure allows for the macro and micro to be effectively pursued. The first project; the Town Project; explores and designs within a built context, analysing place, usually a small town with social and degeneration issues. Following a full analysis of the settlement the design of a strategy for regeneration is made, within which a building is designed that will act as a catalyst within the proposed strategy for rehabilitation. The second project; the Environmental Project; addresses landscape and requires a very intimate exploration of the placement of a proposal within an established natural landscape, the proposals for the building also include the design of full environmental and technological strategies. Each project engages with Slow Architecture's principles at different scales and both are required to place the user central within the proposal. Working in parallel with the 'Town Project' is a written piece of work called the Research Project. This is a vehicle to introduce students to the theory of Public Realm. Lectures and workshops support this written submission, with students self selecting their subject within the heading 'Public Realm'.

The Environmental Project, which is the major design project of the programme, has an environmental and technical brief designed to sit in parallel with the design brief. This element of the project challenges the student to develop specific environments to house and enhance the contained activity in an 'off grid' context. All the resources that the building will required should be designed to be produced from what the site can offer, together with the consideration of careful placement and a high performing building envelope. Fanciful 'bolt on' devices are not accepted as a means to support a proposal that is in denial of the passive opportunities that the context can offer and one that is not aware



of its level of consumption of energy and creation of waste. This may seem an extreme approach, but it is a challenge with no ambiguity. Selection of an appropriate site supports this move and allows this to be presented as a realistic proposition (figure 4).

Fig. 4 Environmental explorations; J Hudspith 2010

SITE:



Figure 5 A landscape with a sense of place; N Cunningham 2010 In conjunction with the construction of the brief is the selection of place, or site, where the proposals will be located. This is the second key component that contributes to the programme, and site selection is driven by the demands of the brief. The understanding of the uniqueness of place is important particularly in relationship to Slow Architecture, where a sympathetic approach to localness and regionality, appropriateness of placement and materiality is essential. There is also a connection with the place and user of the building helping to ground the project; and a landscape with texture and a real sense of place is sought. Previous studies have taken us to a Cistercian Abbey near Stranrear; a Roman fort in Perthshire; and the designed estate of an Art loving Marquis on an island off the west coast of Scotland; all unique inspiring yet appropriate and believable. The Abbey and its acoustically perfect chapel complimented the proposed musical retreat; a Roman fort close to the town of Perth, Scotland's only Cittaslow member seemed a perfect location for a Cook house, and the Mount Stuart Estate on Bute which currently runs an Arts program with no residential accommodation was a realistic proposition for an artists' residency. Nearby settlements to each of the chosen sites were the towns of Stranrear, Crief and Rothesay. All offered challenges addressing rural decline, population decrease and erosion of the core of the town. Each project addressed the challenge through an appropriate proposal for that particular town and with a connection to the site selected for the environmental project. Stranrear became the 'Town of Music' with a House of Music to support such a proposition, designed to house a lively music culture in the town that was currently homeless. A 'supra-market', home for Crieff's nomadic farmers market and complimentary facilities for the Cittaslow organisation to inhabit; and in Rothesay a



community arts facility to show case the Mount Stuart's artists' work and a natural home for the many local artists currently working independently on the Island of Bute. The need for intervention and change on the ground helped to give gravitas to the briefs. Local communities in all of the location became interested and enthusiastic about the students work. A public exhibition of work at the end of the year has helped to close the loop as

Figure 6 A walk through the landscape and the building; J Doyle 2010

students present their work to potential clients and communities.

PROCESS:

The third component is that of Process; and this is where the controlled use of technology is established. The process is structured to guide students through various workshops and experiments utilising many mediums. Whist the computer has its place, after all it would be foolish not to take advantage of the possibilities that it can offer, but bearing in mind that this is often the student's place of comfort sometimes over more appropriate explorative mediums. They are encouraged to engage with different ways of thinking and exploring – it is a cyclical process and aims to help prevent students being stuck in a design vacuum or within the cul-de-sac of a particular design tool. Where this variety of thinking and doing is formalised within the process, students who might normally rely totally on the digital to support their design proposals and those seeking a 'quick fix' who default to the computer,

are encouraged to embrace workshops where making is essential and recording experience is vital. This multifarious experimentation allows personal exploration into the multi layered thinking that is demanded by the program and can reveal particulars of different spaces that would otherwise not be realised. In the initial stages technology plays a key role in research, storing and sharing information. Presentation through Power Point, particularly in the preliminary stages is a really effective method of helping students to align their thinking and communicate a large volume of research, analysis inspiration and ideas and permit critique and subsequent editing and refinement of proposals.

