

Engaging Design - Empowering Beyond 'Participation' For Active Engagement

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Design's approach to complexity; often employs tactics aimed at engaging the public, provoking awareness, seeking transitional behaviour(s) and provoking changes in culture. Engaging Design (ED) initiates active involvement (as a new paradigm for embedding provocative design propositions) within communities and society. ED is an empowering practice (traversing beyond participation) energising communities, providing agency and facilitating; 'self-authored' and 'community authored' responsible change.

Distributed tools, capabilities and access to knowledge has transformed 'authorship' to be socially, environmentally and contextually led. ED examples respond to environmental concerns; presenting opportunities to achieve sustainable and responsible goals. The work focuses on 'authorship and responsibility' as material and engagement 'mis-use' remains unregulated. This presents design's responsibility toward embodying sustainable behaviour in all its means.

We analyse two case study research projects that foster independence, authorship, as a means to engender engagement; 1) *My Naturewatch*, engages DIY technologies to create digital trail cameras, empowering people to create and author 'accessible nature', through 'homecooked' environment exploration. 2) *Grangemead*, is a facilitated, community-led response, enabling participants to design their own garden within a local-authority carehome. Authors unpick design practice examples, presenting Engaging Design methods for; impactful, responsible, co-authored, sustainable and resilient design interactions.

KEYWORDS: Engagement, Authorship, Empowering, Responsible, Sustainability.

Research Objective

Analyse and identify; if, how, where and why Engaging Design is being deployed, and how it impacts notions of design authorship and responsibility. Resulting in methods and strategies for; interactions, experiences, products, in trans-disciplinary Engaging Design.

Introduction

Design provides agency and is a tool, used pervasively to address issues of our time. At its heart, design is, and often engages – captivating users, promoting audience participation making interactions and experiences compelling. Designers utilise languages of; materials, products, services and systems to change behaviour, provoke protests and empower communities. Designers “have become more engaged as citizens and more conscious of roles they play in culture, politics and society, both serving and creating” (Heller, Vienne, 2003a). Designers are dispensing with disciplinary traditions: forming new alliances, promoting civic engagement, mass participation, creating tools, activism and virtuous circular economies (Gant, 2020). Socially Responsible Design (SRD) evolves from a humanist perspective emphasizing the cultural value and meaning of places. SRD idealizes democratic civic engagement, and welcomes utopian visions of positive forces.

Socially “responsible and sustainable design must be developed as flexible design solutions meet[ing] local needs and resources” (Melles, de Vere *et al.* 2011). Social impact implies capacities to create positive change for communities and individuals. Our most pressing issues have reawakened design with the critical concern and purpose that once defined it (Chapman & Gant, 2007) and design is transforming issues into positive intervention opportunities. Designers are facilitating autonomous communities of citizen scientists, instigating powerful environmental crowd campaigns and remaking the future.

Engaging Design (ED) showcases creative material, models and methods for transformative action. Sustainability is arguably a human construct born from a necessity to reengage with our relationship to a range of issues associated with our biosphere dependency. Technocratic, science and statistically driven agendas will only go so far when encountering or engaging human culture. Authors present ‘*Engaging Design*’ (*noun*) as another that borrows from design traditions and emergent design disciplines; to *engage design* (*verb*) as a tool (for change), to design in ways that engage (*adjective*). Moreover, ED is a process that recognises its own capacity as a form of material, cultural language that has value in supporting interactions, with critical issues of our time.

Design Practices

Design practice “is centrally located in society’s agendas by discourses of the ‘creative economy’ and ‘knowledge society’” (Cope, Kalantzis, 2011). Designers are increasingly engaging people’s experience(s) as “design puts people first, challeng[ing] thinking and making lives better” (Design Council, 2018). The mainstay disciplinary traditions of product-orientated-design are interwoven, *warp-and-weft-like*, by emergent design concerns that can exist within and throughout established design subjects. They cut across with principles and approaches that open up potential, provide new and nuanced methods challenging notions of authorship and responsibility.

