Introduction

This paper describes a taxonomy of live projects assembled using data from the Live Projects Network (LPN). The website organises case study projects according to their resources, product and context. A quantitative analysis of this data informed a qualitative analysis of primary motivations for each project. Four primary motivations were found. Through correlation of resources, product, context and motives, trends and patterns were identified. Thirteen different live project models or species were observed and arranged into a taxonomy. Species so far identified and described include Fabrication Wizards and Woodland Creatures. A discussion of emerging live project models is made with reference to the three categories of motivation for live projects identified by Dodd, Harrison and Charlesworth and also an evolution of typologies described by Brown.

Methodology

This analysis is based on data gathered from ninety-seven case study live projects submitted to the Live Projects Network between April 2012 and July 2014. LPN is an international online resource to connect students, educators, clients, practitioners and researchers involved in live projects. Its aims are to promote the use of live projects in education, share best practice, encourage dialogue and also contribute to the establishment of a theoretical basis for the study of live projects. In his critique of the live project, Brown identifies areas for future research. He states that a "critical examination of the curricula, contexts, clients and pedagogical responses of live projects in the UK and Ireland to comparable overseas projects could make a significant contribution to the literature." Here, analysis of the case study data took two forms. The first was a quantitative analysis of the resource, product and location information. The second was a qualitative analysis of the 200-word project descriptions in order to identify the primary motivation behind each project.

Each member of the Live Projects Network has submitted at least one case study live project to the site by completing a pro forma, submitting three images and a 200-word description of the project. The pro forma asks for information about the project designers, external collaborator (client), resources, product and location. This information is used to provide search filters for visitors to the website to find other projects with similar resources to help them plan their future projects.

Resource information is gathered that derives from the six factors identified by the author in collaboration with Colin Priest as being common to all live projects. Here, analysis of the case study data took two forms. The first was a quantitative analysis of the resource, product and location information. The second was a qualitative analysis of the 200-word project descriptions in order to identify the primary motivation behind each project.

Fig. 1. Six factors of a live project ordered into spectra

Each of the six resource factors had already been ordered into its own spectrum. This was used to interpret data as quantitative information. Additional information that had been gathered about the educational organisation was divided into three separate categories for analysis: Group Size, Student Level and Curriculum. Project location information was also analysed to give additional data on the development and the urbanisation levels of the project context. The working hypothesis for this analysis was that resources, product, context and motivation are key to shaping different live project models. The trends and patterns established by this analysis were correlated and profiles of different models of live project identified. The
findings were synthesised into a provisional taxonomy of thirteen identified live project species.

**Quantitative Analysis of Resource and Context Data**

The reason to look at resources, product and context was because live projects tend to exist on the periphery of legitimate participation in the profession and conventional design studio education. A consequence of occupying a peripheral position often means that resources can be difficult to access. A further consequence of scarcity can be an increased sensitivity to one’s immediate context as a source of resources to be gleaned from it. Live project educators often make a virtue from this. They devise responses that are resourceful, responsive, resilient and therefore, particularly relevant to their context and users. This is also relevant to mainstream contemporary design as it adapts to operate in a world of scarce resources. Expression of this fragile ecosystem as an evolutionary taxonomy therefore seemed an appropriate response.

To quantitatively analyse the resource data, Budget (expressed as funding source) and Product (expressed as permanence of outcome) were each mapped against each other as well as the remaining resource factors and recorded in bubble charts: Timescale, Group size, External Collaborator (client), Brief (expressed as level of institutional support), Educational organisation (expressed in relation to curriculum) and Level (expressed as academic stage of students). To analyse the context data, projects were split into two sets of data: Developed and Developing Countries and into Urban and Rural Contexts. These two sets of data were each mapped against every resource factor and recorded in bubble charts: Product, Timescale, Budget, Group Size, External Collaborator, Brief, Educational Organisation and Level.