Site registration is first – this goes beyond analysis and involves prolonged periods of time on and around the site. Digital technology permits student to precede their site visits with desk top studies that allow access to a diverse range of data and information from historical maps and information, ariel photographs, local plans and population demographic, all prior to the physical registration of the site. Once out in the field first initial responses are made and recorded to provide a point of reflection later in the design process. Analytical, observational and experiential drawings follow along side, researching, and recordings and these are made available to be shared with the year group via the school's virtual learning environment. The need for the students to take ownership of the place, to carefully observe and interact with it is important giving them the knowledge and understanding of the context that they are designing within, hopefully resulting in an outcome that is for that place and only that place.



Fig. 7,8&9 Workshops explore materials and light

Workshops exploring materials and full size making with hands on participation sitting beside per-formative studies are timetabled within the project (figure 7,8&9). During these students own experiences are realised and they discover that they know things that they didn't know they knew. Through role play, activity diaries, spatial mappings and less formal studies, the immediacy of a physical connection with the particular activities being studied is sought, for example the experience of 24hrs of solitude, communal dining, mixing concrete, writing poetry, shaping timber and model workshops. All depend on the act of doing and making being fundamental to the creation of a connection with sensuality, resulting in spaces where experience is designed and not a resultant of other choices and decisions. Experts are invited to work in the studio with the students, musicians, chefs and artists alongside architects who are experts in their particular field. Complimenting these practical workshops sit another strand of exploration based in technology, where designs can be

tested in a different way using programs such as Ecotect and visualisation and drawing packages such as Photoshop, Sketchup and Artlantis are used to capture more than just the visual. The breadth of exploration is designed to reveal not just the visual but the sensual qualities that will be a result of the proposed architecture where the smell of paint or the heat of a fire can be felt.

CASE STUDY:

Zumthor in this book 'Thinking Architecture' states:

'The strength of good design lies in ourselves and in our ability to perceive the world with both emotion and reason. A good architectural design is sensuous. A good architectural design is intelligent.'

And whist discussing teaching and architecture he goes on to say:

'All design work starts from the premise of this physical, objective sensuousness of architecture, of its materials. To experience architecture in a concrete way means to touch, see, hear and smell it'

With these observations at the forefront of our minds and our three stage method of Brief, Site and Process established the following describes one year's journey, the briefs and sites and the process that was embarked upon by the students. A series of projects that would embrace all that we believed would nurture the connections with sensuality and atmosphere, regionality and sense of place, sustainability and community and also meet the learning outcomes of the third year. The design briefs were supported with hands on workshops working with timber and concrete, communal dining and solitary space, analysing activity through active participation, specific Design in Detail tutorials, Ecotect training, model workshops, lectures by experts, CAD support sessions and visits to buildings, all supporting the holistic and explorative journey. The year became preoccupied with food; it is something that we can all connect with - our need for food as living beings is essential to our survival, but also an element in our lives that touches our senses so directly, gives joy and contentment and evokes memories of past experiences. The ambition for the years work was to utilise Slow Food as our metaphor, it would help to enable students to make a direct relationship with a multi sensory proposal; cooking and eating being a thread that would continue through all the projects and provide the accessible link for students to embrace, explore and develop the more difficult concepts relating to the atmospheres of their buildings through sight, smell, touch and acoustics. It was also hoped that the issues raised would begin a conversation about the social, environmental and economic issues relating to food in terms of growing, eating, trading and long term sustainability.

SLOW FOOD:

One Day in June

This first short project was designed to act as a preamble to the design briefs, and an opportunity to develop an understanding of indoor environments through a series of real world investigations. The students were asked to plan an experiment that would take place on the 21st June, the summer solstice, the longest day. The experiment required them to select an existing interior space, and by appropriate means register a salient aspect of a very particular environment that they had identified. The design of a methodology was required

together with a device to measure or register the selected sense. No cameras or other electronic equipment was permitted and the design of low tech devices was required. This first foray with the sensual produced a diverse range of experiments and results, from the daily range and depth of smells within a spice shop in Morocco, to the movement of air in a cow shed in Orkney and drawings of sounds within Glasgow's Kelvingrove museum (figure 10).





