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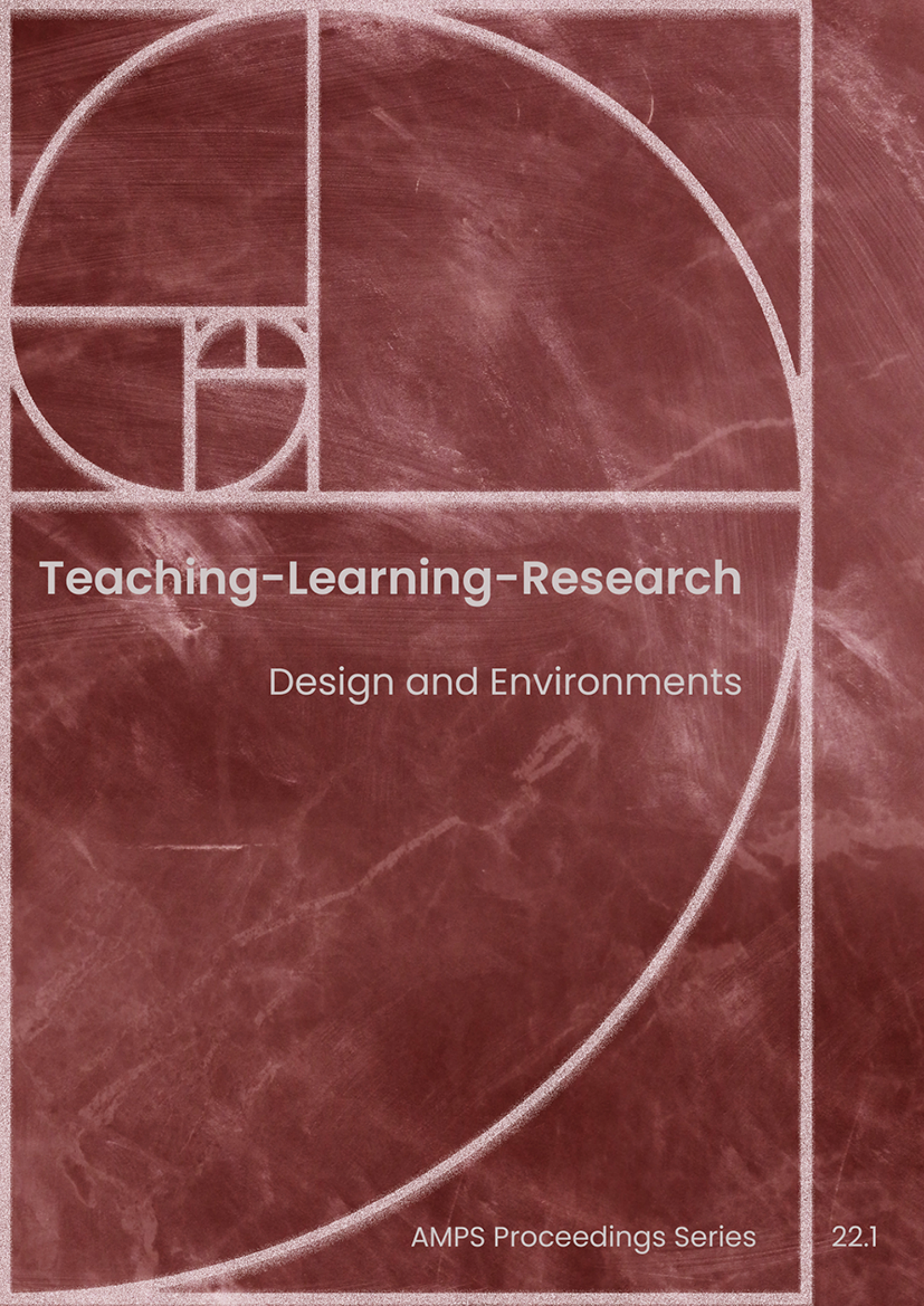
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MSA CATALYSTS: ADVANCED PEER LEARNING THROUGH VERTICAL GROUP PROJECTS

