

Design 3: Connection, Participation and Empowerment: a Transition Research Project

Client: Transition Network

Collaborators: Michelle Bastian, Nicola Hillary, Ben Brangwyn, Naresh Giangrande, Rhys Kelly, Ute Kelly, Rachel Pain, Hamish Fyfe, Jody Boehnert.

1. Summary

The design process began in the summer of 2011, leading to development of a funding application that was submitted in September 2011 and approved in December. Implementation (project delivery) initially ran from February 2012 to January 2013 and was later extended until July 2013.

Design process:

OBREDIM

Design tools:

- **Stakeholder consultation** at gatherings related to Transition and research
- **Client interview** with members of the Transition Network team
- **Functions, systems and elements** analysis during the (first) evaluation phase
- **Input-output analysis** of the fit between needs and resources
- Creation of an **implementation plan**, which formed the basis of a funding proposal

2. Background

This project emerged from meetings of an *Interest Group on Researching Transition* at the Transition Network conferences in the summers of 2010 (which I attended) and 2011 (where other commitments meant I was absent). At the 2011 meeting, Michelle Bastian (then of Transition Liverpool and Manchester University) agreed to develop a funding application for research to address some of the key priorities identified by *Transition Network*. She searched for collaborators through networks of researchers already active in Transition and other community-based work, which soon brought her in contact with me. Around the same time, Rhys and Ute Kelly, lecturers in Peace Studies at Bradford University and active members of both the *Permaculture Association* and *Transition Hebden Bridge*, expressed their interest in participating in the project. After some discussion about how to proceed, Michelle and I agreed that I coordinate proposal development, largely because of the volume of her other commitments. For me this was an ideal opportunity to apply and further develop the ideas about permaculture approaches to research that had emerged in the *Durham Local Food Project* (Design 2), and in doing so explore how I could adapt my professional skills in order to make them more relevant to Transition and permaculture.

3. Design Process: OBREDIM

3.1 Observation

The design brief was set on the basis of Transition Network's understanding of the existing relationship between Transition and research, acquired through use of two design tools. First, findings from the discussions at the Transition Conferences during 2010 and 2011, retrospectively treated as a form of **stakeholder consultation**. Key findings from these meetings are summarised in Figure 1. Following these, we undertook a **client interview**, in the form of a series of more detailed conversations with Transition Network staff, particularly Ben Brangwyn, Nicola Hillary and Naresh Giangrande, to identify their response to the findings from the meetings, key ideas and needs from a Transition Network point of view, and Transition Network's priorities in relation to an application for research funding.

These observation processes revealed that the relationship between Transition and research had always been a problematic one. In theory, it seemed that the inherently experimental nature of Transition should fit well with the interests and skills of researchers. In practice, while many interesting and important research projects on Transition had taken place, reports of negative experiences of Transition groups working with researchers were widespread, and there was a general feeling that the potential for beneficial collaborations with researchers was massively underfulfilled. In particular, there was an increasing need for Transition to develop and implement appropriate methodologies for monitoring and evaluation at all levels, but no clear idea of how to access relevant academic expertise that could support this.