Empathetic or co-design “get[s] people personally, emotionally engaged so they can reflect on a process” (Vaajakallio, Mattelmäki, 2007). Co-design gathers

“information about the contexts of people’s interactions” comprehending applications (Vaajakallio, Mattelmäki, 2007), it’s practice provides “tools that create a fluency” (Stappers 2006). This is in itself a form of engagement and Participatory Design (PD) involving users in “evaluative research: testing existing products or prototypes” (Vaajakallio, Mattelmäki, 2007). The difference “between human-centred and user-centred design is huge as they don’t address the same audience” (Heller, Vienne 2003b). “Human-centred design relates to people, user-centred design relates to consumers” (Heller, Vienne, 2003b).

Sustainable Design (SD) practice foregrounds consequences of traditional relationships and systems. SD often *indirectly* engages with *implicit* ecological benefit, often preoccupied with symptoms of production/consumption within economic growth paradigms and mitigation of human behaviour. We argue that SD rarely, *explicitly* delivers on this implicit design intent to *directly* propagate bio-diversity – However design frequently succeeds in engaging civic communities, consumers and cultures through various embodied principles and creative conversations. These are ‘made’ engaging through the artefacts and interactions that form part of our built environment. Engagements are intent on, enabling participants to transition beyond consequence mitigation, to active activities.

Open Design (OD) is a "catchall term for various on-and offline design and making activities, describ[ing] a design process that allows for (is open to) the participation of anybody (novice or professional) in collaborative development[s] of something" (Tooze, Baurley et al, 2014). OD democratises access to construction information in a post-industrial world, presenting opportunities for communities to sustainably respond to bespoke needs. EU ‘right to repair’ laws are transforming industry approaches, as “manufacturers [will] have to provide spare parts for 10 years” (BBC, 2019). OD, unsettles hierarchies, manufacture, stimulating agency and responsibility “providing people the means to rip, mix and burn physical objects” (Lipson, 2013).

Engaging Design, fabricates interactions directly for engagement (over participation) responsibility exists in authoring authentic connection and interaction with the potential to transfer authorship to participants. “Participation” describes methods to include individuals and communities, tied to different intentions and outcomes (Shirk, Ballard *et al.* 2012). The public participate in scientific research e.g. “birdwatchers collecting data reveal[ing] trends” (Shirk *et al.* 2012). Carroll *et al.*, call participatory engagement *Platform Collectivism*, “local resources and stakeholders become visible, accessible, and engaged with one another through the development and use of a community-based platforms” (Carroll, Beck, 2019). Engagement(s) with the public form; science, art, design and disseminates material. Methods include; citizen science, rethinking public engagement (Strasser, Baudry *et al.* 2019), designing impactful engagement (O’Neill Rebecca, 2019) and democratic innovation. Approaches educate, disseminate information, but do not foster ‘active engagement’, provide citizen led ‘authorship’, or breed responsibility. Combinations of; economic tools, device applications, design platforms, responsible design, digital manufacture and micro

controllers' lower technological barriers, producing design 'enablers' for communities and transfer authorship to anyone.

Engaging Design

We consider 'Engaging Design' (ED) to be an emerging discipline, going beyond 'product/service/system' aiming for impactful positive 'active engagement' of public and expert audiences, encouraging agency, active authors and responsible design. We compare two case study projects with common themes; the natural world and community empowerment. Approaches align interventions integrating co-constructive processes of trial and action (Koskinen, Zimmerman *et al.* 2011). Design and "design skills are the heart of the fourth industrial revolution, [providing] us the tools to respond to these unprecedented challenges, innovation and jobs driving the UK's global future" (Design Council, 2018). Design has grown an explicit sense of the *fourth audience* and recipient of their creative communications; beyond themselves, their clients, their discipline and out-to and in-to society and culture itself. Roles have changed, with more stakeholder co-creation, the implications of this shift for the education of designers and researchers are enormous. The "evolution in design research from a user-centred approach to co-designing has changed the landscape of design practice, creating new domains of collective creativity" (Sanders, Stappers, 2008).