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INTRODUCTION

The Manchester School of Architecture has advanced peer-to-peer learning by linking multi-level group projects with outreach work. This pedagogic approach has become an essential vehicle to progress the School's ambition to connect academia, the architectural profession and societal networks whilst offering a rich learning experience for the student. Embedded into the curriculum, the School adopts this approach at key points during the academic year, requiring students to collaborate through intense 'vertical' projects. Students from different levels of study across undergraduate and postgraduate programmes unite to explore an architectural proposal or contemporary agenda in relation to a live project as group work. The addition of external collaborators, who may act as client or participate as an active team member, enhances student learning, experience and debate.

This paper will introduce and analyse this model's pedagogy and good teaching practice through two examples of the School's established peer-learning projects, *MSA Events* (2008 to date) and the *All School Project* (2015 to date). An associated pedagogic research project, named *MSA CATALYSTS* initiated by this paper's authors, Jolley and Sanderson, will also be outlined. Reflecting on the School's vertical project's inception, evolution and ongoing legacy, this paper will demonstrate the effectiveness and value of the resulting educational ecosystem and note impact on skills and knowledge acquisition. This will be mapped through specific case studies to illustrate built legacy, legislative legacy, and research legacy in the city of Manchester and beyond. This will provide an insight into the thinking, strategy, advantages, outcomes and possibilities of this alternative approach.

Academic Context

Increasing numbers of Higher Education Institutions are creating alternative and often vibrant opportunities for students to collaborate outside campus. Often supported by business strategies to align Universities with current markets, these offer students real-world experiences within education. Specific to architectural studies, this presents the opportunity for educators and practitioners to redefine the role of the Architecture School in society by changing where and how students learn. Students abandon the traditional studio and instead negotiate workspace within a new context, often alongside practitioners, collaborating on live projects.¹ Once removed from an academic setting, project timescales slow down; extend; make room for critical thought and projects can be annually revisited.²

The Manchester School of Architecture has a long history in running vertical projects, which it defines as those characterised by multi-level peer learning. Often short and intense these are positioned at regular intervals through the academic year for all levels and modes of study on the BA (Hons) and Masters programmes. As examples of mixed-level learning, studio-based vertical projects can provide an effective vehicle for peer-to-peer learning through design-based learning. As a perpetual knowledge cycle this mode of knowledge acquisition can be aligned with ‘Legitimate Peripheral Participation’, advocated by Lave and Wenger (1991) because it ‘provides a way to speak about the relationships between newcomers and old-timers, and about activities, identities, artifacts, and communities of knowledge and practice.’³ This is enhanced further by the School incorporating collaboration with outside agencies, organisations and practices, to create an experimental learning environment that sits between academia and practice to simulate professional activities. Scheduled either end of the academic year and driven by live agendas, these vertical projects include:

The All School Project: an integral part of the School’s induction programme uniting every student in MSA in teams to respond to a single brief created in collaboration with a local external partner to rapidly produce 50 solutions to a single design or research question.

MSA Events: a year-long project concluding around Easter as a collection of 20 collaborative projects. Working with a live client, the brief for each ‘Event’ is prepared by groups of three or four students in the postgraduate MArch course and delivered to groups of approximately 16 undergraduate students from the BA (Hons) course in Architecture Years 01 and 02. Activities during Events are researched, designed, planned and taught by MArch students who are then assessed on their project management and delivery.

Over the last seven years Jolley and Sanderson have consecutively and independently co-ordinated Events and the All School Project, and at certain points in their careers, collaborated to share and evaluate findings. In doing so, they conceived MSA *CATALYSTS*, a pedagogic research project to determine vertical projects’ value and monitor how they can enhance curriculum delivery, graduate outcomes and research activity.