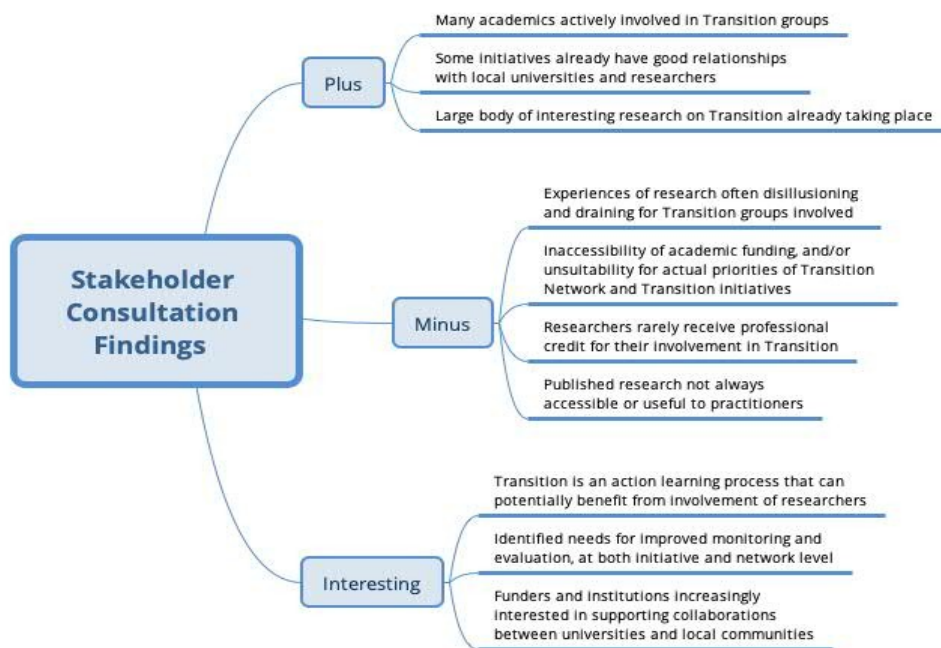


Figure 1: Findings from Stakeholder Consultations

The client interview revealed that, on the basis of its own experiences with researchers and reports from Transition initiatives, Transition Network had identified the following priorities:

- Improve existing protocols for liaising with academic researchers, vetting potential projects and agreeing terms of collaboration, and Transition Network's capacity to implement these
- Establish mechanisms for collaboration with researchers that ensure that this can be a benefit to the Transition Initiatives involved, not an unwelcome drain of time and energy, or an opportunity that the Transition Initiative lacks the resources to take up
- Improving baseline information on the activities of individual Transition Initiatives, at the time reliant on self-reporting to the projects database on the Transition Network website and consequently incomplete
- Initiate specific projects to devise methodologies for evaluating the impacts of Transition Initiatives' activities on resilience in their communities

In my role as coordinator of the proposal development process, I took this as the basis of a **design brief**: to develop a realistic proposal that translates these priorities into the aims, objectives, activities and intended outcomes of an academic research project.

3.2 Boundaries

The main limiting factor was that research collaborations are often problematic. The main reason for this is that it can be hard to find common ground between the interests, institutional requirements and/or capacities of researchers and research students and the interests, needs and capacities of Transition groups. This is exacerbated by the constraints of the time and energy of both paid staff at Transition Network and (mostly) volunteers in Transition groups. The amount of staff time that Transition Network has available to field enquiries from researchers is very limited compared to the volume of the task. Transition groups face similar, and often greater, constraints on their time and energy; many also lack the capacity to evaluate potential collaborations with researchers. As a result, Transition groups often experience their interactions with academic research as one-way drains on their time and energy, rather than edges where mutually beneficial interchange takes place.

Other key limiting factors were:

- The lack of any overview of either research on Transition to date, or of the experiences of Transition groups involved in research.
- Researchers and research students approaching Transition Network and Transition groups often seem unaware of relevant work on the ethics and process of community-based collaborative research. Although Transition Network has published protocols for researchers, these are based on common sense rather than a familiarity with this literature.
- Community groups and organisations (including Transition initiatives and Transition Network) are not directly eligible to receive funding from major academic funders, and can only do so under limited conditions and in partnership with researchers at a university or other recognised academic institution

3.3 Resources

Michelle's initial proposal, right at the start of the process, was based having identified a potential resource that could transform the key constraint into an opportunity: a call for research funding applications based on collaborations between researchers and community groups from the *Connected Communities* programme of the *Arts and Humanities Research Council*, one of the UK government's funding bodies for academic research. The Connected Communities programme had also created a network of researchers interested and experienced in working with community groups.

We assembled the core academic team from researchers who had been involved in previous projects in the programme, which in addition was a requirement of the funding call we were considering (see Section 3.4 Analysis). In addition to Michelle, Rhys, Ute and me, we invited Rachel Pain and Hamish Fyfe, each of whom brought extensive knowledge of university-community partnerships in very different social and academic contexts.

The most relevant resources each team member contributed were as follows:

- Rhys and Ute proposed a survey of the experiences of Transition groups involved in research projects in the past, and of the researchers who had worked with them, as a baseline study that would examine these relationships in more depth. Their background in Peace Studies, including the analysis and resolution of conflictive situations, could usefully inform efforts to negotiate potentially problematic relationships.
- Hamish agreed to contribute his experience of methodologies for making personal testimony more academically rigorous, improving the conduct and analysis of interviews.
- Rachel is a known expert in participatory action research and other collaborative methods that could inform the research protocols.
- Social-ecological resilience is one of my core areas of academic expertise.
- Michelle and I are both experienced organisers and facilitators within our Transition groups and had worked across the boundary of Transition and research, and been active in previous efforts to build active communities in this area.

