Design for Communication: a collaborative practice to amplify qualities of sustainability.

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Abstract

The role of communication design in social innovation for sustainability is the central subject of this thesis. This significant yet under-explored area is the focus of study through practice-led design research. Two current paradigms underpin this study. First, the definition of communication design as an expanded practice that goes beyond visual communication to include communicating through interaction and experiences, as a practice that facilitates complex social exchange and constructs meaning in the world, whether by expert or non-expert designers. Second, the recent discussion in the area of design for sustainability focusing on the 'qualities' displayed by initiatives of social-environmental purpose. These qualities are perceivable and cultivated through the interaction and experience of those who take part. The conjunction of these two paradigms locate the following research questions: What are the distinct roles of communication design practice in social innovation for sustainability? How can communication design practice expand on the social and relational nature of these initiatives? How might the *qualities of sustainability* be cultivated through the process and products of communication design?

These questions were pursued through practice-led research in the sub-context of sustainable food initiatives as an established and growing area of social innovation. The methodology applied was iterative and collaborative, working with 17 sustainable food initiatives. Through a series of 6 workshops a practical tool was developed and tested to support these initiatives to co-create communication design that amplifies their qualities that characterise the sustainability of their activities, using their existing assets. The research contributes to the discipline of communication design and the field of social innovation for sustainability, with a new tool and context for collaborative practice titled *communications assembly*.

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I dedicate the most extensive body completed to date to my Family, my Father Jorge, my Mother Teresa and my Brother Antonio. The foundation without which no act of creation would ever be possible to endure.

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Contents of Thesis

Abstract 5
Acknowledgements 7
Copyright 9
Prologue: A space for discussion, a space for transition. 21

1 - Introduction 23
1.1. Introduction 25
1.2. Research objectives 26
1.3. Research aims 26
1.4. Definitions 26
1.4.1 Expanded practice of communication design 26
1.4.2 Qualities of Sustainability 27
1.4.3 Design for communication 27
1.4.4 Communications assembly 27
1.5. Thesis structure 27
1.5.1 Chapter 1 – Introduction to research 28
1.5.2 Chapter 2 - Discover stage: contextual & literature review 28
1.5.3 Chapter 3 - Define stage: methodology & discovery tool 29
1.5.4 Chapter 4 - Develop stage: iterative practice 29
1.5.5 Chapter 5 - Deliver stage: retrospective evaluation & research deliverables 29
1.5.6 Thesis volume II – Documentation of practice 29

2 - Discover stage: contextual review 31
2.1. Introduction to the Discover stage 33
2.2. Literature review: communication design theoretical context 33
2.2.1 Communication design as an expanded field of practice 33
2.2.2 Historical context in relation to sustainability and social change 34
2.2.3 Section summary and reflection 36
2.3. Literature review: design for social innovation and sustainability 37
2.4. Emerging sustainability frameworks 38
2.4.1 Analysis: the qualities of sustainability 39
2.4.2 Section summary and reflection 41
2.5. Review of contemporary practice: communication design for sustainability 41
2.5.1 Mapping of communication design practice (secondary data) 42
2.5.2 Conversations with communication designers (primary data) 44
2.5.3 Analysis: the communication strategies 46
2.5.4 Review of methods and tools for collaborative practice 47
2.6. Conclusion 49

3 - Define stage: methodology and discovery tool 51
3.1. Introduction to the Define stage 53
3.2. Context for practice: collaboration with sustainable food initiatives 53
3.3. Methodology theoretical framework 54
3.4. Collaborative practice of communication design 55
3.4.1 Embracing diffused design 55
3.4.2 Responsive design approach 56
3.4.3 Reflexivity 56
3.5. Research process: double-diamond model with iteration loop 58
3.5.1 Discover stage 58
3.5.2 Define stage 58

3.5.3 Develop stage (iteration loop) 58
3.5.4 Iteration loop (re)develop: design the workshop tool 59
3.5.5 Iteration loop (re)deliver: design workshop process 60
3.5.6 Iteration loop (re)discover: carry out workshop 61
3.5.7 Iteration loop (re)define: analyse results 61
3.5.7.1. Informative evaluation interviews 61
3.5.7.2. Design of interview 62
3.5.7.3. Interview at end of workshop 62
3.5.7.4. Interview post workshop (6-8 weeks after) 62
3.5.8 Deliver stage - retrospective analysis framework 63
3.5.9 Evaluation of design impact 64
3.6. Selection of participants 64
3.7. Ethical considerations 65
3.8. Fieldwork method: discovery tool 65
3.8.1 Design of the discovery tool 67
3.8.2 Outputs of discovery tool 69
3.8.3 Reflection on fieldwork method: discovery tool 72
3.8.4 Next steps in practice 73
3.9. Conclusion 74

4 - Develop stage: iterative workshop series 75
4.1. Introduction to the Define stage 77
4.2. Iterative practice (workshop series) 81
4.3. Workshop 1 "tell them like it is" 82
4.3.1 Design of tool and process (workshop 1) 82
4.3.2 Outputs (workshop 1) 84
4.3.3 Informative evaluation (workshop 1) 84
4.3.4 Input for next iteration 86
4.3.5 Reflection (workshop 1) 86
4.4. Workshop 2 "Narratives of positive impact" 89
4.4.1 Design of tool and process (workshop 2) 89
4.4.2 Outputs (workshop 2) 92
4.4.3 Informative evaluation (workshop 2) 93
4.4.3.1. Insights from end of workshop interview 93
4.4.3.2. Insights from post-workshop interview 94
4.4.4 Input for next iteration 95
4.4.5 Reflection (workshop 2) 95
4.5. Workshop 3 "Startup stories & positive impact" 98
4.5.1 Design of tool and process (workshop 3) 98
4.5.2 Outputs (workshop 3) 99
4.5.3 Informative evaluation (workshop 3) 100
4.5.3.1. Insights: end of workshop interviews 100
4.5.3.2. Insights: from post-workshop interviews 102
4.5.4 Input for next iteration 102
4.5.5 Reflection (workshop 3) 103
4.6. Workshop 4 "More stories of positive impact" 105
4.6.1 Design of tool and process (workshop 4) 105
4.6.2 Outputs (workshop 4) 106
4.6.3 Informative evaluation (workshop 4) 107
4.6.3.1. Insights: end of workshop interview 107

4.6.3.2. Insights: post- workshop interview 108
4.6.4 Input for next iteration 108
4.6.5 Reflection (workshop 4) 109
4.7. Workshop 5 "Designing for impact" 111
4.7.1 Design of tool and process (workshop 5) 112
4.7.2 Outputs (workshop 5) 112
4.7.3 Informative evaluation (workshop 5) 113
4.7.4 Insights: end of workshop interview 113
4.7.5 Insights: post- workshop interview 114
4.7.6 Input for next iteration 114
4.7.7 Reflection (workshop 5) 115
4.8. Workshop 6 "Stories of sustainability" 117
4.8.1 Design of tool and process (workshop 6) 117
4.8.2 Outputs (workshop 6) 119
4.8.3 Informative Evaluation (workshop 6) 119
4.8.3.1. Insights: end of workshop interview 120
4.8.4 Reflection (workshop 6) 121
4.9. General analysis of workshops outputs 124
4.10. Conclusion 127