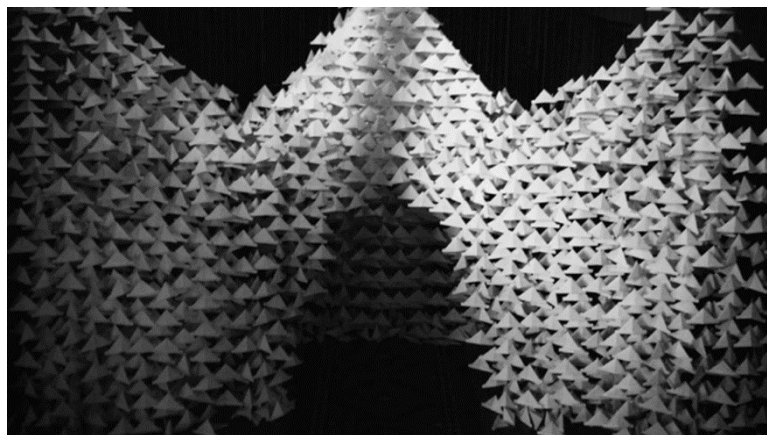


Figure 10. *You Can Leave Your Hat, Installation, MSA Events, 2014.*
<http://analogies.msa.ac.uk/group/23/>

MSA CATALYSTS

MSA *CATALYSTS* asks: Can the pedagogic framework of vertical projects in architectural education enrich learning by supporting peer learning and simulating professional architectural practice whilst simultaneously supporting research informed teaching?



Figure 2. *Become an Architectural Great, Students working in the B.15 workshop, MSA Events, 2017.*
<https://events.msa.ac.uk/2017/group/10/>

The research project is concerned with the effectiveness of vertical teaching; assessing the value of the resulting educational ecosystem; the impact on student skills and knowledge acquisition as well as the benefit to communities and culture. Based on *MSA Events* and the *All School Project*, its initial methodology is centred on self-reflection and the critical appraisal of our own experiences of running these projects. Our observations were then cross-referenced with the analysis of collaborator and student reflective feedback through social media and dedicated student blogs. We noted that the pedagogic theories and methods that characterize vertical projects play a key role in achieving the School's exceptional graduate outcomes; student experience and progression metrics across both its undergraduate and postgraduate programmes and this defined key themes for our research:

- **Theme 1: Learning Community and Student Experience**

How does vertical teaching enhance learning?

- **Theme 2: Graduate Skills Acquisition**

Can we design a unique pedagogic framework to deliver live projects in academia and simulate architectural practice?

- **Theme 3: Research-led Education**

How do we create a pedagogic framework to support live research projects for staff to facilitate research-led education?

- **Theme 4: Incubator**

How can collaboration beyond the university deliver community-focused architectural projects with long-term social value or offer life-long education opportunities?

EXPANDING THE THEMES

The following section of this paper expands on each of the four themes, contextualized in vertical projects at Manchester School of Architecture from 2012 – 2020 which were part of either MSA Events or the All School Project.

Theme 1: Learning Community and Student Experience

The first theme asks: How does vertical teaching enhance learning? By observing and analysing the MSA Events' blog content to compare students' experiences in different years, Jolley and Sanderson concluded that the combination of peer learning and vertical teaching mirrors team dynamics in an architectural firm or a construction design team and in doing so parallels an architectural assistant's training in practice.⁴ Specifically, we highlighted the importance of learning communities, the development of graduate skills and techniques to encourage reflection. We actively encouraged collaboration with international transdisciplinary students and practitioners and, as projects evolved over several years, allowed design team members (students, academics, industry experts and practitioners) to change. Through experimental partnerships, projects advanced in directions not initially imagined at concept development and concluded as unexpected opportunities further explored in later years.