Key resources offered by Transition Network staff included:

- Ben had been mostly responsible for fielding queries from researchers and liaising with Transition groups.
- Nicola was Transition Network's fundraising manager, and aware of funders' requirements in relation to monitoring and evaluation.
- Naresh is Training Coordinator at Transition Network, and so familiar with typical training needs and interested in improving the ways in which training programmes can be informed by relevant academic knowledge.

Other key resources on which we could draw were:

- Research groups dedicated to community-based action – notably the *Centre for Social Justice and Community Action* at Durham University, of which Rachel was a director and which became my main academic base for the project.
- Researchers already interested in and/or active on Transition, for which there was a dedicated email list.
- Academic literatures on community-university collaboration. This included reports from Connected Communities scoping studies, including those in which Michelle, I, and others in our team had been

involved, and a broader literature addressing ethics, politics, protocols, methodologies and other key subject areas.

- Transition’s engagement and/or affinity with certain academic fields, notably *resilience theory* and the *ecology* and *human ecology* behind permaculture.

3.4 Evaluation

Conversations among the research team and ongoing discussions with Transition Network led us to identify three main **functions** that our project proposal would address, along with **systems and elements** to support each of these and allocations of team members to lead responsibility for each (Table 1).

Function	System	Elements	Personnel
Better understand relationships between Transition and academic research	A study of previous experiences of Transition research	Interviews with Transition groups Interviews with researchers Opportunities to discuss and reflect upon findings	Rhys, Ute, Hamish; Ben supporting
Translate learning from experience into guidelines for research collaboration	Creation of research protocols	Review of previous research on community-university collaborations Consideration of relevant thinking from Transition, permaculture and relevant areas of community development. Input from users, especially researchers and Transition activists.	Rachel, Tom, Ben
Scope out creation of M&E (monitoring and evaluation) tools for Transition groups	Assessment of existing approaches and methods and creation of an action plan	Review of approaches to defining, characterised and assessing resilience. Survey of relevant M&E tools. Adaptation of findings to needs of Transition. Mobilisation of relevant (academic) expertise and support to move forwards.	Nicola, Naresh, Tom supporting

Table 1: Functions, Systems, Elements

Each of these systems would become a Work Package (WP) in the final proposal and project. Associated elements became tasks within the respective WPs.

A basic **input-output analysis**, summarised in Table 2 below, highlighted the key offers and needs of each of the three major entities (or classes of entities) in the proposed project:

- AHRC as mooted funder, representing the wider research funding sector and in particular its Connected Communities programme, to which we planned to apply
- Transition Network and the wider network of local Transition groups
- The academic researchers involved, including me, their institutions and research networks

Entity	Inputs	Outputs
AHRC	New knowledge on communities and community-based research Demonstrated scientific value and societal impact of funded projects	Funds Credibility Visibility
Transition Network	Funds to support staff input Reputation as organisation and network Capacity to undertake and support M&E Capacity to support effective collaborations with researchers	Knowledge of and access to network Credibility, reputation and status Understanding of Transition in practice Understanding of needs of network and initiatives
Researchers	Grant income Issues and questions for research Access to Transition initiatives	Technical knowledge of scientific fields New analyses and recommendations Institutional access to AHRC funding

Table 2: Input-Output Analysis

Figure 2 represents the key flows of resources (funds, knowledge/information, and reputation or status) among these three major entities/classes. This simplified diagram does not include the wider flows to, from and within the wider networks in which each is embedded. It also omits edge effects such as the involvement

of academic researchers in Transition groups and close connections between some Transition initiatives and local universities. Between them, the flows represented by the arrows, and those implied by connections to wider networks, allowed the project to mobilise all the resources identified earlier.