5 - Deliver stage: retrospective evaluation & research outputs 133
5.1. Introduction to the Deliver stage 135
5.2. Retrospective analysis 136
5.3. Data collection through retrospective conversations 137
5.4. Retrospective conversation transcript analysis 137
5.4.1 Asset theme 1 - workshop outcomes drawing on people relations 138
5.4.2 Asset theme 2 - workshop outcomes drawing on community of interest between initiatives 138
5.4.3 Asset theme 3 - workshop outcomes drawing on designed "artefacts" 139
5.5. Summary of communication strategies identified in retrospective analysis 139
5.6. Summary of qualities of sustainability identified in retrospective analysis 140
5.7. Connection between qualities of sustainability and communication strategies 142
5.8. Towards evaluation of the design impact 144
5.9. Valuing design framework 144
5.10. Research outputs 146
5.10.1 Framework design for communication 146
5.10.2 Communications assembly (a tool and process) 148
5.10.3 Recommendations for setup of a communications assembly 148
5.10.4 Communications assembly tool (canvas and cards set) 149
5.11. Final discussion and contribution to knowledge 150
5.11.1 Review of research aim and methodology used 150
5.11.2 Synthesis of methods and outcomes 151
5.11.3 Research outputs and engagement of a wider community 151
5.11.4 Contribution of the research 152
5.11.5 Research limitations 153
5.11.6 Potential future development 153
References 155
Appendix 1: Comparison of existing methods & tools in relation to research approach 161
Appendix 2: Consent form for conversations with designers 165
Appendix 3: Extracts from conversational interviews with designers 166
Appendix 4: Participating sustainable food initiatives 168

Appendix 5: Consent form for workshop participants 169
Appendix 6: Reference list of informative evaluation interviews 170
Appendix 7: End of workshop interview questions 172
Appendix 8: Post workshop interview questions 173
Appendix 9: Sample - matrix used for analysis of practice 174
Appendix 10: Retrospective conversation questions 177
Appendix 11: Sample - analysis of retrospective conversations using software Atlas.ti 178
Appendix 12: Workshop 1 prompt cards 180
Appendix 13: Workshop 2 prompt cards 181
Appendix 14: Workshop 3 prompt cards 182
Appendix 15: Workshop 4 prompt cards 183
Appendix 16: Workshop 5 prompt cards 184
Appendix 17: Workshop 6 prompt cards 185
Appendix 18: Illustration of canvas iterations 186
Appendix 19: Workshop 1 retrospective analysis visualisations 188
Appendix 20: Workshop 2 retrospective analysis visualisations 190
Appendix 21: Workshop 3 retrospective analysis visualisations 192
Appendix 22: Workshop 4 retrospective analysis visualisations 194
Appendix 23: Workshop 5 retrospective analysis visualisations 196
Appendix 24: Workshop 6 retrospective analysis visualisations 198
Appendix 25: Published work 201

List of figures - Thesis

Figure 1-1 Practice-led communication design research landscape. 25

Figure 1-2 Thesis structure of chapters and the relation between content. 28

Figure 2-1 Research process model. Highlighting where discover stage is situated. 33

Figure 2-2 Sustainability frameworks from literature.

Figure 2-3 Qualities of sustainability analysis cluster 1. 40

Figure 2-4 Qualities of sustainability analysis cluster 2. 40

Figure 2-5 Qualities of sustainability analysis cluster 3. 40

Figure 2-6 Qualities of sustainability analysis cluster 4. 41

Figure 2-7 Mapping different approaches to communication design in practice. 43

Figure 2-8 Sample of communication design works that are participative. 44

Figure 2-9 Approaches to communicating sustainability and communication strategies identified. 45

Figure 2-10 Clustering of methods and tools mapped relevant to the research focus. 48

Figure 2-11 Mind map review of existing methods and tools. 48

Figure 2-12 Qualities of sustainability and communication strategies taken forward into practice. 50

Figure 3-1 Research process highlighting define stage. 53

Figure 3-2 Methodology: diagram shows theoretical frameworks and methods used at each stage of research. 57

Figure 3-3 Methodology: research process. Adapted from double-diamond model to include an iteration loop (workshop series). 59

Figure 3-4 Example of tools designed for Workshop 2, prompt cards, canvas and brief to participants. 60

Figure 3-5 Diagram illustrates timeframe where informative interviews take place. 62

Figure 3-7 Example of discovery tool in use with sustainable food initiative House of Svere. 66

Figure 3-6 Discovery Tool: the canvas layout. 66

Figure 3-8 Discovery Tool: the content of prompt cards. 68

Figure 3-9 Discovery tool outputs on the prompted qualities and strategies (drawn from literature). 69

Figure 3-10 Outputs of discovery tool: qualities and strategies extracted from sustainable food initiatives. 70

Figure 4-0 Time-line of workshops and evaluation interviews. 78

Figure 4-1 Summary of workshops attendance. 81

Figure 4-2 Plan for canvas in workshop 1. Indicates the plan for use. 82

Figure 4-3 Workshop 1 in progress. 83

Figure 4-4 Workshop 1 outputs. 84

Figure 4-5 Workshop 1 example of communication strategy prompt cards in use. 85

Figure 4-6 Workshop 1 example of outputs in post-its. 85

Figure 4-7 Workshop 1 outputs. 88

Figure 4-8 Plan for design of tool in workshop 2 based on double-diamond structure. 90

Figure 4-9 Plan for canvas in workshop 2. Indicates the plan for use. 90

Figure 4-10 Workshop 2 tool canvas and cards used. 90

Figure 4-11 Workshop 2 output card. 90

Figure 4-12 Workshop 2 in session. 91

Figure 4-13 Workshop 2 in progress at Second Home. 91

Figure 4-14 Workshop 2 communication challenge and outputs generated by the group. 92

Figure 4-15 Workshop 2 example of output card. 92

Figure 4-16 Workshop 2 example of qualities of sustainability card. 92

Figure 4-17 Workshop 2 end of workshop interview. 93

Figure 4-18 Workshop 2 output implemented by Rubies in the Rubble “street team” meet-up. 93