Fig 10 Blind drawing and a life aquatic J Barton 2009

Cookhouse

The Environmental project required the design of a 'Cookhouse'. The students were introduced to the principles of the Slow Food movement and Slow Architecture and were immediately asked to consider architecture beyond the visual - an architecture that would address all the senses. This new building type would bring together a community of 15 individuals to live from the land for a year. The proposal for a cook house and its supporting landscape would be a place where slow food would be grown, cooked and eaten. The ambition for the building would be one in which the facility would provide a place to 'change gear', a place for its residents to jump off the treadmill and reflect holistically on their lives. Through careful partnership of architecture and food, the house would actively facilitate the enjoyment of growing, cooking and eating of food and provide a positive and sensitive environment within which these activities could be enjoyed.

Careful selection of a site in order to support the ideas was important. Perth and Kinross was chosen, as it is Scotland's first, and currently only Cittaslow member. Perth has also adopted the Slow Food Charter. We sought a site with an historical resonance and real



Fig 11 Exploring place

sense of place. Ardoch Fort near the small settlement of Braco on the banks of the River Knaik became the project's touchstone. On the edge of the broad and fertile valley of Strathearn, 2000 years ago, Ardoch became home to one of the earliest and most northerly outpost of the Roman Empire. The Romans selected their sites with great care. Proximity to water and good agricultural land being fundamental to the choice of place and the subsequent sustainability of the settlement in what was a hostile country. The choice for the location of the student's proposals is similar; the proximity of a watercourse and good quality arable and grazing land will be fundamental to the prolonged existence of the facility.

Throughout the project students were encouraged to explore both the haptic and the ephemeral, utilising physical models, hand drawings and computer renders. Proposals were also tested using 'ecotect', as well as internal and external visualisation using multi-media techniques (figure 11).



Fig. 12,13 & 14 Dining, exploring and analysisng the 'feast'

'Supra-market'

The Town Project took the students to Creiff, a near neighbour to Ardoch Fort. Creiff is a town with an embedded history of trade and local industry. The town has evolved and morphed through various different identities and now finds itself as an ailing rural settlement suffering from the effects of a declining and ageing population. A new community campus school and an out of town supermarket have taken facilities and life away from the town's core, and Crieff is now a town struggling to define its identity in the 21st century.

The project demanded students to design a strategy for new growth and required to design a 'supra-market' and new external public space, and reflect on the town's past, its present and the possible future. The proposed facility transcends the notion of a farmers market - becoming a permanent venue for the current and nomadic monthly market, a public foothold for the Cook House and various other social facilities. It was also required to have a true sustainable agenda in terms of the local community, building again on the concepts of the Slow Food movement. The establishment of such a proposal would have the ambition to act as a catalyst to revive the town's centre and reverse the current trend of deterioration. Again, students used a variety of methods to explore and design proposals including initial desk top studies, video recording, sound studies and interviews with local people, physical models, 3d CAD models and visualisations. All modes of investigation individually revealed one aspect of the proposal yet collectively a holistic vision for the town and its people was communicated (figure 15&16).



Figs. 15&16 New Public Space; O Kennelly & C Liggat 2010

CONCLUSION:

Each year students are confronted with design challenges that will enable them to meet the aims and objectives of the degree programme at the Mackintosh School. Often the results produced through more traditional project briefs where currently the use of the digital technology is often the single tool utilised by the student's and can result in proposals that have a distance from the end user. Spaces are seldom inhabited and atmospheres not

communicated. The 'Slow' briefs have been specifically designed to move our ambitions for the student's proposals beyond the visually dominant results; to a process and outcome that demonstrate students' exploration and design of place and space beyond a visual conclusion, outcomes that demonstrate endeavour to communicate the factual, the poetic and the sensual qualities of the proposals.

Conventional drawings are mandatory allowing the more pragmatic information to be communicated after all we still need to know where the front door is and how public and private thresholds are dealt with. But these are complimented with computer generated images, films, paintings and books which try to communicate the softer qualities, those of human experience. The process has encouraged the students to attempt to smell, feel and touch the spaces created in their architecture. The computer visualisations have taken on a new dimension as students endeavour to use these sophisticated drawing tools to produce visions that communicate the feelings that one might have if inhabiting the space (figure 17&18).

The project is now into its fourth year. The design of the programme is within a continual cycle of reflection and refinement, as each element of the three stage process is reviewed and enhanced. During this academic year we will discuss the e-book versus the physical artefact, and students will be designing a Book Factory in Penicuik which will be the locale for the Town Study and public realm project. Following on from that the Environmental Project will be the design of a library and writer's residency at nearby Little Sparta, the unique gardens of the late artist, philosopher and poet Ian Hamilton Finlay. We will be writing poetry whilst feeling the wind in our hair and giving recitals.... probably in the rain as we endeavour to engage students with an architecture that should be felt rather than simply viewed.



Figs. 17 & 18 A place designed for life; J Hudspith 2010

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