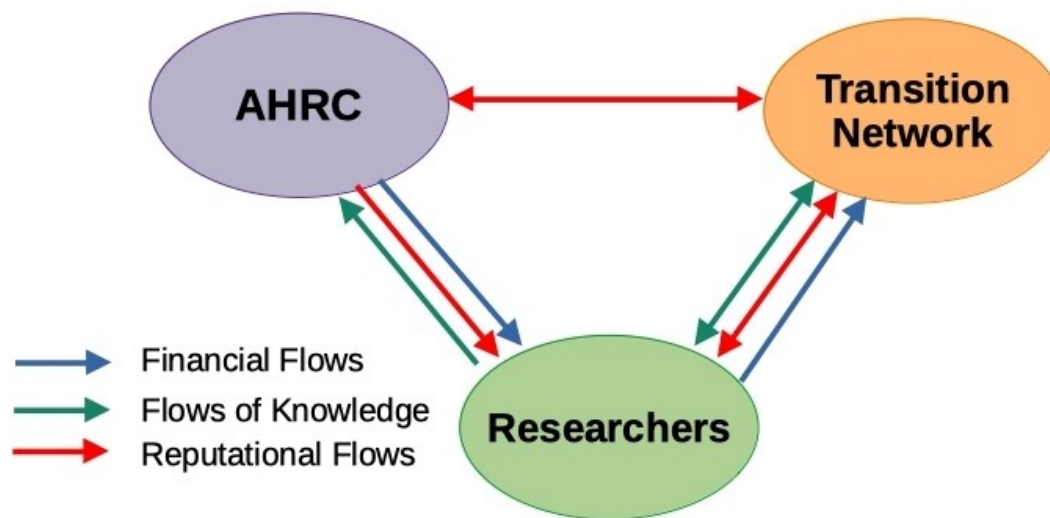


Figure 2: Key Resource Flows

The interactions depicted in Figure 2 also provide an *edge* between the Transition movement and academic research that can address the key limiting factors addressed in the boundaries section. Collaboration with researchers made AHRC funds accessible to Transition Network, and through them to the wider Transition movement. Researchers also brought competences and experiences that help to make relevant fields of research, including the knowledge being developed in the AHRC's Connected Communities Programme, more accessible to the Transition movement, and the for those fields of knowledge to engage with the knowledge, experiences and perspectives of practitioners in Transition.

This having becoming clear, we agreed to proceed with preparation of an application to the funding call. The call itself introduced several new constraints: a fixed deadline, upper limits of either £30,000 or £100,000 on overall project budgets, and a requirement that teams include researchers from projects in the previous phase of Connected Communities, that had consisted of several dozen scoping studies. All of these proved to be helpful limits: the time limit ensured we acted rapidly and kept momentum from the meetings and subsequent planning, the budgetary limit and intellectual constraints obliged us to focus our ideas and keep our planned activities realistic, and all of the researchers involved had some direct or indirect connection with previous projects.

As we developed the proposal, it became clear that its scale suited the call for larger proposals. Even at this level, the maximum available financial resource – which determined the amount of time people could dedicate to the project – was insufficient fully to address all of the aims and meet all of the objectives. Rather than narrow the scope of the study, we treated it as linked pilots in two main areas: research protocols and evaluation methods, each of these informed by the background study of Transition groups' experiences of research. The initial plan had been to run these sequentially: the experiences study informing the development of research protocols, and these protocols applied in the monitoring and evaluation study. In practice, the need to accommodate team members' other commitments led us to bring the third work package forward, so that it too informed the development of research protocols (an instance of the Holmgren principle *Creatively Respond to Change*).

Treating the project as pilots helped create mechanisms for involvement of the wider Transition community. Pilots would create an *edge* between this broader community and the project team, creating resources around which to mobilise people interested in being involved in their continuation as broader projects. These further projects would also provide opportunities to evaluate and tweak the resources developed here. Engagement with this broader community also helped clarify the position of Michelle, whose other commitments made it

difficult for her to take a major role in this project but who took an active role in cultivating this edge as one of the core coordinators of the *Transition Research Network*, which we were developing at the same time.

As another integrating mechanism, I proposed a *Pattern Language* as a format for the new research protocols (which was eventually implemented as Design 4). Pattern languages are integrative in several ways: of different types of knowledge and expertise, allowing more inclusive collaboration among groups with different backgrounds and interests, and as a tool familiar in Transition and permaculture as well as various academic fields.

3.5 Design

With the key elements of the project agreed, I employed a **logical framework analysis** to identify clear trajectories from aims and objectives to activities and intended outputs. In consultation with the rest of the project team, we assigned personnel and work days to each set of activities, in order to ensure feasibility within the constraints of the funding call (Table 3; 'TI' is an acronym for 'Transition Initiative').