Figure 4-19 Workshop 2 outputs. 97
Figure 4-20 Workshop 3 envelopes containing instructions and prompt cards. 99
Figure 4-21 Workshop 3 sketch for canvas sketch. 99
Figure 4-22 Workshop 3 in process. 100
Figure 4-23 Workshop 3 communication challenge. 100
Figure 4-24 Workshop 3 complete set of outputs for Jack's Veg. 101
Figure 4-26 Workshop 3 set of outputs for Disco Soup. 101
Figure 4-25 Workshop 3 set of outputs for Growing Communities. 101
Figure 4-27 Workshop 3 outputs. 104
Figure 4-28 Workshop 4 in progress. 105
Figure 4-29 Workshop 4 canvas and card set used. 105
Figure 4-30 Workshop 4 communication challenge. 107
Figure 4-31 Workshop 4 - example of 'idea' card (output). 107
Figure 4-33 Workshop 4 complete output of participant The Golden Company. 107
Figure 4-32 Workshop 4 - example of communication challenge card. 107
Figure 4-34 Workshop 4 outputs. 110
Figure 4-35 Workshop 5 in progress at BAR Agency Lisbon. 111
Figure 4-36 Workshop 5 sketch for canvas design. 112
Figure 4-37 Workshop 5 tool prompt cards and canvas. 112
Figure 4-38 Overview of the communication challenges. 113
Figure 4-40 Workshop 5 set of output for Pede Salsa. 114
Figure 4-39 Workshop 5 set of output for Casal Hortelao. 114
Figure 4-41 Workshop 5 outputs. 116
Figure 4-42 Workshop 6 in progress. 118
Figure 4-43 Workshop 6 canvas design testing two new sections. 118
Figure 4-44 Workshop 6 tool (canvas and prompt cards set). 118
Figure 4-45 Workshop 6 example of communication challenge card. 120
Figure 4-47 Outputs for workshop 6. 120
Figure 4-48 Workshop 6 complete output of Lucid Selections. 120
Figure 4-46 Workshop 6 example of 'story' card. 120
Figure 4-49 Workshop 6 outputs. 123
Figure 4-50 The effect of workshop output for each sustainable food initiative. 125
Figure 4-51 Bloombox Salads workshop output and icons designed afterwards sent by participant. 126
Figure 4-52 Pede Salsa workshop output and image received of a pilot test implementing the output. 126
Figure 4-53 Vidacycle workshop output and the storytelling-experience dinner created post-workshop. 127
Figure 4-54 Lucid Selections film created after workshop output. 127
Figure 5-1 Where Deliver stage is situated in the research methodology. 136
Figure 5-2 Communication strategies identified in retrospective conversation interviews. 140
Figure 5-3 Qualities of sustainability identified in retrospective conversation interviews. 141
Figure 5-4 Cross-comparison of Retrospective Analysis with Valuing Design framework (Yee et al, 2015) 143
Figure 5-5 Final canvas used in communications assembly. 147
Figure 5-6 Final prompt cards used in communications assembly. 147

"I think, if you walk away from this being defensive, you walk away with nothing. If you keep an open mind, I think you walk away with something. From being more transparent to being more accountable, to upping your game on events and getting motivated to provide people a good experience, to defining what value is. I think those are the things I'm going to walk away with. Being able to define sustainable, local and organic without using those words but yet still conveying the strength of those messages."

Participant in Workshop 6

Prologue: A space for discussion, a space for transition.

> *"To build this kind of movement there needs to be space where people can share. A kind of arena for discussion." Participant in Workshop 2.*

The discipline of Design in the 21st century witnesses a cultural shift and transition in practices. This emerging shift can be understood as a response to current societal and environmental challenges and the search for more sustainable solutions (Margolin, 2007). However, it also results as a response to the abundant hyper-connectivity, the democratization of access to knowledge and to open-source tools that can empower creative innovation (Rifkin, 2014, 2009). The role of design in this transition shifts the focus from industrial to social practices, from product innovation to social innovation, which is reflected in the development of more collaborative and inclusive design methods. The complexity of social interactions, interconnectedness, and constant becoming are aspects we identify within this paradigm. As pointed out by author Josephine Green this current design paradigm can be described as a shift in worldviews; "Unlike the industrial era it is not about doing things to or for people but about doing things with people and by people themselves" (Green, 2013, p.2).

In this sense we might say communication design for social innovation and sustainability requires a melting of the solids. This expression borrowed from sociologist Zygmunt Bauman (2000) describes the approach of this thesis. The practice-led research melted the solids of communication design (the products of design) to emphasise that which is fluid, the processes.

> *"…The time of fluid modernity, are the bonds which interlock individual choices in collective projects and actions – the patterns of communication and co-ordination between individually conducted life policies on the one hand and political actions of human collectivities on the other." (Bauman, 2000, p.6)*

Design culture has been proven to be an essential facilitator in addressing complex social challenges. This has been evidenced through recent academic frameworks like Transition Design (Tonkinwise, 2015) and Design for Social Innovation and Sustainability (DESIS Network, 2015). Open design tools such as IDEO's Human-Centred Design Toolkits (2012, 2015), Hyper Island's Toolbox (2015), Service Design Tools (Roberta Tassi, 2009), or NESTA's DIY Toolbox (2014) have enabled a wider contribution from both expert designers and non-experts in designing towards sustainable and socially innovative solutions.

This thesis was motivated by an interest in the future of communication design and its pivotal role in this transition. The practice-led collaborative research explored an approach to communication design that is not (only) centred on the ends of design (the things that are solid like products and artefacts) but rather emphasises a focus on the means of design (the things that are fluid, such as processes of co-creation). If communication is a primary act for human understanding (Heller, 2014) then it must be carefully analysed through practice within an area which explicitly aims to engage, assemble, and support the formation of publics (Dewey, 1954) (DiSalvo, 2009) and communities (Wenger, 1998) to understand its potential contribution in a transition towards more mindful ways of living.

1 - Introduction

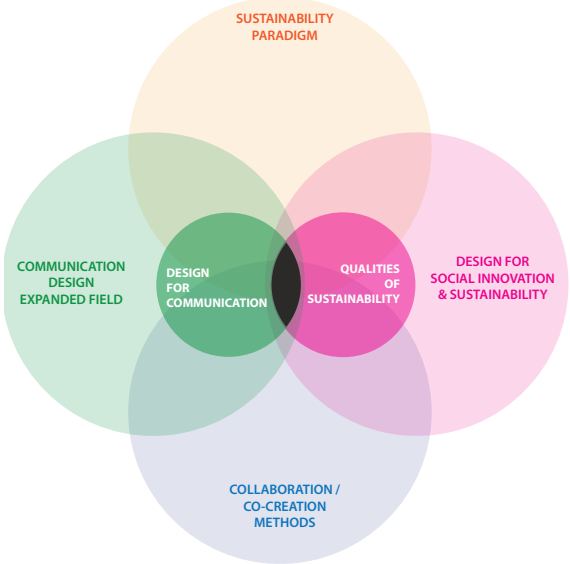
1.1. Introduction

Historically, the conjunction of communication design and sustainability can be seen to have had two main tracks: a focus on the sustainable production of communication design artefacts (ethical concerns for ecological production of print materials) and a focus on the social role of communication design messages (how to generate meaning that impacts upon the behaviour of publics and drives action). The second track is the historical foundation for this research.

This thesis is situated at the intersection of, the expanded field of communication design practice, design for social innovation and sustainability, collaborative methods, and an emerging paradigm of sustainability in design described in this research as *qualities of sustainability* (illustrated in Figure 1-1, p.25). The research questions (to be introduced in the following section) were pursued through practice-led research that applied an iterative and collaborative methodology. The practice is situated in the sub-context of sustainable food as example of an established and growing area of social innovation. In collaboration with 17 different sustainable food initiatives and through an iterative process of 6 workshops, a new tool and collaborative process titled *communications assembly* was developed and tested. The objective of this *communications assembly* is to provide the conditions for socially innovative initiatives to analyse and co-create their communications in relation to their qualities of sustainability, through a set of communication strategies, and using their existing assets. The outcomes of the research contribute to the discipline of communication design and the area design for social innovation and sustainability with this *communications assembly* and with the encompassing theoretical framework *design for communication*.

