

Connected Communities

Scaling Up Co-Design Research and Practice:

building community-academic capacity
and extending reach

Zamenopoulos, T., Alexiou, K., Dearden, A., de Sousa, S.,
Foskett, C., Gaubert, J., Goraya, H., Graham, P., Lam, B.,
Light, A., Plouviez, E.



Scaling Up Co-Design Research and Practice

Zamenopoulos, T., Alexiou, K., Dearden, A., de Sousa, S., Foskett, C., Gaubert, J., Goraya, H., Graham, P., Lam, B., Light, A., Plouviez, E.

Executive Summary

Scaling up co-design research and practice engaged with civil society organisations that support communities through creative co-design activities (including media, technology, product design and place-making). This project focussed on the question of how these co-design practices and their impact on people and society can be scaled up.

Against the typical view of scaling up as 'growing bigger', this project experimentally identified and used four mechanisms of scaling up that gave more emphasis on the generation of creative connections and the propagation of practices within networks. These were: 1) Scaling up by extending out: creating a 'socio-technical infrastructure' to connect more people in different geographical places or contexts and help them to work collaboratively, 2) Scaling up by extending up: fostering connections and collaborations with policy makers and gatekeepers, 3) Scaling up by spreading practice: generating 'champions' or 'ambassadors' that propagate practices within new contexts and 4) Scaling up by connecting: creating links between practices, skills and expertise of people and organizations.

And audit and other evaluation workshops revealed that this project had a positive impact on the involved organizations in terms of their capacity to secure new projects, diversify their offering, achieve greater visibility and reach more communities.

Researchers and Project Partners

Academic partners: Dr. Theodore Zamenopoulos (Principal Investigator, Open University), Dr. Katerina Alexiou (Co-investigator, Open University), Prof. Andy Dearden (Co-investigator, Sheffield Hallam University), Dr. Busayawam Lam (Co-investigator,

Brunel University), Prof. Ann Light (Co-investigator, Northumbria University)

Community partners: Sophia de Sousa (The Glass-House Community Led Design), Colin Foskett (Blackwood Foundation), Justine Gaubert (Silent Cities), Hannah Goraya (inclusion and citizen engagement), Paula Graham (Fossbox and Flossie), Emma Plouviez (One Westminster)

Key words

co-design, co-production, civil society organizations, community-academic partnerships, capacity building, cooperative economy, cross-pollination

1. Introduction

Co-design is a term used to signify the direct engagement of users and stakeholders in the conceptual development and realization of ideas into solutions (e.g. Sanders and Stappers, 2008). This study explored the development of co-design practices between civil society organizations (CSOs) and the effect of those practices on scaling up impact and reach.

CSOs have been facing economic, political and pragmatic challenges. While more and more individuals and communities turn to CSOs for support, the resources these organisations have are diminishing. To survive, they need to constantly adapt and diversify their offering but also provide evidence of greater impact.

In this context, the core aims of the project were two-fold:

- *to explore how the impact and reach of the work of CSOs could be 'scaled up' through co-design practices*
- *to explore how co-design practices can be cascaded more widely in civil society*

The report outlines the research approaches and insights produced.

This project was funded by AHRC in an initiative to support community-academic co-produced research. The project was funded in two phases. Phase 1 focussed on the co-creation of a research agenda and phase 2 focussed on the co-delivery of the research.

2. Theoretical foundations and gaps in co-design research

Co-design has been developed and studied around different traditions and domains:

- *Community planning and architecture*: Such practices emerged in the '60s as part of the human rights movement, and a growing sense that people should have the right to participate directly in shaping and managing the environments they live in. (e.g. Blundell et al, 2005; Sanoff, 2006)
- *Technology and system design*: This is the so-called Scandinavian tradition that has its roots in North European post-war political movements around industrial democracy. There is strong emphasis on Action Research and the view of design as a situated learning process (e.g. Gregory, 2003).
- *Service design*: The core emphasis here is the creation of an equal and reciprocal relationship between professionals and people using services that can act as agents for change (e.g. Boyle and Harris, 2009).