The ninety-seven case study projects are located across five continents in developed and developing countries as well as urban and rural locations. Proportions of each continent making up the sample are: Europe 80%, Asia 8%, America 5%, Africa 4% and Australia 2%. At present UK projects dominate and make up 62% of the sample. The sample of data for developing countries (13%) and rural contexts (18%) were significantly smaller than developed countries and urban contexts so conclusions are less reliable for them. It should also be noted that of the thirty-four contributing educational organisations many have submitted multiple projects. Some are multiples of work by the same group, not always following the same model for every project and some are contributions from multiple groups normally following different models but all based at the same educational organisation.

The following trends and patterns were observed that most clearly relate to the aim of this study of the influence of resources, product and context on the formation of different live project models:

**Resources and Products**

Relationships with external collaborators are a balance of commissions, collaborations and self-initiated projects. This suggests that live projects are operating in a way that is distinct from conventional practice with a maturing track record, expertise and flexibility.

Winning funding was more successful than expected, although full funding is likely to be rare. Sponsorship (23%) is less common than self-funding (33%) and client-funding (44%) suggesting that support from industry and the profession may be under-explored. Client commissioned projects are most the likely type to be client-funded while self-funded projects are the most likely type to be self-initiated and temporary.

Temporary and semi-permanent projects are more common (62%) than permanent and propositional projects (36%). Analytical projects are rare (2%). The largest proportion of undergraduate projects are temporary or semi-permanent and self-funded. The largest proportion of postgraduate projects are client-funded. Postgraduate projects are more likely than undergraduate projects to be permanent or propositional.

Most projects happen either in days (37%) or months (45%) rather than years (18%), regardless of budget or permanence. This suggests that the academic calendar has a strong influence. Live projects are enabling students at different levels to work together in mixed groups (19%) which is rare in conventional design studio education. Large groups above fifty students are rarer, are normally self-funded and in the sample were not involved in permanent buildings.

The majority of projects are happening within the curriculum (61%). Surprisingly, extra-curricular projects are more likely to be client-funded or sponsored than self-
funded. Perhaps student labour and expertise outside the curriculum is seen as more worthy of recompense or perhaps more complex projects demanding recompense happen outside the curriculum due to the increased time commitment that they require. Overall, student level, group size and timescale seem to have the biggest impact on the other resource factors.

**Context**

Most projects in developed and developing countries were located in urban areas. This suggests that projects are engaging with contemporary urban issues but also that areas distant from urban-sited universities may be relatively neglected. Groups above fifty students are less likely to operate in developing countries and rural areas suggesting that cost, and accessibility may restrict activity in these contexts. Undergraduate students are less likely to operate in developing countries suggesting that complexity may restrict activity there. Similar proportions of undergraduate and postgraduate students operate in urban and rural areas suggesting that projects of appropriate complexity can be found in either context.

Projects in developing countries and rural areas were more likely to be permanent than temporary. This suggests that it is more difficult to find opportunities to build permanently in the more complex legislative and commercially competitive developed urban areas. Few projects took years, regardless of location.

Client funding was less likely in developing countries than any other context. All projects in developing countries were self-initiated or collaborative. None were commissioned. Most of these projects were carried out in conjunction with NGOs and charities. Mixed undergraduate and postgraduate projects are less likely in developing countries.

**Qualitative Analysis of Motivation Data**

Once a methodology to analyse the effect of resources, product and context had been established and applied to the current data set which it is hoped will increase and become more international over time, the next step was to undertake a qualitative analysis of motive. This was done by searching for key words in the 200-word descriptions of each project. Key words were identified that related to the factors that had been seen to influence particular trends and patterns in the quantitative analysis of resource and context data (“landscape”, “masterplan”, “commissioned”). They were augmented by words relating to values that occurred frequently across case studies (“participatory”, “sustainability”, “cultural”).

In order to make a critical evaluation of different live project models, Dodd et al. chose to look at motive rather than outcome. Following the symposium that informed their book, they decided to move away from context as a means of definition. Their case studies are “classified through the definition of the intention for doing live projects. This shifts the discussion away from a focus on outcomes toward an understanding of the deeper import or meaning in the practice...we also acknowledge that the boundaries are slippery and imprecise. Certain case studies can straddle definitions, or fall into the gaps between.” It is hoped that by attempting in this study a whole-project method to analyse motivation, resources, context and product will enable better understanding of the inter-relationships between these characteristics, establish which projects cross single dimensional boundaries such as “motivation” or “context”, why they do and what this means.