This first chapter explains the structure of the practice-led research and how it is presented in the thesis. It describes the research objectives and aims as well as the key terminology used. It then goes on to describe how the thesis structure echoes the process applies in practice, the 'double-diamond' design process (Design Council, 2005) with an emphasis on iteration (the workshop series).

Figure 1-1 Practice-led communication design research landscape.



1.2. Research objectives

First, to map existing communication design practices, so to assess the suitability of current approaches to amplify and communicate *qualities of sustainability.*

Second, to identify a new approach to communication design practice that empowers social innovation initiatives through more collaborative ways of communicating.

Third, to co-design and evaluate a framework for communication design practice in this area with a tool that can support this.

To achieve these objectives the thesis proposes the research questions: What are the distinct roles of communication design practice in social innovation for sustainability? How can communication design practice expand on the social and relational nature of these initiatives? How might the *qualities of sustainability* be cultivated through the process and products of communication design?

1.3. Research aims

a) Identify what communication design can do towards contributing to the emerging paradigm on qualities of sustainability.

b) Examine how communication design practice can support social innovation initiatives to articulate and communicate their own *qualities of sustainability*.

c) Explore how the process of communication design can become collaborative so to amplify the social dynamics of these initiatives and ways of operating.

d) Reflect on how communication design supports the formation of 'publics' and 'communities' towards more sustainable ways of living.

e) Evaluate the effectiveness of a collaborative communication design process and outcomes contemplating the iteration of a practical design tool as well as the engagement of participants and the outcomes of this process.

1.4. Definitions

In the research title and throughout the thesis a number of key terms are used. These terms are defined to clarify their intended meaning in this research.

1.4.1 Expanded practice of communication design

Currently communication design can be understood as an expanded field of practice[1]. Recent discourse in communication design covers a wide spectrum of practice that emphasises the importance of understanding the (communication) systems we are designing for, and with. This is evidenced by a body

1 The reference to the term "expanded" indicatively originated from Rosalind Krauss's seminal essay Sculpture in the Expanded Field (1979) where she described a landscape of practices that no longer fit into standardized modes.

of practice beyond the mode of visual communication, which rather uses multi-modal approaches (Yates and Price, 2015).

1.4.2 Qualities of Sustainability

This thesis adopts an interpretation of sustainability extracted from a set of recent frameworks for design that express a trend towards a qualitative perspective of sustainability rather than a quantitative perspective. These include the frameworks of Ben-Eli (2011), Manzini (2013) and Walker (2014) (discussed in section 2.4, p.38 which have brought about a new conversation focused on what this research defines as the qualities of sustainability. These can be explained as non-material compensations (meaningful things we can feel and experience) manifested through the activity itself, the people involved and the way it is operated.

1.4.3 Design for communication

As a theoretical outcome of the research, this is a framework for communication design practice in social innovation for sustainability. It proposes a new approach for communication design to foster the *qualities of sustainability* through a collaborative practice.

1.4.4 Communications assembly

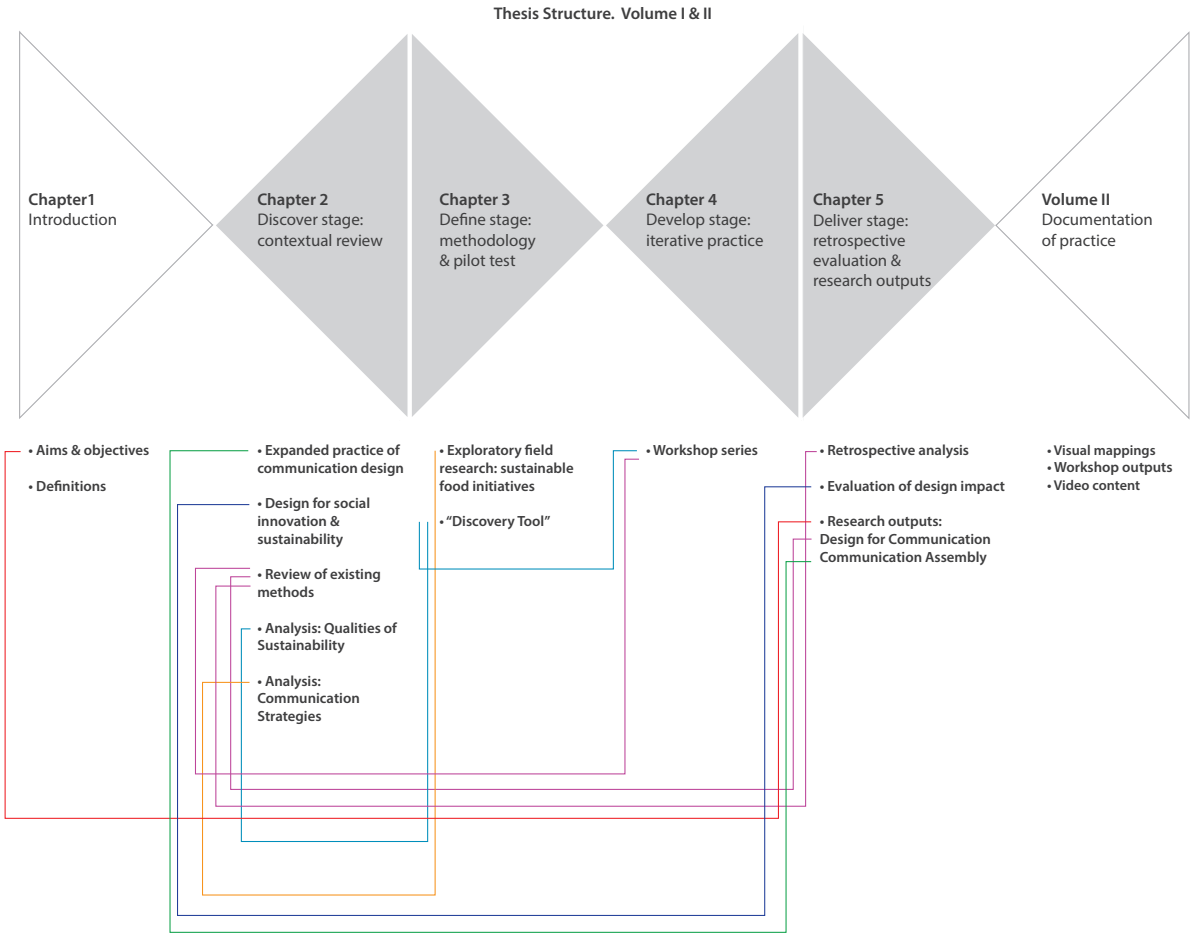
The *communications assembly* is a practical outcome of the research. Drawing on the notion of assembly proposed in Binder et al. (2011,p.1) the term describes the combination of a new tool for collaborative communication design practice, the method by which it is effectively applied, and the environmental context of its use. It was designed for initiatives in the area of social innovation and sustainability to be used in collaboration with a group of participants assembled from the general public. It provides these initiatives with a framework to analyse and develop their communications guided by prompts on *qualities of sustainability* and *communication strategies* and tool components (a canvas and set of prompt cards.)