Aims	Objectives	Activities	Outputs	Staffing
1. Document, reflect on, and systematise learning from experiences of transition initiatives and academics previously involved in research collaborations, identifying best practice, key dilemmas and questions for further consideration.	1a. To identify 5 case studies of research involving transition initiatives. For each of these case studies, to create opportunities for researchers and people involved in transition initiatives that have been the subject of research to reflect on the research experience, including the planning of research, research methodologies, relationships between researchers and researched, and the outcomes of research	Identify five case studies of research involving transition initiatives	Academic paper for publication in a peer-reviewed journal	UK(9 days) RK (9) TH (3) BB (3) RP (2)
		Carry out semi-structured qualitative interviews with the researchers involved in each case study, with people in the transition initiatives who are/have been directly involved in the research, and with other people who participate in the transition initiative but are/were not involved in the research	An accessible report for a more general audience, including community-based initiatives	
	1b. Produce a systematic overview of learning from the case studies, identifying best practice in research collaboration, key dilemmas that have arisen and how they have been approached, and questions that need further consideration			
2. To build on the above in order to improve existing protocols for liaising with academic researchers, vetting potential projects and agreeing terms of collaboration, and the TN's capacity to implement these	2. Hosted a two-day workshop for 20 participants from the transition network, the case study transition initiatives, and the researchers, with the purpose of enabling honest dialogue about the findings and the development of guiding principles for effective collaboration between academic researchers and transition initiatives		Improved understanding among TN staff of academic research and how to engage with academics	BB (6) TH (6) RP (1) RK(1) UK(1) NH (1) NG (1) AP (1)
			Refined/updated protocols for researchers seeking to work with TN or TIs	
3. Establish mechanisms for collaboration with researchers that ensure that this can be a benefit to the TIs involved, not an unwelcome drain of time and energy, or an opportunity that	3a. Identify existing relevant methodologies and protocols for research collaborations	Review of relevant outputs from CC scoping phase to identify existing relevant knowledge on working with communities (Methodologies, ethics, pitfalls, potentials)	Synthesis/ working paper on existing 'best practice' for community collaborations	TH (18) BB (21) RP (3) RK(3) UK(3)
	3b. Devise Transition-specific research	Distill, adapt and advance relevant	Pattern language that can be	

Aims	Objectives	Activities	Outputs	Staffing
the TI does not have the resources to take up	methodologies and/or protocols	information from synthesis of existing practices, supplemented by personal experience	adapted to a range of specific contexts	
4. Improve TN capacity to document and communicate about activities of individual TIs	4a. Extend TN's baseline information on the activities of individual TIs	Action research experimenting with methods to improve reporting/harvesting of information based	Additions to and refinements of existing project database on TN website	AP (12) TH (8) UK (6) RP(1)
	4b. Improve methodologies for gathering and collating data on the activities of individual TIs	Co-design proposal for research based on appropriate methodologies	Proposal for further research involving TN staff and members of research network	
5. Develop TN capacity to evaluate the impacts of activities of TIs on resilience in their communities	5a. Devise effective methodologies for collaborative evaluation of community resilience	Identify any relevant methods/precedents from previous literature surveys	Working paper on best practice	TH (17) NH (24) NG (24) RP(2)
		Co-design methodologies for evaluation and develop a research proposal for testing these	Proposal for further research involving TN staff and members of research network	
Project Coordination		Team Meetings	RP (3), UK (3), RK (3), TH (3), BB (3), NH (1), NG(1), AP (1)	
<p>Research Team RP (Rachel Pain, Durham University, Principal Investigator): 12 days UK/RK (Ute/Rhys Kelly, Bradford University, Co-Investigator/researcher): 35 days TH (Thomas Henfrey, Durham University, Co-Investigator /researcher): 55 days BB (Ben Brangwyn, Transition Network, Counterpart and Coordinator): 33 days NH (Nicola Hillary, Transition Network, Participant in WP2, WP3): 28 days NG (Naresh Giangrande, Transition Network, Participant in WP3): 28 days AP (Amber Ponton, Transition Network, Participant in WP2): 14 days</p> <p>Academic Collaborators Jenny Pearce (Bradford University) Hamish Fyfe (Cardiff University) Michelle Bastian (Manchester University)</p>				

Table 3: Implementation Plan

3.6 Implementation

The agreed implementation plan became the basis of a **funding application**, submitted to the AHRC in September 2011 (Appendix 1). We received confirmation of its success in December 2011. The research project initially ran for one year from February 2012. In December 2012 we submitted an application for follow-on funding (Appendix 2) for dissemination materials and activities, with the additional input of Jody Boenhert, a founder of Transition Town Brixton and researcher in environmental design, on design aspects. This was approved in January 2013, and supported development of several further written outputs.