- *User-centred design - often around product design*: The core assumption in this tradition is the participation of the user in the design process – usually as a ‘subject’ rather than ‘partner’ – will improve the quality of our knowledge. (Sanders and Stappers, 2008).
- *Community research*: It refers to the production of knowledge through the formation of equal partnerships between academic researchers, practitioners and communities. The core emphasis is on producing knowledge that is more relevant and valuable to the community but also supporting more ‘democratic’ and ‘emancipatory’ ways of knowing (e.g. Reason et al, 2008; Durose et al, 2012).

In all these approaches the core focus (and value) of co-design has been placed on all or some of following three points:

- 1) Co-design is improving our knowledge of action and therefore is pragmatically desirable
- 2) Co-design democratizes society, workplace and research and therefore is ethically desirable
- 3) Co-design enables people to take ownership of their environments, systems or products and therefore contribute to their sustainability and resilience

However, despite the ongoing focus on these values of co-design, there is very little understanding about the value of co-design as a process that enables partnerships (within civil society) to build a co-operative economy and scale up their practice and reach. For that purpose, this project developed co-design activities between CSOs and studied the effect of those practices on scaling up impact and reach.

3. The approach and core outputs

The study was an action research project developed by a multi-disciplinary team of academics and practitioners. The team included academic researchers from architecture, psychology, HCI, design management and participatory design. The CSOs were also diverse, including: **Fossbox**, a social enterprise applying (open source) information technology to support the voluntary sector; **Flossie**, a network of women promoting open-source software for social innovation; **The Glass-House Community Led Design**, a national charity supporting communities engaging in collaborative placemaking and design of the built environment; **Blackwood Foundation**, a foundation that supports a distributed network of people with disabilities to explore design for independent living; and **Silent Cities**, a social enterprise developing creative engagements using digital media so that people who are isolated and disadvantaged can flourish. **One Westminster**, the local charity supporting local volunteering and community action in Westminster joined in the second phase of the project. **Hannah Goraya** supported research and facilitation activities.

3.1 Phase 1

In phase 1 the main aim was the negotiation and development of an action research plan around the overarching theme of 'scaling up co-design'. For that purpose, workshops were conducted –one of them- based on an approach called 'Design by Consensus' developed by The Glass-House (see Alexiou and Zamenopoulos, 2012).

Interpretations of 'scaling up'

The workshop examination had two components: a theoretical and a practical. The theoretical examination identified four interpretations of 'scaling-up' as appear in Figure 1