1.5. Thesis structure

The thesis is structured according to the overarching research process in stages *Discover, Define, Develop, Deliver* based on the double-diamond design research model (Design Council, 2014). The connections between the thesis sections are illustrated in Figure 1-2, p.28.

Through the thesis several extracts from interviews with participating sustainable food initaitives are presented. These are references to extracts from interviews with participating representatives of sustainable food initiatives delivered throughout the workshop series linked to reflective evaluation (these are notated as x,y and a reference listing can be found in section Appendix 6: Reference list of informative evaluation interviews, p.170).

Figure 1-2 Thesis structure of chapters and the relation between content.



1.5.1 Chapter 1 – Introduction to research

Sets out the terms used throughout the research (section 1.4. Definitions, p.26) as well as research aims and objectives (section 1.2 Research aims).

1.5.2 Chapter 2 - Discover stage: contextual & literature review

Review of the theoretical context for communication design and design for social innovation and sustainability. It presents the analysis of an emerging paradigm in design for sustainability refered to in this thesis as *qualities of sustainability*. It also presents a review of communication design practice in the area of sustainability with particular attention to participatory and collaborative approaches. This analysis was done through desk research and primary data gathered through conversational semi-structured interviews with communication designers in the field. A review of current communication design practice was done and analysed in relation to the framework *qualities of sustainability (*section 2.4.1, p.39*)*. A review of methods and tools for collaborative practice was also done. The literature landscape demonstrated a range of guidelines for communication design practice but no methods or tools for communication design that specifically addresses *qualities of sustainability*. This revealed the gap in knowledge which this practice-led research adresses.

1.5.3 Chapter 3 - Define stage: methodology & discovery tool

Sets out the methodology and context for a collaborative practice with participants from sustainable food initiatives (section 3.4, p.55). It presents the research process model that is based on the double diamond, adapted to focus on the iteration of *communications assembly* and the final retrospective evaluation of practice (section 3.5, p.58). The fieldwork method *discovery tool* developed in this stage of research is also introduced as the first collaborative activity with a set of sustainable food initiatives (section 3.8, p.65). It served to extract primary data on approaches to communicating *qualities of sustainability* and what *communication strategies* participants use to do so. The outcomes of the discovery tool include a set of new *qualities of sustainability* and *communications strategies* extracted. Applying the discovery tool in this way also revealed findings that supported the tool itself to be developed through the iterative practice described in the next chapter.

1.5.4 Chapter 4 - Develop stage: iterative practice

The workshop series is presented (#1-6). This is the core of iterative practice applied towards the fulfillment of the research objectives: (I) to identify a new communication design approach that can support the participation of publics, (ii) to empower sustainable food initiatives through more collaborative ways of communicating. The six workshops are described individually including the design of the tool (canvas and prompt card set) and the method used for each iteration. The results described are based on the informative evaluation interviews conducted with representatives of sustainable food initaitives that participated in the workshops. These informed the input for iteration of the tool and method of use from one workshop to the next. A closing reflection on each workshop is also presented informed by the theorical context (section 4.2, p.81).

1.5.5 Chapter 5 - Deliver stage: retrospective evaluation & research deliverables

Presents the retrospective analysis of practice achieved through a final round of interviews with participants to understand the impact of workshop series over the longer term (section 5.2, p.136). To substantiate the retrospective analysis, a second evaluation was done through an established design impact framework 'valuing design' (section 5.8, p.144). It then introduces the two research outputs; the framework *design for communication* (section 5.10.1, p.146) and the *communications assembly,* derived from the workshop series (section 5.10.2, p.148). The chapter concludes with the contribution to knowledge and final discussion that emerges out of the research (section 5.11, p.150) including the research limitations and potential for development.

1.5.6 Thesis volume II – Documentation of practice

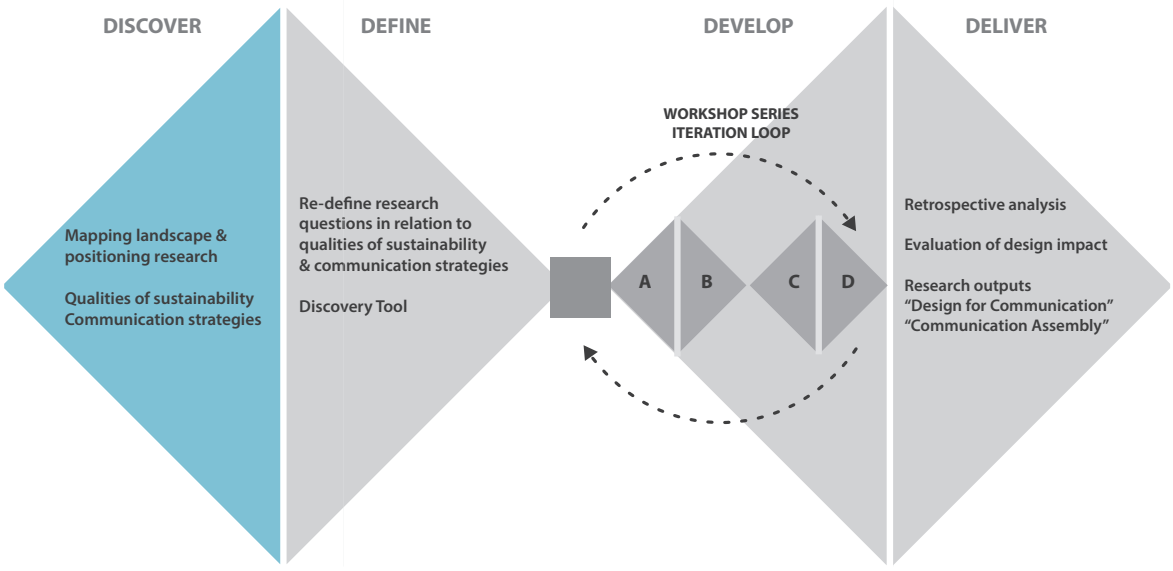
The second volume focuses on the documentation of practice, this includes imagery of visual mapping exercises and further workshop documentation.

2 - Discover stage: contextual review

2.1. Introduction to the Discover stage

This chapter introduces the theoretical landscape of the research as part of the *Discover stage* of research (refer to Figure 2-1, p.33). It presents a literature review of communication design as an expanded field of practice, a review of current practice, and the historical context of communication design in relation to sustainability. It then introduces a literature review of design for social innovation and sustainability and an analysis on the emerging paradigm referred to this research as the *qualities of sustainability*. Together this constitutes the theoretical context that underpins the practice-led research.

Figure 2-1 Research process model. Highlighting where discover stage is situated.
In the Develop stage, the sub-stages A, B, C, D represent the iterative loop of practice (to be explained in section 3.5, p.58).



