

Makers to Change-Makers: A pedagogic investigation into making as a transformative tool

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Abstract

This is a joint submission!! This paper explores the Making practice as tool and agency for rethinking the complexity of issues around the social and urban landscape. How can Making enable new hybrid relationships that are needed to explore new ways of living, working, learning. What spaces are needed to develop new frameworks for the transition from Maker to Change-maker? Through using Pomona Island as a case study for a pedagogic project to develop future visions to inform the regeneration of a brownfield site on the borders of Manchester, Salford and Trafford in the UK, design students from Manchester School of Art and ArtEZ Institute of the Arts, Arnhem (NL), worked with Manchester Metropolitan University's LiFE 'Living in Future Ecologies' research group and MA Landscape Architecture students to develop and present proposals for intervening in the urban landscape. As Education Institutes we value the outside spaces as our laboratory, where students have space to imagine, invent and explore the unknown as ways of rediscovering the city. Making and Thinking within the context is a rich soil to foster awareness, learning to shift from desired outcome towards understanding the depth of context and meta-physical matter. Enabling the rich possibilities of creating and designing together in open, participatory and imaginative ways requires new forms of learning. In *Speculative Everything*, Anthony Dunne and Fiona Raby propose a kind of making that is used as a tool to create not only things but ideas. For them, making is a means of speculating about how things could be—to imagine possible futures. Through the two-day workshop students researched, tested and designed OPISO sensing instruments that interpreted and proposed future scenarios in response to Pomona Island. OPISO derives from the ancient Greek word, which means behind or back, but refers not to the past but to the future. Early Greek imagination envisaged the past and the present as in front of us, something that we can see. The Future was viewed as invisible, meaning that we are walking blind, backwards into the future (Knox, 1994). Using this creative discourse, participants developed their own view and interrogation exploring new tools and contexts to influence transformative change on the current or future state of the brownfields. Through the making students addressed issues on nurturing city eco-systems, city center regeneration and learning from local histories or the politics of place. The participants explored ways in which to influence, inspire, mediate and change social reasoning. Making became a way that design scenarios could become acted out, envisioned through material role play, materialized philosophical questions as real experience to better understand creative opportunities. The crafting of objects through material language acted as an interface and mediator for understanding (Adams, 2014) that meant objects became ways in which to codify and understand different social and material contexts. The work was exhibited through a 'Salon'

exhibition event to a public audience as part of Design Manchester 2016. The Manchester School of Art and ArtEZ Institute of the Arts continue to collaborate and deepen research on the notion Maker to Change-Maker.

Introduction

This paper explores Making practice as an investigative and transformative tool for rethinking the complexity of issues within the social and urban landscape. How can Making enable new hybrid relationships that are needed to explore new ways of living, working and learning? What learning spaces are needed to develop new frameworks for the transition from Maker to Change-Maker?

Through using Pomona Island as a test location for the OPISO CITY design workshop, students from Manchester School of Art and ArtEZ University of the Arts, Arnhem (NL) developed future visions to inform the regeneration of a brownfield site on the borders of Manchester, Salford and Trafford in the UK. During the workshop the OPISO CITY students worked together with the Manchester Metropolitan University's LiFE 'Living in Future Ecologies' research group to develop and present proposals for intervening in the urban landscape.

Manchester School of Art and ArtEZ University of the Arts share a vision and need for outside spaces to function as laboratories, creating environments where students have space to imagine, invent and explore the unknown as ways of rediscovering the city and urban surroundings. By Making and Thinking in an external context, desired outcomes create a rich soil from which to investigate a depth of context through meta-physical matter. New forms of learning require experimental spaces in which the rich possibilities of creating and designing together in open, participatory and imaginative ways can be activated. In *Speculative Everything* (2013), Anthony Dunne and Fiona Raby propose a kind of making that is used as a tool to create not only things but also ideas. For them, making is a means of speculating about how things could be—to imagine possible futures.

Through the two-day OPISO CITY workshop students researched, tested and designed OPISO sensing instruments that interpreted and proposed future scenarios in response to Pomona Island. OPISO derives from the ancient Greek word, which means behind or back, but refers not to the past but to the future. Early Greek imagination envisaged the past and the present as in front of us, something that we can see. The Future was viewed as invisible, meaning that we are walking blind, backwards into the future (Knox, 1994).

Using this creative discourse, participants developed their own view and interrogation, exploring new tools and contexts to influence transformative change on the current and future state of brownfield sites. Through making, students addressed issues on nurturing city eco-systems, city centre regeneration and learning from local histories and the politics of place. Participants explored ways in which to influence, inspire, mediate and change social reasoning.

