The BEAM Project - Real Life Complexity in a Design Studio Context

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Introduction - Isn't Architecture Hard Anyway?

Studying architecture is hard; architecture courses are cited amongst the most challenging of those on offer to students. In an interview with Tom Dyckhoff published in the Times newspaper article 'Who would want to be an architecture student?' [1] Laura Allen, BSc Architecture Programme Director at UCL, illuminates the familiar experience of students in architecture schools throughout the UK:

"Architecture students aren't like other students," Allen says. "They've always worked a damned sight harder. You won't find them living up to the student stereotype. Hundred-hour weeks are quite normal. Flatmates never get to see them. They're strangers in their own home because they're here working till dawn day after day." "It has to be like that", she adds. "Architecture is an immensely broad subject. It straddles arts and sciences. You have to learn the past 200 years of knowledge about building, cities, landscapes, sociology. And you have to have designed - and come up with the brief and the site for - five or six buildings by the time you leave, right down to the smallest detail. And then you've got to learn actually how to be an architect - the law, the business, the contracts, running a team. You just can't do it in less than seven intense years."

This account openly conveys the conventional Design Studio teaching environment in the UK and around the world.

This synchronises with the critique expressed by Awan, Schneider and Till in Spatial Agency [2] reflecting on architectural education as 'the continuation of the master tutor and willing servant students, the privileging of the visual, the inculcation of absurd modes of behaviour (sleep deprivation, aggressive defensiveness, internal competition), the raising of individuals onto pedestals, all these and more self-perpetuate in schools of architecture around the world'.

The authors' experience of Design Studio on the MArch programme at the Leeds School of Architecture (LSA) at Leeds Beckett University correlates with this. It is within this environment that most Live Projects at LSA are situated. Whilst at the time of writing there appears an emergence of Live Project pedagogies distinct from orthodox Design Studio and many Live Projects are no longer situated in the Design Studio context, this paper is focused and limited to those that are.

Fig. 1. BEAM Collaborative Working

Design Studio modules can exist in different forms and it is important to review the particular context at LSA. Like many Schools of Architecture a vertical studio system is employed across years. For the Master of Architecture course this is across the two years. There is also the distinction in architecture courses where the learning outcomes can either be the same across all studios or specific to the studio, (studios are normally known as 'units' in the latter). At LSA there are common learning outcomes for all of the studios in Design Studio modules.

The Design Studio modules state, '*The content is specific to each of the studios on offer, but all studios have the same learning outcomes, and each studio will explore the full range of issues which impact on the design process, albeit starting from their own frame of interest.*'

Live Projects – Making it Harder?

In this setting the architecture Live Project, as defined by both Anderson [3] and Sara [4] can seem insurmountable. The additional factors for consideration are well known, the most prominent amongst them being; client requirements and interface, procurement methodology, site specificity, cost, group and collaborative working. See Fig. 1.

Through the experience of experimenting with differing forms of instruction, it became apparent to the authors that the key to a student cohort navigating their way through the increased complications of the Live Project is the brief. It is this component, the 'Live Project brief' that this paper explores. How can a Live Project be conceived and communicated to a student such that the outcome is not only appropriate and desirable from the client perspective, and suitably address the module criteria, but also satisfy the desire to produce beautiful architecture?

BEAM Live Project

The question is explored through the case study of the BEAM Live Project undertaken by nine year 1 postgraduate students in the CITYzen Agency studio at the LSA. Three projects were produced by three student groups during 10 weeks of Semester 1 in 2013/14.

Taken from the organisations website, BEAM is an 'arts, architecture and learning company dedicated to the imaginative understanding and improvement of the public realm. BEAM is also committed to further developing its base at The Orangery as a creative centre, venue, and visitor destination as part of Wakefield's growing cultural ecology.'

Fig. 2. BEAM Brief

The client's headline task required a 'demountable / permanent' space or structure that might combine the uses of café/bar, meeting space, and space for creative activities. As with most live projects LSA has been involved with to date, the scope of this requirement as defined by the client was insufficient to meet the module criteria.

Consequently the tutors' construction of the brief must bridge the gap between the two, whilst generating stimulus for interesting and exciting results. Brief writing is alchemy and artistry and is where Live Project educators can be at their most influential.

Here the brief was expanded by integrating an urban design concern:

'Through collaborative praxis produce a fine and practical work of 'demountable-permanent' architecture at The Orangery, Wakefield set within a re-imagined urbanscape. Using 'change and identity' as foci, produce an alternative urbanscape to that which is developing.

The output to be generated was a *'Comprehensive Urbanscape design project underpinned by a theoretical approach demonstrated in the portfolio.'* This was to be seen alongside a piece of design work which is '*intelligent, resolved, beautiful, technological, sustainable, economically viable, communicative and creative.'*

The brief is generally project and cohort specific and is assessed in a portfolio format. The portfolio must align with the module criteria. The brief writing process is iterative, with client involvement crucial. Ideas are noted down, discussed, embellished, drawn back and moved forward until a finished proposal is fleshed out. Whilst difficult, a useful starting point lies with the EU Criteria.