2.2. Literature review: communication design theoretical context

The literature review in this study looked to inform the definition of communication design as an expanded field of practice, as well as the historical and contemporary context in relation to sustainability and social change including research in the area of design for social innovation.

2.2.1 Communication design as an expanded field of practice

Defining the discipline of communication design has proven to be challenging. Throughout literature the term is often found used interchangeably with visual communication design and graphic design. Currently, communication design can be understood as an expanded field of practice and this perspective is most relevant to the thesis. The use to the term "expanded" indicatively originated from Rosalind Krauss's seminal essay Sculpture in the Expanded Field (1979) where she described a landscape of sculpture practices that no longer fit into standardized modes and needed to be described in new vocabulary. In design studies, Buchanan (1985) in his well-known article Declaration by Design also discussed the wide scope of design practices. He did however propose a unifying thread between the

different areas of design, from product design to architecture, urban planning, and more obviously graphic design. This unifying thread is rhetoric, as argued by the author, communication is present in all design practice; "if one idea could be found central in design studies, it most likely would be communication." (Buchanan, 1985, p.4). Jorge Frascara is an essential point of reference for the term "communication design" set out in his book on communication design methods, principles and practices (2004). His perception of communication design bridged design studies, communication theory and visual communication (Frascara, 1997). Communication design seen as visual communication, had so far been explored as a practice that informs, leads publics and influences attitudes, whether market driven or socially driven (Frascara, 2004). However, more recent discourse in communication design covers a wider spectrum and further reflects on the importance of understanding the (communication) systems we are designing for, and with. Nemeth articulated this perspective of communication design as "a natural extension of the human need to make sense of the world" (2003, p.94). Meredith Davis also proposed that communication design should be concerned with evolving the knowledge in the way we communicate (2012) and that intervening in communication systems is what might drive real change. This understanding of communication design is clearly evidenced by a body of practices beyond the mode of visual communication, or use of specific media but rather use of multi-modal approaches (Yates and Price, 2015). The current spectrum of practice can be summarised by Ric Grefé's observation that in its most contemporary definition communication design has become experience design (2011). Arguably, making sense of the world (Nemeth, 2003, p.94) is developed through finding and evidencing patterns and through representing that which is apparently imperceptible, abstract, or immaterial in relationship to data and information. The contemporary discourse of communication design also acknowledges more complex communication systems that highlight a need to move beyond a one-way communication stream (i.e. designer to public) to enabling two-way communications streams (i.e. between actors and publics) via the introduction of more participatory methods for communication design (Armstrong, 2011). However loose the boundaries of practice are, they are still guided by the principle questions, who are we designing communications for, and what are we communicating?

2.2.2 Historical context in relation to sustainability and social change

The significant tipping point of (graphic) communication design in relation to social impact can be traced to the original publication of the First Things First Manifesto in 1964 drafted by British designer Ken Garland and signed by 22 prominent designers, typographers and teachers (Soar, 2002). This manifesto was a call to action on the social responsibility of communications in relation to commercial products and marketing. This action initiated debates on the value of graphic design and its influence in public(s) whether social, environmental, economic, cultural or ethical. Concurrently, another significant publication was Papanek's Design for the Real World originally in 1971 which called for social and environmental responsibility of product design solutions, a perspective that was later also reflected in (visual) communication design practices (Frascara, 1996) (Soar, 2002).

"design has become the most powerful tool with which man shapes his tools and environments

> *(and, by extension, society and himself). This demands high social and moral responsibility from the designer." (Papanek, p.ix).*

Communication design as a discipline has progressed greatly over the last two decades accompanying technology and consumer products that advanced practices such as branding, packaging design, print and digital graphics. However, not all communication designers have demonstrated interest in subscribing to practice focused on consumer products, which has led to a manifestation of practices to benefit society in other purposeful ways. It can be stated that the concept of sustainability in communication design has had two main tracks. The first track is a focus on the process of designed communication: the social role of the communications, both of the message and medium, its purpose and impact on publics. The second is a focus on the products of designed communication: developing more sustainable approaches to the making process of artefacts, for example, ecological graphic production. This is often referred to as green graphic design (Dougherty and Celery Design Collaborative, 2008) or sustainable communication design (Cadarso, 2010) which gained traction concurrently with the discipline of sustainable product design and innovation in materials. It focuses on resources, paper sourcing, innovations for print, and other methods to reduce environmental impact (Benson and Napier, 2012; Fine, 2016). The first track is historically the most relevant to this thesis and the foundation for research, as the reflection on the social role of communication design is the enabler of more participatory and collaborative methods of practice.

In 1992 designer Sheila de Bretteville stated, in an Eye Magazine interview the importance of including the public in the development of communications.

> *"the audience is not an audience; it's a co-participant with you (…) so if you bring skills, they bring their own knowledge and you are both agencies of knowledge – your knowledge as a designer, their knowledge as a person in need and the community as a group of people in need. It's a parallel construction rather than a top-down mechanism." (De Bretteville, 1992, p.10-16).*

In 1997 the symposium of visual communication "Design beyond Design: critical reflection and the practice of visual communication" was held in the Jan van Eyck Akademie in the Netherlands, initiated by designer and former director Jan van Toorn. It was a landmark in critical reflection and dissent of communication design practice as to how it forms and informs publics beyond a market-purpose, in the "hope to contribute to communication design as a reflexive public practice" (Toorn, 1998, p.13). Various influential practitioners participated in this conversation initiated for the unsettled objective of redefining the role of the profession, including Gui Bonsiepe, Rick Poynor and Sheila Levrant de Bretteville, who have since then challenged communication design practice and social purpose. This symposium was published as a book (Toorn, 1998) that is significant both as an early reference to works of communication design in a wider definition of practice beyond visual communication or graphic design and for addressing participation and inclusiveness of the public. It introduced the concept of reflexive practice in communication design, which continues to be a contemporary conversation in design methodology. Alongside this publication, the discussion on the process of communication design practice is most significantly found in Frascara's work on user-centred graphic design (1997). This was an early effort

in research to include the public in the development of the communication itself. These user-centred approaches were developed with the intention of democratising the construction of visual messages and a focus on its social role.

> *"There are enough market-driven designers to keep the economy going, but there is a great need for talented communicators in the social field..." (Frascara, 1997, p.31).*

The second edition of the First Things First Manifesto was published in 2000 by designer Max Bruinsma (First Things First, 2000) and re-iterated the initial principles written by Ken Garland in 1964. Since then, other manifestos and principles-for-practice have been published whether by design studios or independent designers evidencing a concern for the role of commercial practice and the aspiration of communication design to leverage social change (Mau, 2000) (Another Limited Rebellion, 2001) (Chochinov, 2007). The contributions of Steven Heller's (2003) manifesto for a 'citizen designer' as counter-practice to capitalist graphic culture, and Lucienne Roberts' (2006) exploration of what is 'good' in graphic design, among others, have been substantial contributions that stirred this conversation. Concurrently, the appearance of organisations like The Designers Accord[1] in 2007 gathered a community of practice concerned with social-environmental impact and generated discussion on the type of work designers should pursue and the principles they should apply in practice. In graphic design the notion of good practice has been significantly discussed from the perspective of the designer-client relationship, the focus on ethics and cultural impact.