Live projects are so rich and allow participants to negotiate all aspects of reality that they encounter during the project, both expected and unexpected. This richness and authenticity is one of the strengths of live project learning and educators are faced with the challenge to absorb this characteristic into their pedagogical framework, whatever their primary motivations and without losing them. The 200-word summary of each project on the Live Projects Network allows the contributor (normally the tutor but not in every case) to reflect on their project and reveal their motivations.

To guide this partially subjective process, experience was drawn from live project educators’ papers, comments and conversations at three conferences in Belfast, Oxford and Nottingham. Brown’s thesis survey of UK live projects as well as informal conversations and correspondence stimulated by the running of the Live Projects Network. Comments such as “But your work looks more like an art installation than a building” and experiences such a demonstration of political activist techniques helped to reveal the variety of motivations and methods being employed by live project educators. This, plus the results of the quantitative data analysis was useful to help make decisions when projects fell into several categories. Each case study was allocated a primary motivation. Most correlated broadly to the motivations identified by Dodd et al. (summarised here as Technical, Social and Pedagogical). In this analysis, all were assumed to have a pedagogical basis, distinguishing them as live educational projects rather than professional projects. Two categories were added for projects that were motivated by Design or Professional priorities. In this survey 38% were Design-led, 29% were Socially motivated, 26% were Technically motivated and 7% were Professionally motivated.
Correlation of Resource, Product, Context and Motive

By using the quantitative resource, product and context data analysis and arriving at a categorisation of primary motivation via a qualitative analysis, it became possible to correlate motivation, context, product and resources to build up profiles for different models of live project. This avoids the trap identified by Dodd et al. of judging a live project by its appearance. Instead it gives a more complete picture of the inter-relation of opportunity, motive and outcome for each identified model of live project. Thirteen models or species were identified and named according to their habitat (context and resources) and habit (motivation and products). Examples of different species and their frequency in this survey are:

Creative Catalysts. 25%. Design-led. Frequently found in private spheres rather than the public domain. Develop strong symbiotic relationship with a particular client group to build structures ranging from the propositional to permanent that neither species could realise alone. Common.

Masterplan Engagers. 13%. Sociable and tenacious. Interact with multiple communities and government structures in their local urban habitat. Difficult to spot because they leave analytical and propositional trails rather than built. Can display participatory expertise.

Artist Activists. 11%. Design-led. Found on the street in urban areas. Their structures can be difficult to spot, being temporary or ephemeral. Distinctive socio-cultural agenda. Display behaviour often influenced by either activist or contemporary public art practice.

Woodland Creatures. 10%. Technically motivated. Normally found in groups of between 1 and 50 undergraduate or postgraduate students who have temporarily migrated from the city. Enjoy private woodlands and parkland. Most likely to build permanent or semi-permanent structures either in a matter of days or over the course of months. Often display specialist or traditional craft techniques.

Development Explorers. 9%. Socially motivated. Normally a group of 1-50 postgraduate students who have temporarily migrated to a developing country to build a self-funded permanent structure in an urban context in a period of months. Normally form a symbiotic relationship with NGOs and display expert methodologies in development practice.

Fabrication Wizards. 8%. Technically motivated. Prefer Wi-Fi hotspots. May not require contact with end users or work with a social agenda. Employ complex tools to produce structures ranging from the prototypical to the permanent.

Sustainable Champions. 6%. Technically motivated with a global social agenda. May not require contact with end user. Occasionally flock to Solar Decathlon to display high performance sustainable construction techniques.

Grass Roots Engagers. 6%. Sociable. Interact with multiple grass roots groups in a variety of public domains. Structures range from the propositional to the permanent. Can display participatory expertise.

Upstart Startups. 6%. Professionally motivated. Normally found in urban contexts close to the university where they hatched and still derive some source of support there. Build structures that range from the temporary to the permanent. Most likely to be sponsored or client funded. Displays entrepreneurial behaviour.