Design "is an act of conception and an agenda for construction" and provides agency (Cope, Kalantzis, 2011). Often researchers classify approaches as 'research in the wild' as it "evaluates prototypes as they are used and integrated into people's lives" (Chamberlain, Crabtree *et al.* 2012). Engagement provides a means of facilitating communication between participants, in the interaction design process. Author's believe ED, uses design led approaches to engage audiences, transferring authorship and transforming participants into responsible 'ecological citizens'. The process is not an afterthought, but the primary goal. Enabling users, assists audiences at the top and front of their discipline, empowering them to author and influence others. The *Politics of the Everyday*, states designers should provide "infrastructure[s] for project centred democracy" (Manzini, 2019). Authors see one "role of design experts is to build a collective design intelligence" producing "design capability of participants" and such providing agency, authorship and responsibility (Manzini, 2019). Design practice is in itself inclusive as a set of processes can support creativity and authorship as a tool for betterment. Design sensibility, recognising design culture's rhetorical or meta disciplinary concerns and culture. Participants (in participatory practices) need to be engaged and we design as a means to facilitate this.

OD and democratisations have torn up traditional design models, reducing barriers for communities previously outside 'official design spaces'. In *DIY Citizenship: Critical Making and Social Media* (Ratto, M. & Boler, M. 2014) defines the "author as producer, in taking part, participants become a community to interrogate a theme of shared concern", i.e. the concept becomes a point of shared ownership. In *is authorship sufficient for today's collaborative research? A call for contributor roles* states;

“Technical and cultural challenges must be addressed to lower the burden on the individual and system level to include [author] information, provide easy ways to collect and measure this information, and enable downstream opportunities for this information to have a real impact on the academic (and non-academic) reward system, welcoming critique to avoid worsening the bias present in the ecosystem” (Vasilevsky A. 2020).

We believe the citizen can ‘make’ tools and be fully included within authorship and have witnessed the power of authorship in both case studies. *Citizen Designer*, advocates for Human Centred Design, "develop[ing] solutions based on interactions with individuals, user-centred design relates to consumers" (Heller, Vienne, 2003). Culturally we are disconnected with material value, repairing (Schmid, 2019) and underestimate the damage of extracted natural resources used in products, creating loss of ‘consumption perspective’ (Young, Rosner, 2019). Authors see ‘responsible Citizenship’ akin to people following Covid-19 regulations making circumstance better for all, by daily micro to macro scale interactions actions. In turbid times where politics, environmental issues, rights and technology are evolving exponentially (Hoegh-Guldberg, Jacob *et al.* 2018), the public have increasing power (theoretically). Fostered through online resources; distributed networks and their actions have consequences. *People, Public Services, Power and Place* Portillo *et al* comment “engagement ensures people have a greater say about big challenges we face” (RSA, 2018). The responsibility that comes with these interactions is exceptionally different when it is impacting a community and or team.

“If a team plan fails, it is often of interest to determine what caused the failure, the degree of responsibility of each agent for the failure, and the degree of blame attached to each agent” (Alechina, N. 2020).

In *Computing Professionals for Social Responsibility: The Past, Present and Future Values of Participatory Design* states;

“The needs of communities marginalized through a lack of meaningful participation may find their way through explicit expressions of alternative sets of values that in turn provide a foundation for alternative participatory design efforts” (Becker, C. et al, 2020)

In summary the designer(s) and stakeholder(s) have different levels of responsibility but they are all responsible. Within this complex framework of cause and effect it is easier to think about ‘community responsibility’. Steering towards community responsible authorship that is engaged and embedded is critical as it not only protects parties but also, future proofs projects for researchers to exit projects, highlighting unique design opportunities.