2.2.3 Section summary and reflection

The literature review on communication design theory revealed that, the discipline can be understood as an expanded field of multimodal practices. Most relevant to the purpose of this thesis is the focus on the process of designed communication, the social role of the communications, both of the message and medium, its purpose and impact on publics. The importance of communication design doctoral research has been found to be centred on the need to generate new knowledge that supports a shift from designing communicative products to designing communicative experiences and processes that respond to the complexity of sustainability challenges (Davis, 2008).

The review of historical context in relation to sustainability and social innovation is crucial to the motivations of this thesis and revealed key findings. The current landscape in this area demonstrated a growing exploration of more human-centred approaches to communication design practice. However the intersection of communication design specifically with social innovation and sustainability was found to be an emerging area that reveals a small but promising body of recent research (Akama, 2008) (Boehnert, 2012) (Ali, 2014) (Choukeir, 2015). In this sense, this thesis is positioned alongside others that

1 "The Designers Accord was created in 2007 as a five-year project to mainstream sustainability in the global creative community. Formed as a distributed knowledge network of design firms, universities, and business leaders, the Designers Accord has helped advance the conversation around the ethics, practices, and responsibilities of the creative community." Designers Accord. Available from: http://www.designersaccord.org/ (Accessed 11 September 2015).

have recently explored the potential of new structures and methodologies for communication design research towards sustainability and social innovation (Davis, 2008) (Armstrong, 2011) (Bennett, 2012) (Pontis, 2012) (Poggenpohl, 2013). Another important common point found across the literature review was the progress in participatory approaches to communication design by involving stakeholders in practice, however mostly with an emphasis to produce graphic communication design. Another point identified was the interest in enabling non-designers to design themselves, evidencing the importance of empowerment of communities through communication design.

2.3. Literature review: design for social innovation and sustainability

Since Papanek's call to action in sustainable product design (1971) design practice across different disciplines has gained from the development of human-centred approaches that have led to a change of focus from the ends of design (products) to the means of design (process) (Margolin, V. & Margolin, S, 2002) (Shedroff, 2009) . In this sense, design practice towards social innovation and sustainability has increasingly become more socially inclusive as evidenced by the introduction of participatory and collaborative methods with diverse actors and publics, designing for product-service systems, and the inter-disciplinary application of service design tools. Currently, design for social innovation and sustainability requires collaborative processes as practice has led to an understanding of the importance of designing with groups of people around shared values. Social innovation initiatives are defined as new activities (and ideas) that are motivated by social goals (Mulgan, 2006). Over the last decade the nature of these initiatives has been seen to have strong social, environmental, ethical and cultural foundations differing from others which can be considered more conventional in their commercial objectives. Social innovation is a social activity that requires connection and collaboration between individuals and groups of people around common goals or challenges. The role of design in support of these initiatives has been described in various ways. Thackara (2006) described the role of design to be about "steering rather than shaping" and by Manzini (2009) as "creating the conditions" for social change to happen. The difference being the shift of concern from the way something looks to what it does. This shift could be described as a change in the culture of design as a discipline able to respond to social-economic-environmental challenges. This role of design as described by DESIS (Design for Social Innovation and Sustainability Network) is about leveraging "visions, strategies and co-design tools to move from ideas to mature solutions and viable programs" (DESIS, 2015) and also according to the Transition Design framework it involves supporting the transitioning of "socio-technical practices" (Tonkinwise, 2014). This means the intervention of design should be focused to facilitate people and systems, rather than focused to create products and artefacts. This view of design highlights the importance of processes of mediation and empowering people to improve their own existing conditions and respond to their own challenges. An approach to design that was described by author John Thackara as "from designing on the world to designing in the world" (2006) that implies a collaborative approach to design. Therefore communication design, as a discipline concerned with facilitating human communications, must have a fundamental

contribution to make to the area of social innovation, an approach predicated on collaboration, since collaboration requires communication.

2.4. Emerging sustainability frameworks

The meaning of sustainability (and sustainable development) has been continually re-defined since the original Brundtland Report in 1987 through a greater understanding of natural and man-made (eco) systems, social interactions and the inquiry into what are we trying to sustain (Ehrenfeld and Hoffman, 2013). Sustainability can be understood as a continuous process of adaptation and not only as a target to reach by social-environmental indicators. In design studies, due to the nature of the disciplines predominant focus on the production of artefacts and use of materials, sustainability has been an on-going conversation to develop principles and models that reduce the environmental impact of design and maximise the social impact (Fry, 2003) (Dilnot, 2011). This thesis adopts an interpretation of sustainability extracted from three recent frameworks that express a trend in thinking about sustainability from a qualitative perspective rather than a quantitative perspective.

The definition of sustainability most suited to this thesis is that of a dynamic process. The dynamics of whole systems is described in the words of author Dr. Michael Ben-Eli founder of the Sustainability Laboratory[2] and mentee of R. Buckminster Fuller as "things continuously affecting each other, and being affected by, the process of affecting" (Ben-Eli, 2012). This abstract definition demonstrates an emphasis on cause-effect, on interaction and co-existence. This representation is fitting for this thesis, because it echoes the definition of the expanded practice of communication design, as well as, the complex nature of social innovation initiatives and the societal challenges they address.

The historical review of sustainability in design showed a predominant technical discourse focused on ways to assess the material and quantifiable impact of design, for example, ecodesign frameworks and material life cycle. A contemporary and emerging discourse focuses on a qualitative perspective of sustainability that is the focus in this research. The complex nature of social innovation initiatives described earlier has shown to be rich in *qualities* (Manzini & Tassinari, 2013) that cannot seem to be analysed through technical sustainability models. For this reason, recent conceptual frameworks have brought about a new conversation focused on what is here referred to as *qualities of sustainability*. Whilst previous discourses emphasized the materials and products of communication design (i.e. green graphic design) this new discourse extends the discourse to by focusing on the processes of communication design. This new discourse presents an opportunity for communication design to leverage the process of co-creation of communications towards more sustainable approaches. The concept of *quality* in the discourse of design and sustainability can be traced to early works of product-systems designers McDonough & Braungart who pioneered cradle-to-cradle product methodologies for a new notion of quality that "enhances well-being of nature and culture" (McDonough, 2003).