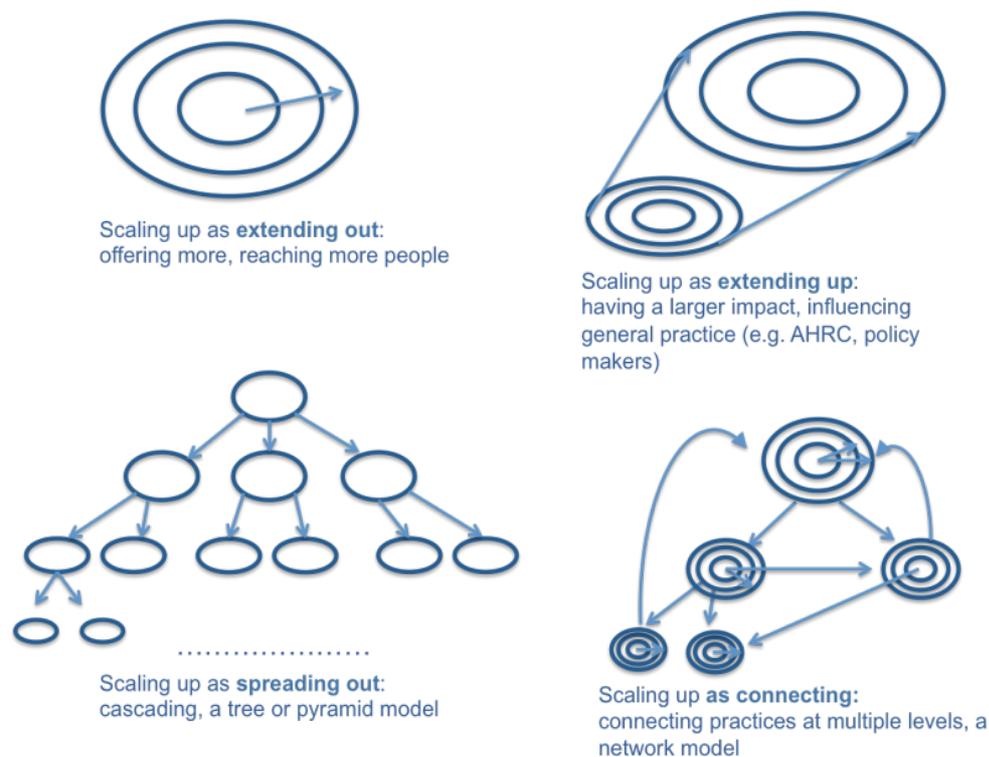


Figure 1 Interpretations of scaling up

The pragmatic examination defined scaling up as a means by which these organisations might:

- Address issues that could not be addressed before (or address them more holistically);
- Deliver the same or more outputs with less resources;
- Reach more people and communities;
- Cascade co-design practice to the wider society;
- Diversify their offering to communities.

These objectives underpinned the design of phase 2.

Building a shared code of practice

The project considered ethical principles that arise both in the development of 'Community based participatory research' (e.g. Minkler et al, 2008; Banks, 2012) and in creating and sustaining 'community-academic partnerships' (e.g. Wright et al, 2011). This led to a living document that contains some shared ethical principles and working practice (see Table 1).

Ethical principles	Protocol of communication	Protocol for handling difficulties	Management of research	Criteria of success
1. Being open about what we want and need from our collaboration 2. Respect of others views, wants and needs 3. Mutual development towards a shared vision 4. Focus on community needs and wants	1 Recognize that we have different languages, so taking time to listen and figure out what each other really means 2. Community partners to feel sufficiently comfortable to question academic discourse 3. Use of technology to share info, develop ideas and give feedback	1. Share your difficulty with people you trust 2. Create little niches in the project where people can express there issues	1. Clarity of roles and decision making process 2. Allow a lot of time for listening, talking and doing together 3. Don't divide tasks and then try to combine results together 4. Allow time for social interaction and play	1. Make a difference 2. Challenge current practice (Think / Do / Make in new ways) 3. Clear outcomes. 4. Impact on the community 5. Builds on existing skills, knowledge and activity

Table 1 A living document that contains some shared ethical principles and working practice.

Identifying mechanisms for scaling up

One of the core starting activities for 'scaling up' was to sketch connections between partners and write a plan around possible projects between partners (Figure 2). This process created the proposed model of scaling up co-design called **cross-pollination**.