The Nature of Engaging Design

In this context ED, instigates interactions with wildlife and natural worlds, shifting beyond mitigation of consequence to ‘design action’ providing authorship in participants surroundings. For example, engaging in forest school(s) contributes

to learning skills, encouraging children to work collaboratively on challenging outdoor activities, are designed engagements. Growing research identifies spending time in natural surroundings benefits our mental health. The Natural England, *Access to Nature Report*, stresses nature engagements “increase communities’ sense of ownership of local natural places, establishing strong partnerships between communities, voluntary organisations and local authorities” (England, 2010). Authors argue for designing *with* nature actively preserving and propagating, informing people’s actions, i.e. National parks encourage engagement, “biologists [comment] that protected areas are not playgrounds”: wildlife “parks are assets for tourism, not tourism assets” (Buckley, 2009). The rise in “nature deficit disorder” draws attention to negative health effects from people spending less time in nature (Louv, 2008). *Nature Connectedness* documents the “drop in levels of nature connectedness from [ages] 10-15” (Richardson, Hunt *et al.* 2019).

These large-scale challenges are, complex and authors advocate for responsible 'Ecological Citizenship'. Transcending consumerism, undertaking challenges: impacting culture, enacting sustainable change and empowering resilience. An 'Ecological Citizenship' example is ‘voluntourism’. In 2019 the Faroe Islands, closed to reduce tourist impacts on indigenous wildlife. Faroe tourist office reported, 5,886 people applied for 100 voluntourism places. Whilst inspirational, Ecological Citizenship, is for; large/small communities, urban/suburban and from all backgrounds. Authors acknowledge “sustainable development goes beyond individual levels [as it is] too hard to alter by one person”, targeting engagements with communities is more successful (Grund, Brock, 2019). Authors comprehend peer-to-peer impacts on significant others i.e. organisations, lead users, experts and volunteers.

In *Contemporary Participatory Design* Björgvinsson *et al* challenge the term “thing” as “things that are modifying the space of interactions and performance that may be explored, opening up new ways of behaving, ready for unexpected use” (Björgvinsson, Ehn *et al.* 2012). We propose; designing for/with ‘proposals’ proactively engaging communities, beyond traditional means informing behaviours and subsequent actions. Researchers should *not* remain distanced from the “people they want to study”, ED works directly with its audience (Nzinga, Rapp *et al.* 2018). For example, design engagements encouraging “environmental stewardship achieves social–ecological relationships fulfilling lives for present and future generations” (Chan, Balvanera *et al.* 2016).

The deployment of goods and services must “move design out of the lab, making it an unremarkable feature of everyday life” (Tolmie, Crabtree *et al.* 2010). Deploying proposals for ‘engagement’ enable “better understand[ing of] its ‘real world’ capabilities” yielding impact over time (Tolmie *et al.* 2010). Profound “technologies disappear, weaving themselves into everyday life until they are indistinguishable” (Weiser, 1991). Authors selected ‘ED’ projects, focused on the natural world, falling outside traditional ‘design’ as initiation and/or end point leaves room for agency and open interpretation by the audience, i.e. the objective of ‘ED’. The alignment of; digital proliferation, community agency, authorship create the capacity for change and transformation. Engaging Design is its own

discipline with the sole objective of fostering authorship & responsibility. The following examples have been analysed unpicking the permissions they gave to participants for their ‘authorship’.