Making became a way that design scenarios could be acted out, envisioned through material role play and materialised as philosophical questions to real experience in order to better understand creative opportunities. The crafting of objects through material language acted as an interface and mediator for understanding (Adams, 2014) that meant objects became ways in which to codify and understand different social and material contexts. The work was exhibited through a 'Salon' exhibition event to a public audience as part of Design Manchester 2016. The Manchester School of Art and ArtEZ Institute of the Arts continue to collaborate and deepen research on alternative modes of education and practice towards Change-Makers.

Backwards into the Future

During the collaborative project students were asked to work as an OPISO CITY multidisciplinary Design Lab to explore notions of encountering the city. During the two-day workshop students researched, tested and designed OPISO sensing instruments that interpreted and proposed future scenarios in response to past and current friction around Pomona Island. By approaching the workshop from an OPISO methodology students could reimagine their current location from different perspectives, allowing a broader view on the design of work, creating a form of belonging, placeless and amenity within the context of the project. The references and approach to use the Greek view on past and present deliberately opened windows of opportunity to reframe the timeline of Pomona Island towards alternative possible futures.

The workshop brief asked students to acknowledge the city as a transitory state, looking backwards into the information and digital infrastructures, reframing its citizens that move through the city landscape, overlooking the past, present and future state of the places they embark. In 'today's age' it was proposed that there is a danger we are losing our physical connection, sensory nature and way-finding in our cities. The city is the playfield for government, policymaking and architects, building city quarters and the economic infrastructures of the spaces we inhabit. However, in today's world cities are more and more becoming reimagined by its citizens, uniting together to claim new forms of living, becoming self-sufficient with power and energy or to develop the need for food growing spaces or community hubs.

Over the last few years, we are experiencing a shift towards ecological lifestyles and social initiatives, that can be seen in a wide range of developments, whether we look at new attitudes to food and alternative uses of city space, cooperatives, local currencies and the revival of do-it-yourself. Equally, we are witnessing a resurgence of small-scale, hands-on, and local approaches to social issues. Collectively, a significant transition is on the way in how we experience everyday life. (Schwarz, 2014)

Pomona Island has mediated years of protest and interfering economic agendas. As a brownfield site and residual space it was the perfect location for design students to learn about the impact of community and power of individual actions in attempting to challenge places of conflict between politics, citizens and economic powers.

The purpose of the workshop OPISO CITY was to enable a cross-disciplinary investigation into tangible cultural and critical experiences. Students learnt the fundamental principles of enabling change through design and making. By using Pomona Island as inspiration and resource for different modes of action, students were invited to collect, analyse, interpret and explore social, historical, inter-generational, geographical and cultural stories to translate the ever-changing multilayered city. As designers, students were asked to utilise their creative skills through making in order to create interfaces to translate ideas into objects, experiences and interventions that would convince the city's citizens to embrace a new method for living.

The methodology of the workshop was centred around Making as a Tool for Change, by learning about modelling, instant prototyping, quick building, studio improvisations and making physical interventions in order to learn, read and interpret the reactions and interaction caused between objects, location and inhabitants, human, flora and fauna.

The main OPISO CITY Questions posed during the workshop were:

- What tools do we need to invent, explore and investigate the OPISO City?
- How do we set our directionality and positioning?
- What narratives can be explored through Pomona Island?

Students were then asked to explore these notions framed by the following three themes:

Nature's Metropolis

How can nature generate new sensing solutions and visions for future cities?

Developed responses need to engage city dwellers with the nature of the city. Objects, products and interventions should allow humans to converse with nature. Create a collection of eco-centric responses that help to re-imagine the 'Concrete Jungle' as an abundant natural metropolis.

Mini Monuments

What ways of marking the landscape create direction and orientation to a new fictional city?

Places to rest, reflect, direct, divert, subvert and inform. Mini monuments will provide a renewed orientation of the city space. Create engagement that displaces and replaces meanings of how we navigate the city. Mini monuments are Pomona's branches that act as markers connecting city points and urban communities to city nature.

Wild Futures

Does there exist a feral future city?

Taking inspiration from forgotten spaces such as Pomona's untamed and unruly takeover of unmanaged land. Look for intervention opportunities to design, define and facilitate wild(ing) experience through objects, products and tools. Acknowledge the context, imagine the future and change the notion with which people explore the wilds of Manchester.