Implementation of the project addressed the main initial aims, and went beyond them. Ute and Rhys Kelly undertook a study of experiences of Transition groups involved in research and wrote an internal report for the project team. Alongside this, Transition Network conducted a general survey of all Transition initiatives in the UK, which helped inform the reorganisation of Transition Network's mechanisms for communicating with, coordinating and supporting initiatives. Findings fed into development of new research protocols captured in the [Transition Research Pattern Language](#) (documented here as Design 4) and later summarised in the [Transition Research Primer](#), released as part of the follow-on project. Review of the wider literature led to a series of working papers on Transition, Resilience and Theory of Change (which later became the basis of a chapter in the book "[Resilience, Community Action and Societal Transformation](#)"). This material was also the basis of conversations at a [workshop](#) on Monitoring and Evaluation for Transition. This workshop directly led to collaboration between Transition Network and a team of researchers from Oxford University, who together

developed and secured funding for two new projects on monitoring and evaluation for Transition and other community groups, a total of 18 months in length and also involving Low Carbon Communities Network.

3.7 Maintenance

Ongoing delivery of the project produced multiple side-yields, which were widely dispersed, and stimulated a wide range of activity beyond the project itself. Side-yields included allocation of funding (which was very widely spread), improvement of individual skills and organisational capacities, development of new contacts and networks through workshops and meetings, initiation of new research projects involving these contacts, and production of a large number of written outputs (many of them consolidated on the [project page](#) on the Transition Research Network website). Maintenance and harvest were thus very closely linked.

Key yields arising from ongoing maintenance of the project were:

- My part-time paid role on the project was my main source of income from the beginning of 2012 to the middle of 2013. It enabled me to work close to full-time as a Transition researcher, and supported my own transition from dependency on university employment to my current more autonomous poly-livelihood that combined freelance work with developing a role within the Schumacher Institute.
- Collaborators in established academic positions achieved the credit for being part of a successful application for Research Council funding, which is an important criterion for professional success. All also have an active interest in Transition and welcomed the opportunity to make a professional contribution. The Centre for Social Justice and Community Action at Durham University benefited in several ways: from the funding award itself, from the association with Transition Network, and from the opportunity to extend the edges of its work into a new field in ways consistent with its radical approach to research.
- A substantial proportion of the project grant went directly to Transition Network, supporting employment of both established and freelance staff and allowing staff to dedicate significant time to working at the interface between Transition and academic research. This demonstrated Transition Network's ability to collaborate productively with academics, and hence its credibility with research funders (Transition Network directly received and administered the follow-up grant, very exceptional for Research Council funding). It greatly strengthened Transition Network's capacity to engage with researchers and develop new research projects, and has led to a number of more ambitious further projects.
- Transition initiatives contributing to the study (whose members participated in interviews and attended major workshops) received cash donations of £300 as appreciation for their time. Feedback from them indicated that these were very useful additions to the unallocated funds of community groups working on small budgets.
- We contracted paid technical support from the creators of the WAGN platform we used for our online pattern language (Design 4). This helped support this open source facility, and established a relationship with a community of US-based transitioners and other activists connected with the development team, including the creators of the Groupworks pattern language. Several of these have joined the development team.
- Meetings and workshops held as part of the research brought together a wide range of researchers interested in and committed to Transition, leading to a number of concrete further collaborations and establishing the potential for many more.
- The follow-on grant awarded during early 2013 supported attendance at the AHRC's Connected Communities Showcase event, where we launched the Transition Research Primer and presented posters on each project work package: [Experiences of Transition Groups](#) (WP1), [Pattern Language](#) (WP2), [Monitoring and Evaluation](#) (WP3), along with [Theory of Change workshops](#) co-hosted with local initiatives in Lewes and Brixton (June/July 2013) (with Jody Boehert) and a Transition Network [learning day on community resilience](#) (July 2013).
- Alongside the project itself, a number of meetings and workshops further explored and developed the edge between Transition and research. These included a 40-person ['Research Permeability'](#) held in Plymouth in February 2012 and led to establishment of the [Transition Research Network](#), which for several years afterwards maintained a website, collection of resources for Transition research, and online bibliography of academic research on Transition.
- Transition Network, along with Global Ecovillage Network and researchers from several European countries developed the [TREE](#) research project (Transition: Reporting, Engagement and Empowerment). Although our first bid for EU funding to support this was not successful, our work