Grangemead, Residential Home

The Community21 Grangemead Garden project saw the collaborative and inclusive design of a communal space in an emergency respite carehome in East Sussex, UK. Austerity cuts, have impacted on staff moral and retention and service provision across the sector. The design process sought to engage an authentic creative culture in the home that would use a values and needs-basis to enact change on the space and its use. The agreed aims included an objective to research how best to form a sustainable creative culture of engagement beyond the act of changing the space but also shifting attitudes and motivations within the facility. The design of the engagement starts with a method to support individuals with really diverse and complex needs participating in the design process itself. We used a set of visual cards (Dee & Hanson, 2019) that contain bright coloured images of a whole range of different recognisable things as well striking abstract patterns and participants can select one by means of introduction to the group as the co-design team. A ‘seeding kit’ (fig 1.1.) consisting seed-style-packets with prompts inside that engaged care home service users and staff in a process of collating ideas and responses. Results are posted into a sealed box - this could be undertaken at any appropriate time – the kit tours the home and gathers data as a probe (Gaver, Dunne & Pacenti, 1999). The exciting event of opening of the box and revealing anonymous drawings, comments, stories helped enfranchise the group in the process of collaborative consideration. A service user suggested we designed a ‘cool-wall’ (fig 1.2) where anyone could assign value to the emerging ideas and we can place ideas higher-or-lower (without the need of speech for those with limited verbal communication capacity). It existed in the home over a period as an engagement tool where service users and staff could interact with the object outside of defined design meetings and negotiate the value of the emerging ideas and could add others, whilst promoting engagement with the project.

Once the ideas for the garden developed service users and staff could engage in what became called ‘homework’ tasks to go out on trips and seek out information, visual research and references to support the co-design process - Undertaking ‘citizen science’ surveys of nature in the current space, going to wildlife gardens and modern pavilion spaces for reference and visual research. Whilst the heavy production of the space required large plant and limited access for the team – the safety fencing became a co-communication and engagement space adorned with on-going offerings of ‘homework’, which were appended. The objects and spaces are inspired by the ambition to encourage nature to what was a sterile, barren environment. Beyond the prescribed function of providing habitats that are accessible to people, animal and plant species the designs deliberately integrate a vernacular and material, visual language that integrates and communicates.

Through the reuse of waste materials from the existing garden site the garden develops a communicative set of objects ranging in scale that allow for inclusion in the creative process, but they also outwardly ‘speak’ to the concerns of the

community for encouraging nature and wildlife interactions and addressing a stigma of being wasteful. Pots made from waste clay from the pond dig (fig 2.1.), old feather duvets form a composite bird box (fig 2.2.) both formed using simple safe moulding techniques and carrier bags are simply heat-pressed as a garden club activity into instant artworks and signage (2.4.). Each element expresses the accessibility of both the object and space but moreover the process of (re)creation as a means to engage service users in a process and onlookers in a visual vocabulary that champions the considered reuse of what would-be-waste.

The 'design' inherently and strategically tells the community of users and future visitors *what it is, how it is made* (and remade) and *what it is for*. The making is social, inclusive and collaborative and the design language meaningfully seeks to mediate and celebrate this process and moreover seeks to sustain these values through its (engaging) design. The objects, therefore, transcend their immediate purpose and help form new and continuing communities (human and natural) and interactions that are mediated through a defined set of design protocols and processes that support on-going engagement. A programme of on-going community activities is facilitated by the space and the pride taken in the space engaging the broader community through the objects and interactions (re)created. A 'Reminiscence Map coffee table', records personal experiences and places, 'Porta-Planters' allow growing access when mobility is limited. This project was always perceived as investigation into 'engaging design' – there are far ranging and multiple impacts coming out from the garden including a host of new user integrated and co-designed activities and interactions with the garden, between the community and reaching out to the wider community beyond the care home.

Engaging Design

- 1.1. Seeding kit
- 1.2. 'Cool-Wall' (Cultural probes)

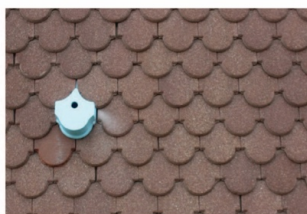


1



Engaging Re-making

- 2.1. Jet-wash-graffitti
- 2.2. Clay from pond into pots
- 2.3. Bird box from old feathers
- 2.4. Carrier bag signage



2



- 3.1. 'Porta-planners'
- 3.2. Bug hotels
- 3.3. Garden Kitchen
- 3.4. 'Reminiscence Map' / coffee-table

Engaging Activities



3

Figure 1 Grangemead Engaging Design programme.