A Pedagogic Investigation

As Education Institutes we wish to take down the physical walls of academic spaces and reinstate the use of outside space within society as our laboratory. It is these places where students will have space to imagine, invent and explore the unknown as ways of rediscovering the city through using the notion of the OPISO as a philosophical lens for questioning. The outside spaces within the urban context can be viewed from various perspectives and questions leading to the development of new tools and scenarios with which to innovate our living environments. As design responds to our changing and future environment, design education should create more space for investigation into new forms and methodologies towards educating a new generation of makers. Educating in the Age of digital modelling, computing and external production also revealed the urgency and need for tactile, hands-on work, allowing processes of trial, presence, individualism in exploring how we digest materials, contextualise meaning and explore undiscovered potential.

Making embodies the processes of change and therefore needs a physical playground and a new pedagogic approach to understand and reflect on its role in today's world. In order to educate a generation of designers that are grounded Change-Makers and have both feet rooted in a changing landscape and society, we build alternative paths, alternative design formats, diverting from the current economically

driven pathways of design towards new visionaries.

Making has the ability to form new alliances, to create community and develop new micro-initiatives that impact from a street to a whole city or region. To enable these impacts education has to shift from practical to practical idealist, equipping students to dream big and build radical. There is a paradigm shift and transition in culture both for designers and non-designers, where questions are raised on the profession of design. The current is redirecting towards co-design and a change in the playing field, where sets of values, ideas and principles transfer the idea of making and craft to initiatives impacting life and understandings of citizenship. (Schwarz, 2014)

To enable a pedagogic investigation into a changing profession of designers and makers, projects, crossovers and new methodologies need to be in place to nurture the understanding of the role and impact of design. What are essential approaches to expose students to knowledge and how do we support a value change on not knowing and uncertainty as strength in the process of making and understanding? What are valuable ingredients in a design process and what form of mentality and attitude towards making does this require? In this design lab workshop students had the opportunity to absorb and respond to a rich source of information and specialist expertise through discussion and brainstorming with the LiFE group and local campaigners. Using the creative discourse of the workshop, participants developed their own view and interrogation exploring new tools, models and contexts to influence transformative change.

Students were equipped with spaces to discuss, meet, create strategies and design new scenarios in response to the brief as well as to continuously re-evaluate and re-write their own manifesto at our base camp, Insitu Architectural salvage, a shop just around the corner from Pomona Island that provided a dry friendly refuge from the quickly changeable Mancunian weather. As students were located so close to Pomona Island they could use the island to forage for materials, ideas and explore the stories of the landscape through the industrial city residue that peppers the terrain. Students could test work and question local bystanders and dog walkers, extracting local personal histories from those occupying and passing by the Island. Students also had access to a workshop space available a few minutes walk from our base at Insitu in which to mock up, make and translate ideas into methods for testing. Making was an important part of our design process for the workshop. Students found materials, re-appropriating these and augmented their functions and narratives in response to history, context and application. Making became a way that design scenarios could be acted out, envisioned through material role play and through materialised philosophical questions into real experience as ways to release creative opportunities. The crafting of objects through material language acted as an interface and mediator for understanding (Adams, 2014) that meant objects became ways in which to codify and understand different social and material contexts.

Raising the Questions

We collectively and collaboratively approached Pomona as a wicked problem (Brown et al., 2015) translating our many different discipline specific viewpoints and approaches into newly formed design teams so that everyone in the Lab learnt from the pool of knowledge and experience, in turn allowing us to devise a new vision and strategy for Pomona. Researchers and students re-defined parameters and current conceptual frameworks to invent proposals that made way for creative speculation with core questions to direct possible outcomes.

By investigating through a trans-disciplinary approach, different Art & Science methods were used such as: situational thinking, everyday narratives, experimental, navigation, storytelling through walking, material making, data foraging, loitering, people watching, public engagement and mapping the terrain to establish new measures to contextualise and respond to the multilayered site that Pomona Island embodies.

The trans-disciplinary nature of the project allowed for many perspectives to inform proposals for design action in relation to the landscape, planning, and socio-political and environmental agendas. Design visions became multi-faceted and multi-focused with each group's response to the three project themes demonstrating a diverse socio-cultural experience and preference (Luck and Ewart, 2012) to the reinvention of city space.

What if?

In order for groups to critically transform current thinking and priorities for Pomona Island groups had to create design strategies embedded in their creative reasoning that would allow change to happen. Students had to ask themselves speculative 'What if' questions in relation to predicting what the results would be if things stayed the same, how and why they would need to change 'unsustainable behaviours', how they would equip community/ city residents to compensate or change their actions in relation to Pomona's future, acknowledging the global context and how to transition the population of that area towards a regenerative human culture to make the positive necessary changes truly 'sustainable' (Wahl, 2016).