created a dynamic network that became the core of the Knowledge and Learning pillar in the ECOLISE meta-network of European community-led initiatives on climate change and sustainability, of which TN, GEN-Europe, GEN-International, the Permaculture Association and the Schumacher Institute were all founding members.

4. Evaluation

As a first exercise in systematically applying permaculture to the design of a formal academic research project, this was a remarkable success. The design achieved its aims well, and provided a large number of additional direct yields. Its learnings and outputs from continue to be relevant to this date. Attribution is, of course difficult - it is impossible to say to what degree the application of permaculture was responsible for the successes of the project, whether in any respect it was a limiting influence, and how the project would have been without it. Anecdotally, my own effectiveness working at the boundary of research and practice has improved immeasurably since I began working in this way. In this case, my estimation is that it brought to the project a distinctive quality that directly helped align the demands of an academic funder with the interests of Transition Network.

I believe that the use of a linear design process, namely OBREDIM, was an important success factor here. While more flexible methods like the design web and pattern language are often considered to be more appropriate for social contexts, in this case the linear framework was a very useful way to translate a messy, complex and open-ended situation into a discrete, time-bounded project that could be communicated to a funder and delivered in a way that met their expectations.

In the bigger picture, this project formed a single iteration in a wider process of ongoing learning, partly captured in the related designs (2, 4 and 5). This shows the value of modularity in working towards ambitious aims that are not necessarily well-defined, which for me relates closely to the *Small and Slow Solutions* design principle. Each well-designed, well-delivered action potentially provides a platform for more extensive further actions that build upon this. The long-term result is layers of emergent complexity, each supported by those that underly it, which minimises the risk of system-wide collapse in the event of unforeseen or unintended outcomes at any one step.

Something I think could have improved this design would have been to make the design process more explicit, and more open to direct engagement of collaborators. While project development was collaborative, I was the only one approaching it explicitly from a permaculture design point of view. In addition, the principles on which I was working (for example, the insights and recommendations of Design 2, and the permaculture principles themselves) were not made available to other collaborators in forms they could draw on themselves. If this opportunity for deeper co-design had been taken, it could have strengthened the coherence of the project, broadened and deepened outcomes, and increased the likelihood of others using similar methods in the future. To some extent the formal publication of findings rectifies this, and the completion and release of this portfolio will add to that. Insights were also part of the curriculum in the first *Permaculture Research Design Course*, held in Portugal in 2017. This work would benefit from further dissemination of this kind, including in the permaculture diploma programme.

Evaluation in relation to the **Holmgren design principles** indicates the following key points:

Accept Self-Regulation and Apply Feedback

The project responded to feedback from Transition groups about the problems they had experienced interacting with researchers.

Use Edges and Value the Marginal

The project was an experiment in cultivating and extending the edge between Transition and academic research. It came about because of the prior involvement of core members of the research team (Michelle Bastian and me) in both Transition and academia – a location as marginal in the world of Transition as Transition is in academic research - and our commitment and that of everyone else involved in working across this edge.

Integrate rather than segregate

Established researchers and Transition Network staff collaborated on an equal footing in the design and implementation of the project. More broadly, collaboration drew extensively on existing networks and

relationships, and actively built new connections, many of which have crystallised into formal collaborations that continue this work.

Use and value diversity

The involvement of a wide range of people, from diverse backgrounds and (among researchers) disciplinary orientations, was key to the success of the project itself and the establishment of ongoing work.

Stacking

This diversity was key to the economy of the project, which allowed it to achieve a remarkable range of outputs given the size of the grant (total funding was almost exactly £100,000 – which seems like a lot of money but is a small grant in academic terms).