My Naturewatch

My Naturewatch (NW) Camera is an inexpensive wildlife camera designed for people to make themselves as a way of promoting engagement with nature and digital making (fig 3.1.1). It was designed in alignment to the BBC's Natural

History Units interests, as part of an orchestrated engagement strategy involving a project website and social media outreach. Since June 2018, when the BBC featured the camera on a SpringWatch 2018 broadcast, over 3,500 My Naturewatch Cameras have been constructed using instructions and software from our project website and commercially available components, without direct contact with researchers. The NW project is a collaboration between Interaction Research Studio (IRS), Goldsmiths and The Royal College of Art (RCA), Design Products programme. The IRS team, designed cameras and instructional materials. The RCA team designed a programme of engagement workshops, with: wildlife charities, schools and cultural institutions (fig 3.1.2) including a training programme for community and institutional hubs.

NW encourages engagement through DIY design (reaching any interested audience) and assembly has yielded international impact in content, but also changed participant's perception and responsibility toward local nature. NW encourages open engagement through 'content capture' providing agency and independent authorship to its users. Active Engagement was central to the NW project providing agency to people through tools. NW foregrounds digital making and digital literacy through: cost effective, accessible means. Its 'downloadable' and home construction means it is scalable. Bringing new audiences to the project leveraging physical and digital networks, e.g. Sussex University uses the NW tool to foster a school ecology engagement programme.

Methods included: digital deployment, social media, lead stakeholder workshops, designed training scheme (fig 3.2.1), empowering lead agencies (fig 3.2.2), formed relationships with broadcasters and cultivated networks with schools and cultural institutions. The project was designed to nurture relationships, encourage authorship with communities through opensource technologies, without relying solely on researchers. The toolkit can be accessed by anyone and parts purchased economically online. The project demographics impacted; 6 – 83-year old's with vast backgrounds, technophobes to techno geeks (fig 3.2.3 & 3.2.4). The bigger landscape of the project concerns creating engagement with the outdoor world, through technologies that people can construct on their kitchen table without specialist tools or knowledge. The RCA team developed a scheme 'Training the Trainers' where 16 leading wildlife experts and public gatekeepers were trained to use the NW toolkit including organisations from: schools, Wildlife Trusts, etc. (fig 3.3.1). This led to 15 workshops being run independently authored and ran with audiences far beyond the research teams' remit.

“as a Trust we have always been interested in how we link technology and nature and now the rest of our team are desperate to engage” (Wildlife Trust spokesperson).

NW also ran workshops with independent cinema (The Depot) Lewes, creating 'community authored', citizen 3-minute trailer. Trailer viewer numbers totaled 15,750. The workshops transformed how participants viewed wildlife with some landscaping their gardens, adding ponds and new plant species creating better biodiversity *“I didn't know that was happening in my garden - the camera proved it, and that was, “Wow” (workshop attendee).* NW cameras led to people actively engaging not only: with their surrounding nature, local residents, landscaped

spaces, added ponds, making kits for elderly communities and provided content to discuss with relatives:

“Going to see my grandma and seeing the excitement on her face when she sees a photo of a robin, brought us together. These cameras are connecting people through the medium of nature and connects people to nature. People do feel more connected to nature and this has had an impact that we could see”
(Focus group participant).

Charitable organisations not only hosted making workshops, but also cultivated site visits to local participants gardens, who were involved in their community process (fig 3.3.2).

“We had a look in the[ir] garden and I went, ‘There's a reason we're not getting anything. Because you've got a piece of grass & a fence. leading to more conversations about making their garden wildlife friendly” (Focus group participant).