Why not?

As groups developed the building block for conceptual frameworks, motivations responded to the stark reality of a dystopian future if community intervention did not succeed in changing the mindset of future planning models. The superficial 'way things are' and analysis of neo-liberal structures justifying short-term thinking became urgent factors in re-thinking how we consume the future (Slaughter, 2013). By thinking around the concept of what constitutes dystopia it seemed evident we were already within it, by speculatively imagining utopian visions through the lens of the OPISO groups were able to plan rhetorical methods through more realistic strategies and designed devices.

Through the question of 'Why not' project and mentality can change from a passive or resistive state towards an active future thinking proposition. This creating not just Pomona Island but a world view shaped by questioning social values, design became an important creative tool to re-envision a social foresight of the consumption of space and resource that relates to the landscape as a supportive ecological infrastructure.

How might we?

Each group's task was to holistically develop new methods in which to inspire a new strategy and how it may be implemented. Through OPISO devises participants investigated ways to make new scenarios possible. Through using co-design as a strategy to invent relevant location based interventions (Fuad-Luke, 2007) that include the many stakeholders it was important future visions were achievable and

addressed the social, economic, political and ecological needs of the island. In order to implement these proposals, it was important to emphasise the need to move towards a bottom up participatory democracy in which the community is heard by the council, developer and planners in order to translate moral arguments in consensual based realism (Batty, 2001). It was important to attempt to effect political structures in order to inspire action to enable a 'power of change' to the current development strategy and methods for the city.

Through the final showcase for our Salon event as part of Design Manchester, scenarios and OPISO tools for change were exhibited as a 'collective power' to attempt to mediate conversation and to connect and develop new networks between public, planners, community and institutes.

Conclusion

The project OPISO CITY grew out of our combined interest in connecting and transferring an ideology, a vision and practical approach to real-life context and opportunities and make space for pedagogic experiments to influence the course and future role of design. Through Pomona Island an opening of a process started to develop into a broader form and application. OPISO CITY created a sense of urgency as well as opportunity, creating a pathway for understanding this new currency for makers, creating social value and increasing the understanding of the role of ground-up initiatives and ideation explored through making and design to lead within society.

By creating a trusted space in which conflict can occur but connect, the Pomona Island Design Lab explored the way design thinking can inspire an affiliation of perspective through discourse, experience, knowledge, consequence, methodology and geographical or cultural origins. Through a systems thinking approach the Lab allowed the opportunity to mediate and influence change in social thinking as a bridge to reasoning between disciplines, departments, politics, people and planet through 'pervasive creativity' (Bohm and Peat, 2000).

Design as a practice is a natural ally to futurity that helps to critically reflect and innovate scenarios affecting behaviours, applications and capabilities. The OPISO CITY Design Lab offered significant yet playful insights to subvert the logic of current practice, a research platform to dismantle borders and transmit different perspectives that are more adaptive to time and space. Education facilitated a subversive force in which to intervene and initiate a change in mind-set (Freire, 1996).

Through futures thinking, utilising design narrative results from the workshop gave the opportunity to approach social and political issues and embrace an opportunity to make the public aware of possibilities within their power to elicit change and engage with affecting the socio-cultural landscape (Head, 2016). The open nature of the project through a systems approach (Westley et al., 2002) with the investment of the many stakeholders of Pomona Island allowed strategic design thinking to define an egalitarian connection between the city (human) and landscape (nature), as a way to deal with uncertainty in issues around regional resource and ecosystem management in a panarchical system (Gunderson and Holling, 2002).

The project OPISO CITY enabled a cross-disciplinary investigation into tangible cultural and critical experiences. Using Pomona Island as our inspiration, participants were able to analyse, interpret and explore social, historical, inter-generational and cultural stories to translate our ever-changing multi-

layered city. Through making, materials became interfaces to translate ideas into objects, experiences and interventions that convince the city's citizens to embrace a new method for living.

Future territories of design and making cannot be wholly understood if we apply the terminology of previous understanding. Investigation is for us the true nature of OPISO, where the past and the present are in front of us, something that we can see. The future is invisible, walking backwards into the unknown and undetermined. We can only investigate further by developing a platform, loose from terminology, policymaking and institutional politics to formulate new visions and forms of facilitation. Our exploration has not finished at Pomona Island but has become the ignition for building test-sites and unidentified facilities in order to determine and test the unknown potential of design practice and design pedagogy, creating beacons for navigation, new terminology and understanding.

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