Case Study 1: Atelier Zero, MSA Events 2012



*Figure 3. Atelier Zero, Final Installation, MSA Events, 2012.
<https://ateliermcr.wordpress.com/>*

Atelier Zero⁵ was an Arts Council funded collaboration in celebration of the Cultural Olympiad, delivered as part of MSA Events 2012 in collaboration with another school of architecture, ESA (Paris), the Office for Subversive Architecture and curator Jane Anderson. The initial brief asked for a city pavilion to mark the Cultural Olympiad, whilst creating an awareness of roles and team work when translating design proposals to building. The project united students on programmes across the school to envision, construct and install a boating pavilion. On completion the pavilion spent 77 days in situ. The students' first-hand and practical involvement in the design, construction, installation and occupation of a structure offers a unique learning experience not routinely encountered during architectural education. Architectural educator John Bishop (1997) notes the advantage of shifting studio projects to the community, stating that 'much design education is very remote and esoteric and even where design work has a 'real life' context there is a tendency to 'tailor' the design brief, often for valid educational reasons, in order that the creativity of the student is not limited by the reality of the context of the design problem.'⁶ Subsequently Sanderson co-authored a paper with Helen Aston (MSA) which included transcribed interviews with the students, land owner, curator, collaborator and agent. This captured the various voices connected to the project (see Figure 4) and also the long-term impacts of temporary installations in the city as catalysts for the longer-term occupation of the site⁷.

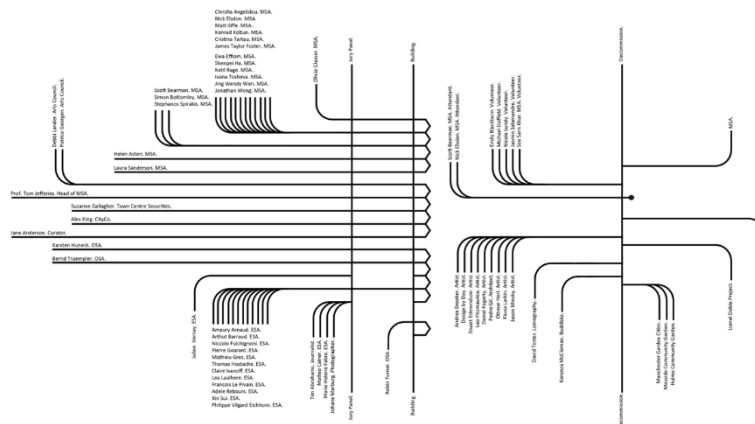


Figure 4. Atelier Zero, Project Diagram, MSA Events, 2012.
<https://ateliermcr.wordpress.com/>

Theme 2: Graduate Skills Acquisition

The second theme asks: Can we design a unique pedagogic framework to deliver live projects in academia and simulate architectural practice? Because these events are live projects we are able to encourage student autonomy; career confidence and readiness whilst developing a pedagogic model to enhance professionalism and complement the UK's PSRB requirements. Specifically, we widen the School's reach by facilitating and supporting international collaborations and travel or online parallel events. This creates a learning environment that sits between academia and practice by allowing Masters architectural students to run their own live project for a real client whilst sharing knowledge and skills with undergraduate students. This allows students to transform their declarative knowledge into a physical output, mirroring practice and demonstrating in depth practical understanding. Our work can support life-long learning in the community and initiate conversations concerning the value of architecture. Vyas et al (2012) discuss the '(1) use of artefacts, (2) use of space and (3) designerly practices'⁸ uncovered in their ethnographic fieldwork in design studio – making sense of the specific tools that designers use to collaborate and communicate, which are essential in creative problem solving.

MSA Events planning for (postgraduate) MArch students commences in January and to highlight how this process parallels practice we introduced design stages to structure the project's delivery, such as risk assessments, schedules of work and cost plans. This was cross-referenced with teaching session plans to ensure the MArch students managed the project's introduction to undergraduate students; its development, resolution and collective and individual reflection whilst meeting the learning outcomes for the purpose of assessment.