All learning outcomes are directly linked to relevant EU criteria and on the face of it marry surprisingly well with the specific area of interests within the architectural Live Project. The architecture Live Project is an extremely potent vehicle for the delivery of EU criteria.

Academic Value

Despite the role of architecture schools to produce individuals capable of working in the profession a set of pragmatic and practical skills such as client liaison, project management and value engineering are often not appreciated as highly by the most academic of architectural educators. It can be their perception that Live Projects display a lack of theory, criticality and pure architectural visioning. The responsibilities of addressing this are once again contained within the brief. Create a project whose virtues can be understood by all who view it, and the value of Live Projects become easier to accept.

The point here is that although Live Projects work well in the regulatory context, the interpretation in a Design Studio context is often of a lacking theoretical approach to the subject. This undermines their potential, particularly at assessment points. To address this issue, each project component can be broken down and given a credit rating. The significance of this move is twofold. Not only does the student understand the elements worth in their overall portfolio, allowing them to concentrate more time and effort toward aspects of greater importance, but also moderating educators comprehend what was deemed valuable and can therefore adjust their assessment comparatively.

At LSA, denoting credit ratings for associated pieces of work has proven successful. All studios have now adopted this practice to enable an easier and more consistent assessment process that is particularly useful when demonstrating parity across the diversity of the studios.

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How to Play the Design Studio Game?

The final hurdle to overcome for the Live Project educator is that of Design Studio itself. Traditionally, Design Studio promotes above all else, a visual hegemony. The drawing is king. Scroll through the President's Medals website http://www.presidentsmedals.com for a cornucopia of drawing gymnastics and pyrotechnics. The truth, we are told, is that the only authentic production of the student is the drawing. When this emphasis is altered, the usual reading of Design Studio is disrupted. How can the viewer compare a drawing of propositional architecture with that of real-world drawings for an actual building? The final challenge of the Live Project brief therefore, is to enable the student to 'compete' with the authority of the Design Studio drawing.

In the BEAM project the brief made reference to different forms of outputs that enabled students to participate in the drawing contest. This has always proved difficult for Live Projects because by their nature they are often small scale and the complexities are not easily drawn in an orthodox Design Studio manner. See Fig. 3.
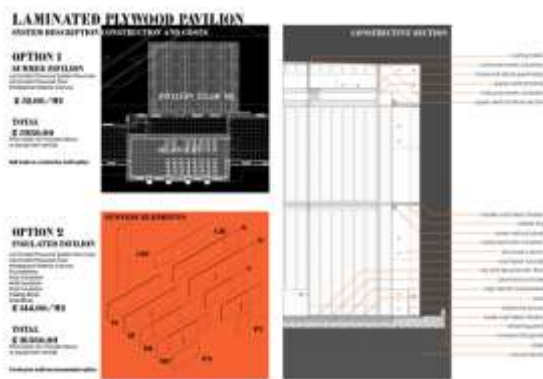

Fig. 3. Team Translation; Cost Options Drawing

Student, Mike Powell reflected on this in his project:

'The physical parameters in which the BEAM proposals were constructed offered the students the opportunity to design within a confined and difficult space. The site was small, triangular, north facing and sunken; offering little opportunity for glamorous imagery that has become inherent in high appeal student presentations. However, where the student lacks these 'portfolio' opportunities, they learn valuable real world experience; for in practice the architect does not get to choose the place in which he alters, therefore having to stimulate a client using the resources available. This in itself is a skill to master and by introducing these criteria into the curriculum, whilst balanced with 'freedom' projects, will only better prepare the student for a career in architecture.'

The BEAM brief made a clear requirement for drawn outputs, *'Beauty of the drawing, the model, the medium'*. Students were set the task to communicate their work in an equally but alternatively stimulating way to other studios.

The representations of the architecture should communicate the additional constraints and motivations of the Live Project. For example, procurement methodology and site specificity drawings of architecture under construction is encouraged, as illustrated in Fig. 4. This conveys the aspects of site constraints, construction sequence, construction methodology and procurement methodology.

Fig. 4. Team Ligneum; Construction

Agency

The methodology the tutors employed was to bestow the status of 'agents' and therefore 'agency' on the cohort. Design process was recorded and reflected upon through the contention that the student designers were 'agents' within the real life project. For this reason students were asked to explore ways to represent themselves in their work. Here 'documentary-ising' was coined.

Live Project architecture in most cases will not produce the set of 'killer' architectural drawings viewers are familiar with. We contest that the drawing should be seen as a tool rather than an end in itself, so that it serves the Live Project portfolio in being a documentary expression of 'living with the project'.

One part of the drawing output at BEAM was to produce an edited book of the three projects in a form distinguished for the client rather than academic assessment (although it was part of the submission). The skill was to communicate to an audience other than the academy the architectural design. This work in quantity would be similar to the purpose of submitting an orthodox piece of work to communicate in the language tacitly developed in Design Studio. Here there is hidden learning, and learning particularly relevant to practice.