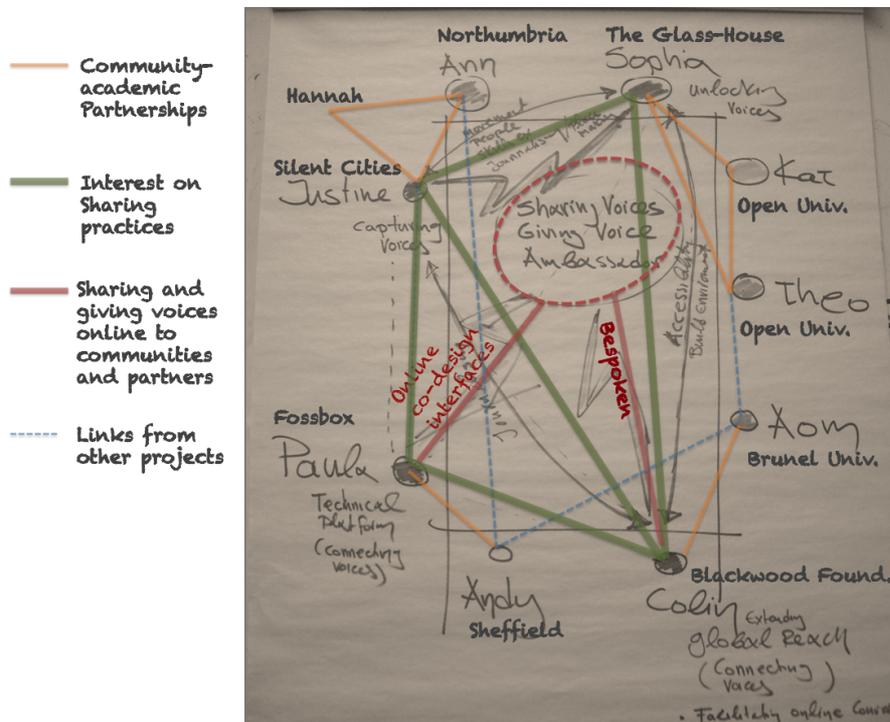


Figure 2 Network map of possible collaboration between partners and existing projects

The aim of cross-pollination was to create a space where people/organizations:

- **Share** their existing work, skills, expertise and resources
- **Identify** relations between existing work and complementary expertise
- **Propose** possible projects that arise in the intersection of existing work and interests
- **Reflect** on the effects and values of the proposed practices

The approach implied that new projects should explicitly align with activities that the community partners were already considering. Emphasis was therefore placed on the community organisations acting as hubs within a network of co-design practices.

Enriching connections between these hubs through cross-pollination activities, and cascading their practices to new partners via 'ambassadors' were the primary mechanisms used for scaling up.

3.2 Phase 2

In phase 2 the overarching aim was the delivery of the cross-pollination approach and the evaluation of its impact on people, organizations and communities.

Cross-pollination projects

Below are some examples of projects that emerged out of the suggested process (for more information see the Scaling up Co-design booklet (2014)):

Community Journalists & Place Potential: The Community Journalism programme run by Silent Cities offered aspiring journalists, many of them with first-hand experience of silent issues, to develop their digital skills to explore Sheffield's silent issues – from homelessness to mental health. Silent Cities, Goraya and The Glass-House Community Led Design supported the journalists to explore issues around how place can exclude and include. The project also involved a member of Blackwood Foundation's Bespoke network, George Perfect, who gave the journalists his first-hand experience of navigating place with a disability.



Figure 3 Students of the *Community Journalists & Place Potential* programme

Place making with young people in Elephant and Castle: The Glass-House, Silent Cities and a couple of 'graduates' of the Community Journalism programme worked together to support young people (aged 14-15) at Sacred Heart Catholic School in Elephant and Castle to: 1) develop media skills - including photography, film and podcasts - as a tool for thinking about their neighbourhood and 2) create ideas for a new open space to be developed on the site of the old Heygate Estate in Elephant and Castle. This project had been initiated by a partnership between The Glass-House and the Citizenship Foundation, for developer Lend Lease.



Figure 4 Examples of photographic work produced during media training by young people (aged 14-15)

Collaborative Funding Applications for Voluntary Sector: Fossbox, worked with Sheffield Hallam University and One Westminster, to deliver training on using online collaborative tools to write funding applications. The first workshop explored distributed document editing with GoogleDocs and Skype, as well as the agile project management platform *Trello* (www.trello.com). Although participants were positive about the tools, there was no evidence after the workshop of the groups adopting them. Following this disappointment, One Westminster designed a novel way of using *Trello* to support groups in bidding (Dearden et al, 2014).