Case Study 2: Temp Fest, MSA Events 2017

Temp Fest⁹ involved the delivery of two temporary pavilions for public events during MSA Events 2017: the globally acclaimed Manchester International Festival (MIF) and the seventh year of Threshold, an independent arts and music festival in Liverpool. For each, the students prepared full working drawings and costings and in doing so the MArch students passed on their practice experience to undergraduate students. The effectiveness of the simulated practice experience is captured by one undergraduate student who reflected: *'I gained considerable experience working to a real budget and client, something that is often lost in regular studio work. Seeing the final project built was also incredibly rewarding.'*

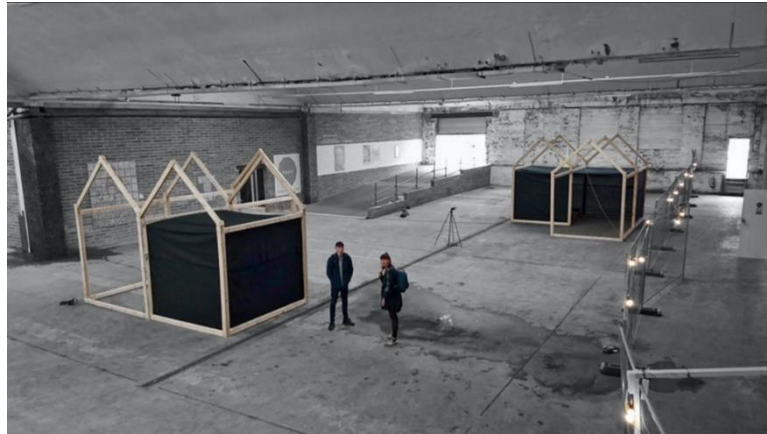


Figure 5. *Threshold Music Festival, Liverpool, MSA Events 2017.*
<https://events.msa.ac.uk/2017/group/11/>

Theme 3: Research-led Education

The third theme asks: How do we create a pedagogic framework to support live research projects for staff to facilitate research-led education? By being able to work ‘off campus’ during the vertical projects, staff routinely gain the opportunity to pursue global research opportunities. The *MSA Events* programme enables staff to integrate research and teaching whilst achieving social or scholarly impact. In doing so the programme, becomes an interface between Manchester School of Architecture, communities, practice, professional bodies and architectural education committees with students acting as agents. They take ownership of a research question and respond by learning through doing. Publications by staff then transfer these creative acts into scholarly activity and this enables others, inside and outside of the School, to evaluate and build upon the results.¹⁰

Case Study 3: Manchester Society of Architects Exhibition, MSA Events 2016

This case study progressed a privately funded piece of research, outside academia, and then through working with the local Architects Society, became an *MSA Events* project concluding with the findings being exhibited in the City of Manchester. In 2003, prior to working in academia, Jolley had secured funding to undertake a feasibility study on behalf of the Manchester Society of Architects who wanted to put together an exhibition of architectural drawings of historic Manchester buildings. This complemented research focusing on Lee House in Manchester, which is a part-realised tall building designed during the 1920s. The building is attributed to Harry S. Fairhurst but its design was influenced by Edgar Wood; both were Manchester architects who were proactively involved in the Society. The building was only completed to the eighth-storey, but a perspective by Edgar Wood in MMU’s Special Collections shows one option for the modelling of the upper storeys. In 2015, over a decade after the original research, the Manchester Society of Architects launched their drawings exhibition. Running alongside this, an *MSA Events 2016* group built a model of Edgar Wood’s full scheme.¹¹ This process combined archival research and professional model making skills. The final model was later handed to the building owner and exhibited in the city.