'Agency' is visible in the concluding element of the BEAM brief through individual reflection of the project. Each team's repository of documentary work was the material for individual reflection. Through compelling the student to

comment upon their own learning experience, each was able to recognise and validate the distinctiveness of the Live Project compared to their previous experiences. They also critiqued how they had developed skills, viewpoints and approach within the process.

The documentary style of authenticating their involvement evolved during the Live Project process; students are seen 'doing' and witness their own interaction with clients, tutors and more. The individual reflection was edited for inclusion in the portfolio.

Throughout the three BEAM portfolios the student team evidenced engaging in similar design activity, but recording it using differing techniques.

The Secret Garden team preferred working together in the architecture studio, before heading home to work individually on assigned tasks. The process was documented as a scrapbook, with the working drawings from time spent together forming the bulk. The group also experimented with video and audio recording for interviews, site visits, and meetings with clients and suppliers etc. Although in its infancy, and with the group struggling to embed the work succinctly within the portfolio meaning it lost some value, video making will develop particularly in a documentary process driven manner.

The *Translation* team worked remotely using email. This felt more akin to consultants communicating in practice but resulted in little useful material to reflect upon.

The *Ligneum* team also worked remotely but used social media for contact. Daylong Skype conference calls twinned with sharing information through a Facebook group provided not only an excellent platform for collaboration, but also an instant repository of the conversations discussed and work shared. For the portfolio, the Facebook group was archived and compiled into a book of 200 A4 pages, bearing witness to the immense dialogue between the three students. It is a visual feast that captures process and reflection in the raw of the now. It cannot be re-edited it can only be reflected on.

Beyond being a pedagogical instrument this move to 'agency' and 'documentary-ising' is, significantly, the best way the authors have found to demonstrate to other academics the value and additional constraints and motivations of the Live Project.

Fig. 5. Team Secret Garden; Material Considerations

Conclusion

The BEAM Live Project portfolios, demonstrate that the Live Project can flourish in orthodox Design Studio contexts through 'documentary-ising' of the student experience as the principal method rather than the 'the privileging of the visual' architectural drawing.

Some notable specific examples from the BEAM Live Project are listed here; students demonstrated their verbal and visual communication skills appropriately to client and stakeholder audiences, they described how they had creatively and effectively responded to a fluctuating brief (because the client was responding to their encounters with the students). They illustrated pavilion designs as a series of possibilities through the real-life need to vary the design criteria. There were more matter-of-fact experiences documented such as the evolution of an effective way of working in a team, and what happens when you visit a timber yard to select appropriate materials, see Fig. 3. When designing a consultation tool (which destined one team to stand in the centre of Wakefield talking to passersby) students verified its effectiveness by evaluating it. Additional concerns demonstrated how each team responded to cost constraints dynamics because the client was non-specific on the budget. The cohort considered solutions to site and procurement realities – which included prototyping of a new constructional system and to a self-build strategy.

Ruth Morrow in the Foreword to 'Architecture LIVE projects – pedagogy into practice' [5] describes Design Studio as:

'providing 'the perfect risk-free environment to strip away context, conditions and uncontrollable complexities and allow an abstracted space in which to examine concepts in detail and isolation. If Live Projects are to take up a different role from that of Design Studio projects, it is because they exist in complex, unpredictable spaces where skills of negotiation, fleetness of foot, resourcefulness, time management, and an ability to deliver within (changing) constraints to a range of audiences are at stake and of

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value. In that case, live Projects must be assessed in a different way to Design Studio projects.'

Morrow's position is seen as a longer-term goal as the authors continue to evolve Live Projects at LSA. For now the projects work within the system. However, encounters with Design Studio are proving informative, enabling a range of approaches to be tested that could be appropriate and adaptable to future Live Project pedagogies.

For now, the authors play, though not exclusively, the Design Studio game. There are virtues and pitfalls. It can be argued that this skews the development of a clear Live Project pedagogy. The counter is that this pragmatism, in itself, resonates with the 'fleet of foot' territory of the architecture Live Project.

Fig. 6. Team Ligneum; Facebook Reflective Compendium

The final word is left to student Amy Featherstone whose experience of the Live Project in Design Studio is so well documented through the Facebook book, Fig. 6. Amy concludes:

'Working on the BEAM project as part of a group of three was a refreshing and intense task. In previous university projects both the brief and the final design were theoretical, whereas the task our Design Studio group CITYzen Agency was set, bordered much closer to a real 'in-practice' project as we had to juggle working towards the brief set by tutors, the ever evolving brief from the client, designing whilst keeping a focus on 'buildability' and cost as well as learning how to work as a team and designating tasks fairly and equally which played to our individual strengths and weaknesses. Personally I gained a huge amount from becoming a 'CITYzen agent'.