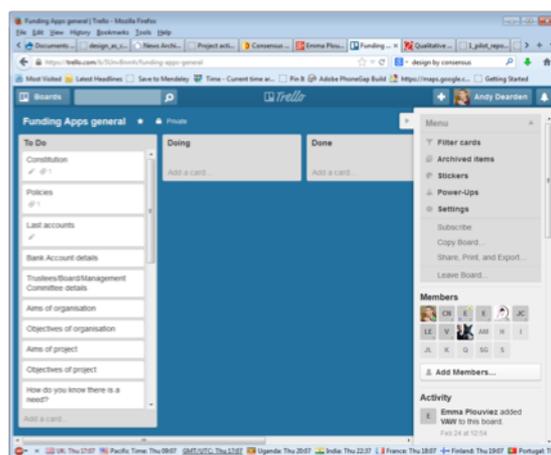


Figure 5 Trello board for funding applications

Diversifying the Internet of Things and independent living: As part of Flossie 2013 (a two-day women-only event to open up and diversify technology) a two days workshop was organized with the collaboration of Fossbox, Flossie, Blackwood Foundation, the

Open University, Brunel University, Sheffield Hallam University and architecture students from Arts University Bournemouth. Participants explored and co-developed conceptual ideas for assistive environments to support independent living.



Figure 6 Diversifying the Internet of things and independent living, mock-up modelling at the Flossie co-design workshop

Learning and reflection tools

Regular meetings were held to reflect on the progress of suggested projects and to think about the impacts, through:

- *Card sorting game*: participants recorded individually observations on project activities and perceived changes of practice using cards. The group clustered these cards based on their similarities and differences.
- *Network mapping exercise*: maps were created (individually and as a group) to depict collaborations and emergent new projects from scaling up activities.
- *Impact mapping exercises*: cross-pollination partners were asked to reflect and collect evidence about the impact of the project on people, organizations and communities.
- *Values mapping*: partners identified core values and legacies of the project and prioritized them (this activity was partially supported by the AHRC project entitled Starting from Values)



Figure 7 Value mapping workshop (left) and Place-making resource and reflection journals (right)

Other tools included an *Audit* with all CSOs that were part of the core team, *interviews* and *reflection journals* (e.g. Placemaking resource/reflection book) with the communities that took part in the project activities.

Co-creation tools

Towards the end of the project, the processes used were translated into structured co-creation tools/activities that can be delivered within a workshop.

- *Cross-pollination game*: The game aims to help develop new projects based on existing assets using the cross-pollination approach. Participants are divided into different tables (usually 6-8) of 5-6 people each. Participants are given three cards to record existing projects, interests and assets. People from each table discuss their cards and create ideas for new projects. Following this, an ambassador from each table goes to the next table to collect support, assets and ideas. At the end, the ideas are presented to the whole group.
- *Cascading box*: The cascading box can be described as a collaborative cultural probe - a technique for inspiring/sharing ideas, connecting people and collaboratively generating data for supporting design thinking. The box is passed from one person to another with the objective to cascade a message and it involves the collaborative creation of pictures and stories using a camera and postcards provided.



Figure 8 Cross-pollination cards and cascading box

4. Insights

4.1 The impact of cross-pollination as a mechanism for scaling up

Results from impact/network mapping showed:

- *An increase in the size and density of connections for the original network:* within a year, there was an increase from four to eight cross-pollination projects and two new partnerships
- *The generation of champions:* at least three people that participated in the project carried out similar practices beyond the confines of the specific research project.
- One champion secured an impact acceleration grant from Brunel University to run similar practices that focused on the use of technology in family cars.