Figure 6. Completed model of Lee House, MSA Events 2016.
<https://events.msa.ac.uk/2016/group/15/>

Theme 4: Incubator

The final theme asks: How can collaboration beyond the university deliver community-focused architectural projects with long-term social value or offer life-long education opportunities? Using vertical projects, the Manchester School of Architecture pursues opportunities capable of accommodating ‘slow scholarship’ to make space for critical thought and the School’s reiteration and repetition of these projects further advances them. This is achieved by the addition of new collaborators joining a project to offer a new perspective or set of ideas. Over time this created research ‘sandboxes’ through collaborative trans-disciplinary networks.¹² A new pedagogic model has been established at the School to nurture supportive outward-facing networks between students, academic staff, external organisations, specialists and potential employers.¹³ This generates a perpetuating education ‘ecosystem’ where students formulate further research questions, often explored through independent study once the vertical projects conclude, and this in turn influences career pathways and networks.

Case Study 4: High Streets + Town Centres 2030 and Beyond, All School Project 2019.



Figure 7. Proposal for Withington High Street, All School Project 2019.
<https://www.msa.ac.uk/allschoolproject/>

In 2019, Sanderson collaborated with colleague Luca Csepely-Knorr (MSA) and the Institute of Place Management to discuss the future of UK High Streets and Town Centres. This research was a response to two notable reports in December 2018, the ‘High Street Report’ and ‘High Street 2030: Achieving Change’ as well as major funding opportunities including the Ministry of Housing, Communities and Government’s 2019 ‘Future High Streets Fund’ and Historic England’s announcement of Historic High Streets as Heritage Action Zones. There was also considerable architectural interest, demonstrated in the launch of the RIBA Journal ‘Future Town Centres Competition’ with ACO Technologies.

The *All School Project 2019* enabled Csepely-Knorr and Sanderson to re-contextualise their research within a broader context, taking students to produce solutions for one of five Failing Mancunian High Streets by applying earlier research by the Institute of Place Management and their “25 Factors for Vitality and Viability”¹⁴. In one week the project produced bold visuals for 50 proposals which were exhibited at the ESRC Festival of Social Science and documented on a student blog¹⁵ shared with local stakeholders. This work was embedded into the wider research project, organized by Csepely-Knorr and Sanderson, which included an ‘IPM+MSA Research Special on the High Street’ to draw together expertise from inside MMU, and a symposium as part of the ESRC Festival of Social Science which included practitioners. These two events allowed the pair to bring together voices from Architecture, Sculpture, Planning, Urbanism, Landscape, Film and Fashion. The presentation boards created as part of the *All School Project 2019*, although produced within a single week and perhaps rather utopian, aligned incredibly well thematically with the research content of the symposium, including ideas of typology, place specificity, pedestrianization, transportation and seasonality. The visual quality of the work, made possible by the *All School Project 2019* and the online interface of the blog, engaged new and diverse audiences and allowed the research more impact than would have been otherwise possible using tradition studio-based delivery and timescales.

The research proved to be even more timely than originally anticipated, and within a year, the Covid 19 pandemic had brought even more considerable challenges for High Streets and Town Centers locally, nationally and internationally.

CONCLUSION

“The situated nature of learning, remembering, and understanding is a central fact. It may appear obvious that human minds develop in social situations, and that they use tools and representation media that culture provides to support, extend, and reorganize mental functioning. But cognitive theories of knowledge representation and educational practice, in school and the workplace, have not been sufficiently responsive to questions about these relationships.”¹⁶

This culture of vertical projects at the Manchester School of Architecture has advanced significantly since the first *MSA Events* in 2008. 300 projects have been completed over 13 years of *MSA Events* and 50 solutions have been proposed each year over the five years of the *All School Project*. Through the *MSA CATALYSTS* research project, Jolley and Sanderson have refined and related the pedagogic framework behind vertical projects across MSA, defining the embedded research-informed teaching.