Pedagogical Pioneers. 2%. Design-led. Unless accompanied by postgraduate students, young pioneers normally remain close to their home university in large undergraduate cohorts of 51 or more. Their structures are temporary or semi-permanent.

Applied Researchers. 2%. Motivation omnivorous. Attached to a university but the more adventurous will migrate globally to realise components of funded research projects that range from the propositional to the permanent.

Rural Activists. 1%. Socially motivated. Normally groups of up to 50 undergraduate or postgraduate students who have temporarily migrated to a rural area or small town. Their structures are mostly permanent or semi-permanent. Endangered.

Professionally Interested. 1%. Professionally motivated. Normally undergraduate or postgraduate students who have migrated from their University for the summer to form a symbiotic relationship with professionals displaying educational behaviour. Their structures range from the analytical to the permanent. Rare.

Provisional Taxonomy

Using the four primary motivations (Technical, Social, Design, Professional) as stepping-off points to group different species of live projects into families, a provisional taxonomy can be expressed. An involvement of both educational and professional organisations in live projects has been identified by the author. All live projects involve an educational organisation. Some professional organisations such as architectural practices or artist-run organisations function temporarily or periodically in an
educational capacity to run live projects with a pedagogical remit. This means that the taxonomy has two roots: pedagogy and practice.

Fig. 3. Taxonomy of Live Projects

In his critique of the live project, Brown identifies an evolution of live projects in education in UK and Ireland that begins with “modern” live projects emphasising “practical, hands-on experience of the design and construction of small projects”. Projects described as “from modern to post-modern” “were established with a pragmatic interest in the processes of construction, before evolving towards an expanded and more socially-aware appreciation of the role of the architects.” Finally, “The postmodern live project shifts the focus of the students’ learning experience from architecture as built product to a wider conception of architecture as process.”

The taxonomy and classification in this paper identify several species of technically motivated live projects focussed on the built product. It is of course a legitimate pedagogical strategy to focus a project on excellence in techniques of construction. As long as live project educators are aware of the “complex pedagogies” co-existing in any live project, they will frame the project brief in appropriate terms. For example they will site the project in a context that is appropriate to a construction-led focus. What would not be compatible with the “complex pedagogies” of postmodern live projects would be to ignore or dismiss any socio-political-economic issues that were to be found in that context, such as sustainability. The complexity acknowledged by contributors in their 200-word descriptions on the Live Projects Network tend to suggest that, along with the other case studies analysed here, they are more likely to be “postmodern” rather than “modern”. This taxonomy of recent projects therefore does not attempt to explore their evolution over time, simply to record their present-day state, observed to date as thirteen distinct species.

Conclusion

In this study, live project data on resources, product and context from ninety-seven Live Projects Network case studies were analysed quantitatively. This informed a qualitative analysis of motivation data. The trends and patterns established by this analysis were sufficient to enable a correlation to be made between them. All projects were ascribed pedagogical roots as the fundamental connecting feature that allows live projects to be differentiated from professional projects. Four primary motivations were found, forming four distinct families of live projects. Thirteen different live project models or species were identified and described. The findings were synthesised into a provisional taxonomy.

The purpose of this taxonomy is not to freeze or stifle evolution and innovation but to record the current moment in the hope that both available data and live project activity will continue to flourish and diversify. As pointed out by Dodd et al. greater clarity on motivation will also enable a more critical evaluation of whether live projects are successfully achieving their stated aims. By connecting the models to an identification of the resources, products, contexts and motivations that inter-relate to shape them it is hoped that live project practitioners will be better able to explore uncharted territories. It may enable a re-evaluation of what is possible with currently available resources and contexts as well as clarify strategies to harness resources that are needed in order to operate in ways that were previously impossible. It may even stimulate some to challenge the limitations of their existing environment by altering it or defying it.

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References

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7 Anderson (forthcoming)
11 Dodd, Harrisson and Charlesworth, p. 250.
12 Dodd, Harrisson and Charlesworth, p. 3.
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14 Dodd, Harrisson and Charlesworth, p. 251.