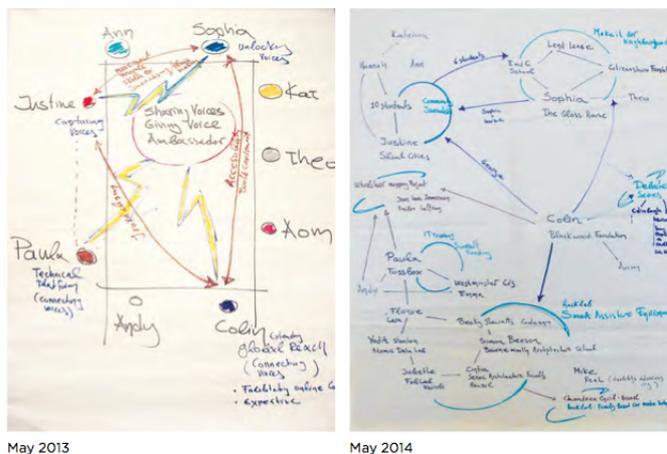


Figure 9 Network mapping: new partners and connected projects within a year

The Audit on CSOs showed:

- Increased capacity to secure new projects,
- Diversification of their offering
- New understanding and use of co-design approaches
- Improved visibility and reach to more communities.

In particular, the organisations were able to strengthen their expertise in co-design, develop their confidence and reputation, and put their skills and knowledge at work in new activities and projects (beyond the original project). Examples include the Sheffield Age Better initiative and toolkit, and new collaborative research projects (like the Starting from Values and Co-designing Asset Mapping projects).

4.2 Variety and conditions for scaling up co-design

The project identified the following four ways or models of scaling up co-design accompanied by different processes or conditions:

Scaling up by connecting

The cross-pollination strategy was effectively a process of scaling up by connecting: identifying and building connections and then building new projects out of these connections. Reflecting back at the end of the project, the project team identified the following conditions for co-design and cross-pollination:

1. Openness: being open about
 - Priorities
 - Sharing resources
 - Relinquishing control/ownership
 - Ideas that allow projects to stay unfinished
2. Building a Safe space: build a space for
 - Experimentation (but tied up with existing projects and assets)
 - Questioning each other (but with trust/respect)
 - Integration of fun and social time

Scaling up by spreading practice

This model is exemplified by co-design practices that nurture people to propagate practices within new contexts. The following core conditions were identified by interviews with communities:

- Accessible activities: activities that can reach a wide audience
- Adaptable activities: activities that can be adapted to take different forms and purposes

- Replicable activities: activities that participants can copy and reuse.

Scaling up by extending out

This model of scaling up is developed by a 'socio-technical infrastructure' (e.g. *Collaborative Funding Applications for Voluntary Sector*) that can reach and connect more people in different geographical places or contexts. The following conditions has been identified:

- The provision of a socio-technical infrastructure (rather than tool)
- Compatibility with existing practice
- Tackling immediate concerns

Scaling up by extending up

This model of scaling up is about fostering connections and collaborations with policy makers and gatekeepers. This type of scaling up was realized through dissemination events but also other meetings with important gatekeepers (e.g. private developers) or personal communications.

4.3 Co-Design research

The funding structure had a positive impact in supporting co-design of research. The partner organisations had different agendas and no previous connections with each other, so Phase 1 provided (funded) time for building new relationships and partnerships. However, the fixed/arbitrary timeframe of Phase 1 limited gradual evolution of a research vision and demanded rapid decisions (Dearden et al, 2014).

5. Concluding thoughts

The project proposed and evaluated an approach for building more sustainable and resilient co-operative economies between CSOs through co-design. The co-design practices used were based on the idea of 'cross-pollinating' expertise and resources. Despite the relatively small sample of people involved, the proposed approach did demonstrate a positive impact on organizations and communities.