Figure 8. Transgrestival Pangaea Festival DJ Booth, Design + Build, MSA Events 2015.
<https://events.msa.ac.uk/2015/group/18/>

Through a series of case studies, this paper has highlighted the role of these vertical projects in (1) enhancing learning communities and student experience, (2) simulating architectural practice, (3) engendering research-led education, and (4) acting as incubators for community-focused architectural projects with long-term social value

ONGOING TRAJECTORIES

MSA Events and the *All School Project* have continued since Jolley and Sanderson moved to other roles in the School, and are now under the direction of Senior Lecturer, Becky Sobell. In the 2020-2021 academic year, and as the Covid-19 pandemic continues, vertical projects at MSA have moved to online formats, made necessary by social distancing. The *All School Project 2020* saw students work in mixed year, mixed programme (BA, MArch, MLA) groups on a series of themes (1) Viewpoint : how can we connect when we are apart?, (2) Black Lives Matter, in collaboration with BLM_Arch@MSA, and (3) Wellbeing in Architecture, in collaboration with MSA&U. Each project used Instagram hashtags to report to a common thread. *MSA Events 2021* builds once again on the format of the programme by exploring new possibilities made possible by online learning platforms.

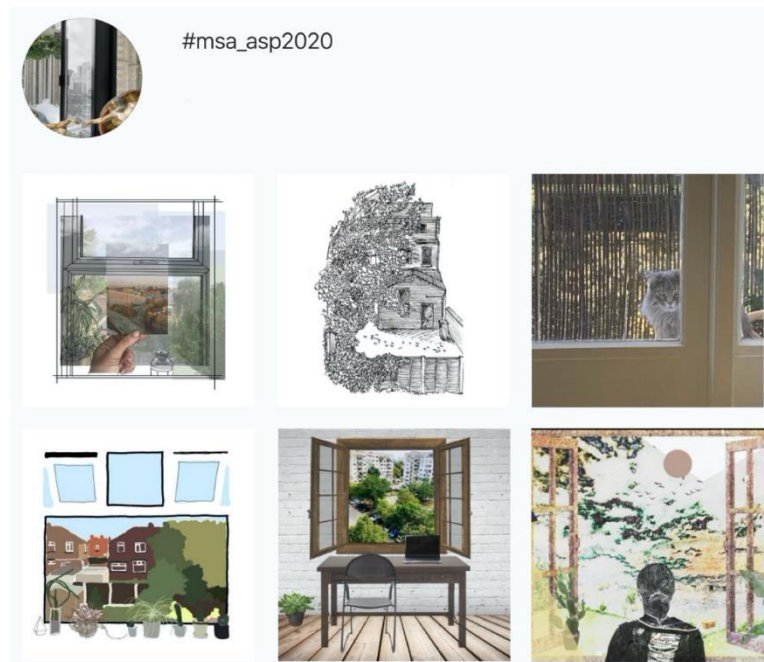


Figure 9. Viewpoint Instagram, Sobell, B., All School Project, 2020.

Although no longer coordinating these specific vertical projects, Jolley and Sanderson continue to pursue their own research and interests, connected to projects which were catalyzed by *MSA Events* and the *All School Project*. Jolley is currently developing a sketching festival with the Manchester Society of Architects. *The 2021 Sketching Festival*, will build on previous activity in 2015 and 2017 to engage two international architectural communities through a collaboration between KL SketchNation (Kuala Lumpur, Malaysia), Manchester Student Society of Architecture, Manchester Urban Sketchers and Manchester Society of Architecture, where outputs included sketching walking tours and exhibitions. Sanderson is the Atelier Leader for *Continuity in Architecture*, a vertical (BA3, MArch1, MArch 2) studio for teaching and research who have been working with local community groups for a number of years. Taking an interest in how the ‘Design Thinking’ of the atelier can be applied to the ‘Wicked Problems’¹⁷ of Local Planning, *Continuity in Architecture* have produced papers, chapters and exhibitions in Bollington (2016), Bakewell (2017), Rochdale (2019), Shrewsbury (2019). The atelier is currently working in collaboration in Bradford Civic Society and Bradford Townscape Heritage Scheme on a project funded by the Architectural Heritage Fund on the future of the Historic High Street in the Top of Town area in Bradford.

NOTES

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- ⁶ Bishop, J., (1997) *Architecture in the Community Project*. Page 87.
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