Obtain a Yield

The list of outputs highlights the outstanding feature of this project: how extensive use of stacking allowed yields that are numerous, diverse, and very wide-ranging (On a smaller scale, and less extensively, this was also prominent in the Durham Local Food project – Design 2). Also relevant is the extent to which securing funding depended on opportunism: the timing of the project's conception matched nicely with the availability of Connected Communities funding (Michelle's awareness of this, incidentally, was another outcome of her edge location), and many of the most important yields were supported by the follow-up grant, whose availability was also timely... 'make hay while the sun shines'.

Capture and store energy

The less tangible yields associated with networking, community building, and development of personal skills and organisational capacity, are considerable and the benefits of these ongoing.

In relation to the **permaculture ethics**, the strongest ethic represented is *Fair Shares*, which the project addresses on multiple levels. The budget is shared widely across the project team, including a substantial proportion directly allocated to Transition Network and smaller sums supporting participation of local Transition initiatives, who would not be directly eligible for AHRC funding. In terms of subject matter, the project directly examines imbalances in power, resources and agency arising in research collaborations and the consequences of these, and seeks to provide remedies. In doing so, it seeks to support more inclusive and equitable approaches to research, in which community groups can have an equal say in the aims and conduct of research projects and receive adequate resources to support their work. The platform provided by association with a high-profile state funding agency and research programme, including attendance at the AHRC showcase, along with the production of written outputs, provides scope to influence research agendas and cultures in the longer term. In terms of *People Care*, the project directly supported the livelihoods of several people (all those without established academic positions, including me), and provided professional credit to those already holding tenured academic jobs. In this way, it gave everyone involved an opportunity to do work they were interested in and passionate about. Project implementation also prioritised people care, avoiding overloading individuals with excessive work and ensuring everyone was well looked after at project meetings. Contributions to *Earth Care* were mostly indirect, by supporting the commitment of the Transition Network to local action on sustainability. We prioritised local sourcing of food and use of community venues for all project meetings, and took steps to keep travel overland and to a minimum (though our pattern language workshop did involve three international participants who had flown from Portugal and Sweden).

5. Reflection

This was the first time I had intentionally applied permaculture principles in the design and execution of an academic research project. To the extent it followed on from the Durham Local Food Project, this demonstrated to me the power of incremental design: successful execution of a relatively small and bounded project and systematic documentation of and reflection on the learning achieved was the foundation of a larger and more ambitious project. This project, in turn, is leading on to bigger things. My personal learning has been considerable, and much of it attributable to my use of permaculture as a framework for project management and to support my own role in coordination of the project overall and execution of various key tasks. Overall, the use of a design framework greatly helped with rationalising the very complicated challenge of integrating the main aims identified by Transition Network, the funding criteria, and the interests and capacities of different participants into a coherent research proposal.

Additional reflection following revision, Sept 2021

This was the only diploma design on which I had to make substantial changes following assessment. I realised that this was because I had focused on the use of a design framework and successful outcomes of the project, and so not done a good job of explaining which design tools I used and how they supported decision-making and planning at each stage. Having my attention drawn to this by the assessment, and having to correct it, was a useful learning experience in reporting design work appropriately. Coming back to the design after so many years, and much later in my diploma, was also a great indication of how much my design work has improved over time.

In revising, I also realised that material could be better allocated across the Evaluation, Design, Implementation and Maintenance stages. Better delineating Implementation and Maintenance helped provide clarity concerning which yields directly contributed to the original design aims and which went beyond them, which was a question raised during assessment. This helped me realise that, in general, Maintenance tends to be a weak point in much of my design work, both reporting and the design itself, and an area I can work to improve in future.

I also realised how much the design would have benefitted from use of the Principles and Ethics at earlier stages, not just as a retrospective evaluation. In particular, it built on explicit use of the Holmgren principles in Design 2, and could have introduced this right at the outset, as well as perhaps coming back to it at different points. It's clear that the ethics and principles were on my mind throughout the design process, but the write-up doesn't reflect that and would have been stronger if it were explicit. I've also learned that making use of the ethics and principles explicit, and writing it down, helps make their application much more effective, and nowadays take more care to do this, as well as consider at what points it makes most sense to introduce them in any particular design. In this case it could link with my comments about more participation: some group reflection on the relevance of the ethics and principles to this project could have been excellent ways to invite fuller participation in the design. This could have taken place as a very early step and been revisited at one or two key points in the process. This is a useful lesson for future designs of this nature.