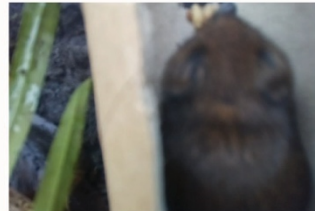
Engaging Design

- 1.1. Deployed Kit
- 1.2. Open Workshop



Engaging Making

- 2.1. Training programme
- 2.2. Wildlife expert camera rig
- 2.3. Mammal through rig
- 2.4. Novice capturing fledgeling



- 3.1. rewilding project using kits with volunteers to capture storks
- 3.2. Wildlife Trusts using kits to work with Hedgehog Hospital

Engaging Activities



Figure 2 The My Naturewatch Engaging Design process.

Discussion

The case studies present a range of scalable interventions that seek to foster, provoke, enhance and sustain engagement in both the (designed) processes and wider, macro concerns and subjects.

In the case of the Grangemead Garden, the design process is protracted and takes longer or shall we say it is an appropriately long engagement (and remains so). Interventions have one (collective) eye on forming the ‘creative community culture’ that can emerge to provide on-going opportunities for change and means to continue engagement with everyday values, needs and opportunities. This is an *inclusive design* that demonstrates the agency of a creative attitude towards the environment that we work and live in and the eco-system of opportunities to interact with the world around us in ways where authorship and responsibility are opened up and shared, promoted. But importantly these are affordances facilitated by engaging design (noun, verb and adjective) and an attitude and recognition of the influence of design can have when seeking to foster a collective culture. We co-designed a garden, yes, but it we could have designed anything, importantly what has been co-authored is a sustained programme of engagement present throughout the community mind-set and embodied and communicated through the objects, spaces and the on-going activities. The responsibility throughout the team has been to enable engagement, making the process of design itself inclusive and involving through the engaging-design-tools and methods that promote continued use (and engagement). Collaboration and participation are sought as part of the process but they require facilitation through or by Engaging Design.

The agency of *design sensibilities* is significant and fundamental and manifests through tangible, designed graphic cards, interior and exterior objects and even buildings such as a maker-space (garden shed) – all of which recognise the visual and material culture of design culture and the role of designed things to enact a purposeful interaction. The responsibility of identifying active engagement as a subject or ambition lies initially with ‘design-research-team’ but collective authorship becomes both a signifier of engagement and transfers importance and engagement as a value out into the community. This, in turn, is enabled by ‘engaging things’. These objects do *provoke and promote* but unlike say Critical Design where deliberate ambiguity (Malpass, 2019) or discourse (Tharp & Tharp, 2018) is sought, the objects and methods provide a direct function (that engages); interactions that are defined as a material experience that enacts or enables direct participation with and articulation of the values and topics being considered.

Care homes were deeply affected by the challenges brought by the COVID-19 pandemic and the garden has been a ‘life-saver’ in terms of its value as a considered space. Moreover, management teams report on how the nature of creativity itself (in response to all kinds of issues and opportunities) has re-engaged staff and service users in an understanding and appreciation of their agency and value to one-another that is formed of a collective authorship and responsibility.

My NatureWatch exemplifies Engaging Design having led to autonomous interactions with the subject and its associated objects as mediators of meaningful engagement. Beyond participation, it fostered communities, developed community agency and achieved a larger goal, contributing to Ecological Citizenship and a culture of common concern. As Engaging Design, it activated objectives through (strategically designed) objects and through engaged communities’ overtime that are far bigger than their constituent objects, systems

and/or digital media. The NW project assisted participants in the authorship of their personal and public environments, images and subsequent impacts. The project never dictated how audiences should engage, i.e. they were free to deploy cameras in their: gardens, parks, nursing home gardens, conservation projects and school grounds. Giving participants complete ownership through the making and taking of images. The carefully designed process not only enabled the 'design of the camera', but participants kept trying new setups adjusting their environment, placing ponds, rewilding and positively adjusting their immediate surrounding nature. There have been countless anecdotes of participants feeling 'responsible' for rewilding their neighbourhoods, or responsible for the flora and fauna encouraging more species, all positive effects of ED.