References

Alexiou, K. and Zamenopoulos T (2012) Project Report. Collaborative Design Workshops: networked ideas and people. Available from: http://www.complexity-creative-economy.net/uploads/6/1/6/6/6166614/1_pilot_report.pdf

- Arnstein, S. (1969) "A ladder of citizen participation", *AIP Journal* 35:215-224
- Banks, S. (2012), *Community-based participatory research: A guide to ethical principles and practice*. National Coordinating Centre for Public Engagement, Bristol.
- Blundell Jones, P., Petrescu, D. and Till, J. eds (2005) *Architecture and Participation*, Routledge, UK
- Boyle, D and Harris, M (2009) *The challenge of co-production*, Discussion Paper, NESTA
- Dearden, A., Light, A., Zamenopoulos, T. Graham, P., Plouviez, E., de Sousa, S. (2014) "Scaling Up Co-Design: Research Projects as Design Things", in *Proceedings of the 13th Participatory Design Conference 2* , 67-70
- Durose, C., Beebejaun, Y., Rees, J., Richardson, J & Richardson, L (2012) "Towards Co-production in Research with Communities" Report, Connected Communities
- Durham Community Research Team (2012) *Community-based participatory research: ethical challenges*: <https://www.dur.ac.uk/beacon/socialjustice/researchprojects/cbpr/>
- Gregory, J. (2003) "Scandinavian Approaches to Participatory Design" *Int. J. Engng Ed.* Vol. 19, No. 1, pp. 62-74
- Lee, Y. (2008) "Design participation tactics: the challenges and new roles for designers in the co-design process". *Co-Design* 4(1): 31-50.
- Minkler, M & Wallerstein, N (2008), *Community-based participatory research for health*, 2nd edn, Jossey-Bass, San Francisco, CA, pp. 1-23.
- Reason P. and Bradbury H. eds, (2008) *The SAGE Handbook of Action Research*, Sage Publications, London UK
- Sanders, E. B-N. and Stappers, P.J. (2008) "Co-creation and the new landscapes of design". *Co-Design* 4(1): 5-18.
- Sanoff, H. (2006) "Multiple views of participatory design" *METU JFA*, 23(2):131-143
- Scaling up Co-design: a journey of collaboration in research, practice and communities* (2014) The Open University and The Glass-House Community Led Design editors: Available online from: http://scalingup-codesign.weebly.com/uploads/1/2/8/5/12856329/scaling-up_booklet_spreads.pdf
- Schön, D. (1983) *The Reflective Practitioner, How professionals think in action*, Basic Books
- Toker, Z. (2007). "Recent trends in community design: the eminence of participation" *Design Studies* 28(3): 309-323
- Wright, K.N., Wright, S., Williams, P., Lieber, E. Carasco, S.R and Gedjeyan, H. (2011) "The Ties that Bind. Creating and sustaining community-academic partnerships". *Gateways: International Journal of Community Research and Engagement* 4: 83-99.

External links

Research outputs, such as the Scaling up booklet and videos, are available on following sites:

<http://scalingup-codesign.weebly.com/>

<http://comparativeassetmapping.org/?p=263>

Acknowledgements

Beyond the core project partners, many other organisations, groups and individuals became involved in the Scaling up Co-Design journey. These are:

Yodit Stanton, Atomic Data Labs

Bournemouth School of Architecture, Arts University Bournemouth

Chandrika Cycil, Brunel University Citizenship Foundation

George Perfect

Lend Lease

OpenStreetMap France Opensensors.io

Sacred Heart Catholic School

Silent Cities Community Journalists, especially El Veasey and Faiza Omar

Maja Jorgensen and Louise Dredge, The Glass-House Community Led Design

The Connected Communities

Connected Communities is a cross-Council Programme being led by the AHRC in partnership with the EPSRC, ESRC, MRC and NERC and a range of external partners. The current vision for the Programme is:

“to mobilise the potential for increasingly inter-connected, culturally diverse, communities to enhance participation, prosperity, sustainability, health & well-being by better connecting research, stakeholders and communities.”

Further details about the Programme can be found on the AHRC’s Connected Communities web pages at:

www.ahrc.ac.uk/FundingOpportunities/Pages/connectedcommunities.aspx