Conclusion

Engaging Design (ED) can form part of any socially orientated design scenario - It can form part of awareness raising, but we are past that stage. User/participant and broader social and cultural motivation is key; the challenge is making the incentive intrinsic and learning the *designer-means* to foster active 'interest' in the context. Moreover, they can engage in the design of the solution or outcome going beyond participation and 'actively engage audiences' and enfranchises them as an active participant in the engagement design and in effect engaging design is contingent on this interaction. The practice of ED should be considered from the conception of a project, rather than traditional bolt-ons. Engaging in the design process and designed outcomes that are fabricated to engage are not mutually exclusive and, to be considered a strength of the potential of ED.

A good means to think about this is 'designing in' engagement beyond user insight and participation but to stewardship, giving people agency over the process. The forms of engagement can be international, local, top down or bottom up not to mention scale. The most important element is creating a community and approach that encourages and is enfranchising and enabling for the parties involved. Engagement is intentionally sought and therefore creative strategies are designed and deployed to ensure it can happen - here the design problem/opportunity, critical concern exists - and skills and initiatives can develop. Design (research) can foster a range of new understandings of the ways and means to engage better; itself as a discipline, community and culture and in turn as a subject and practice that can work effectively to enrich and enliven the way we collaborate and interact in the big issues of our time. ED is about embodying communities' concepts/goals. ED is largely dependent on the contextual situation and populous at hand, but our literature and practice-based experiences lead to the following:

- *Build community advocates*, as they hold more trust than researcher(s) / designer(s), offering (post project) plans for leaving a community supported.
- *Don't get 'them' to 'do your project'*, work collaboratively and empower serendipity.
- *Pass over certain curatorial rights*, as it informs agency as people might steer it in an exciting and often unforeseen different direction.
- *Encourage authorship*, based on audience's metrics of success and motivation.
- *Provide agency*, over pertinent stages and decision making.

- *Assist responsibility recognition*, transitioning to sustainable behaviours.

ED is an instrument used (implicitly) by: NGO's, design agents, communities and government organisations. It requires appropriate health caveats for the space, environment, scale and communities it operates within. *Ruined by Design* states “we need to measure more than profit. We need to measure impact on the people whose lives we're affecting” (Monteiro, 2019). As a discipline we need to perceive the repercussions of what we design and put into the world, even if we enable engagements by proxy. In the age of engagement, it speaks volumes when IDEO, produces *goodparticipation.org* toolkit (IDEO, 2020). The “emergence and proliferation of digital identity systems around the world, it's more important than ever to consider how this new set of identity systems will affect citizens” (IDEO, 2020).

Future work

With local authority partners we are discussing the job of engaging designer as a co-defined and co-funded role within the context of care (home) provision and ‘modernisation’. The work in the NW project has a focus that can be adjusted to different locations where ‘Ecologically minded citizens’ can enable grass roots change, encouraging locally specific and non-colonial responses.

Authors seek to deploy this approach in divisive fields; we see it as a tool for potentially countermanding wicked problems, through community authorship. Most importantly the authors believe that understanding the mechanism of motivation and ‘actively engaging’ different cultures and organisations to achieve outputs that are not patronising but encourage ‘inherent agency’ is critical. Design for engagement is a trans-disciplinary and inclusive process that intersects and includes any discipline with the purpose to consider and support a range of interactions and the explication of key strategies and identifiable design traits will be (and are) taught within a range of guises.

Acknowledgements

Authors thank; My Naturewatch Team, the Interaction Research Studio Goldsmiths and The Design Products department Royal College of Art. Brighton University research group Community 21 team and colleagues at the Schools of Art, Architecture and Design and Environment, Fay Holden and Sue Brooker at East Sussex County Council and Julia Roberts at Culture Shift. Colleagues in discussions; James Tooze, Prof Saeema Ahmed-Kristensen, Prof Ashley Hall, Prof Paul Anderson, Dr Rosie Anderson and Prof Sharon Baurley. Review work was made possible through EPSRC funding Grant EP/P006353/1.

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