2 The Sustainability Laboratory was established in 2008 by Dr. Michael Ben-Eli and works with a whole systems approach to address urgent sustainability issues. www.sustainabilitylabs.org/

The literature review revealed three recent frameworks by different authors addressing the common thread of qualities (shown in Figure 2-2, p.39). In 2011 Michael Ben-Eli, an associate of Buckminster Fuller, proposed a framework of "Five Core Principles for Sustainability" to restore rigour to the growing ambiguity the word sustainability had come to have. It suggested five domains that are interdependent and coexist: material (materials and energy that determine existence), economic (managing wealth), life (behaviour in the atmosphere), social (interactions), spiritual (universal code of ethics) (Ben-Eli, 2011). In 2013 Ezio Manzini and Virginia Tassinari of the international DESIS network proposed a framework for "Sustainable Qualities" which can be explained as non-material compensations (meaningful things we can feel and experience) manifested through the activity itself, the people involved and the way it is operated. Sustainable qualities are defined as "qualities that require more sustainable behaviours in order to enjoy their benefits" (Manzini & Tassinari, 2013). The seven qualities proposed include the intensity of relationships between people; notion of slower time; the search for meaningful work activities; the importance of collaboration; the primacy of small-scale; the importance of place and provenance; and the richness of complexity and diversity. In 2014 designer Stuart Walker proposed a radical change in design for sustainability and published a framework for a quadruple bottom line (2014) challenging conventional models of economic, social, environmental impact. The forth area included in "designing sustainability" is an approach rooted in being human defined as, "a type of design that grows out of contemplation, reflection and quietness" (Walker, 2014, p.1). The framework considers spirituality, inner meaning and symbolism as a proposition against the conventional market-driven value of design.

2.4.1 Analysis: the qualities of sustainability

These three sustainability frameworks were compared to find the common themes (refer to Figure 2-2, p.39). It was relevant to identify the commonalities and take these forward to inform the communication design practice (to be described in the next chapter). This analysis was done by clustering the similar themes found within these theories. *Qualities of sustainability* is the term given to the findings of this analysis and describes the convergence of these theories. The clusters identified are described below.

Cluster 1 - The first commonalitity identified is reference to material qualities (Figure 2-3, p.40).
All three frameworks discuss the importance of awareness in resources used to create new products and services. In a practical sense, this includes gaining an understanding of environmental scarcity, the value of diversity, the notion of how long things take to make, and provenance of natural resources. This cluster describes the interest to align design solutions to the order of natural systems.

Figure 2-2 Sustainability frameworks from literature.
Diagram shows the theoretical frameworks represented by the key concepts.

Framework Ben-Eli, 2011	Material domain	Economic domain	Domain of life	Spiritual domain	Social domain		
Framework Manzini, 2013	Place	Work	Scale	Time	Relationships	Collaboration	Complexity
Framework Walker, 2014	Practical meaning	Social meaning	Personal meaning				

Figure 2-3 *Qualities of sustainability* analysis cluster 1.

Qualities of sustainability					
frameworks	Ben-Eli, 2011	Material domain	Domain of life		
	Manzini, 2013	Place	Work	Scale	Time
	Walker, 2014	Practical meaning			

Cluster 2 - The second commonality identified is reference to qualities of value (refer to Figure 2-4). This cluster identified references of approaches to define the value of products and services. This includes the recalibration of the true cost of products and services in economic, environmental and social measures. This cluster also gathered references that describe the value of embracing diversity, the complexity of systems, and richness of what different contexts, people and skillsets add to products and services. Qualities of value also include the definition of work, the value of craft, the notion of time in making of products and the provenance of products.

Figure 2-4 *Qualities of sustainability* analysis cluster 2.

Qualities of sustainability						
frameworks	Ben-Eli, 2011	Economic domain	Domain of life			
	Manzini, 2013	Place	Work	Scale	Time	Collaboration
	Walker, 2014	Practical meaning	Social meaning			

Cluster 3 - The third commonality identified refers to qualities in social interaction between people (refer to Figure 2-5). This cluster identified various references to qualities that describe social relations and interactions between people towards amplifying sustainability. This includes fostering social equity, inclusivity and enabling the freedom to participate and contribute to social initiatives. It describes embracing diversity as a way to develop cultural value. It describes the qualities generated through activities that reinforce the social fabric and establish stronger bonds between people.

Figure 2-5 *Qualities of sustainability* analysis cluster 3.

Qualities of sustainability					
frameworks	Ben-Eli, 2011	Social domain			
	Manzini, 2013	Time	Relationships	Collaboration	Complexity
	Walker, 2014	Social meaning	Personal meaning		

Cluster 4 - The forth commonality identified refers to qualities of well-being (refers to Figure 2-6). This cluster aggregated references in the sustainability frameworks that describe qualities that are immeasurable and describe a state of being in the world. It describes the importance of inspiring a broader worldview and understanding of the interconnectedness between all living systems. This cluster also describes the importance of freedom and imagination to create solutions towards sustainability and contribute to a broader reality beyond practicalities of mundane every day.

Figure 2-6 *Qualities of sustainability* analysis cluster 4.

Qualities of sustainability					
frameworks	Ben-Eli, 2011	Spiritual domain			
	Manzini, 2013	Time	Relationships	Collaboration	Complexity
	Walker, 2014	Personal meaning			

The analysis of these four clusters served to inform the *qualities of sustainability* taken forward into practice. A set of keywords identified through these clusters was used to develop the prompt cards '*qualities of sustainability*' for the fieldwork discovery tool (chapter 3, section 3.8, p.65) and later for the iterative workshop series (chapter 4, section 4.2, p.81).

2.4.2 Section summary and reflection

This section reviewed literature on design for social innovation and sustainability in order to provide a theoretical framework to support communication design. The first insight drawn out of this review relates to design for social innovation is a growing field for design. The process of addressing complex social problems requires the collaboration of different stakeholders towards generating solutions and in this sense participative and collaborative methods have been increasingly developed. The second insight is on the emerging paradigm of understanding sustainability in design from a qualitative perspective. The analysis of three theories resulted in the framework *qualities of sustainability* to be used to inform the practical research. These insights were used to position the practical research in the landscape of communication design theory presented previously (refer to section 2.2, p.33). This also supported the development of an appropriate methodology for the practice-led research which be presented in Chapter 3. The next section presents a review of contemporary practice focused on communicating sustainability.

2.5. Review of contemporary practice: communication design for sustainability

A review of contemporary practice with a focus on sustainability was done to understand how it reflects the emerging paradigm on *qualities of sustainability* (introduced in previous section 2.4, p.38). This review was delivered in three parts. First, a scoping of works that served as examples to understand the current landscape of practice and where this research is positioned. Second, this was complemented by primary data derived from informal conversational interviews with leading communication designers in the field. These conversations served to re-evaluate assumptions from literature and practice review. Third, a review of existing methods and tools for collaborative practice (with a focus on social innovation and sustainability) that are pertinent for communication design. This served to inform the development of a practice-led methodology in response to the research aims (refer to section 1.2, p.26) and also to situate the potential requirements of a tool that might make a novel contribution.

2.5.1 Mapping of communication design practice (secondary data)

The objective of mapping communication design works with a focus on messages of sustainability was part of secondary data analysis. The objective was not to develop an exhaustive review of this area but rather to gather a broad enough scope to demonstrate where in this practice landscape the research is specifically positioned. Importantly it also served to demonstrate how the thesis contributes with a new approach for communication design within social innovation and sustainability that can be valuable for both designers and non-designers (here among those involved with sustainable food initiatives).
From a wide sample of communication design works with a focus on messages of sustainability a narrower selection was made by filtering down those that displayed a key quality of sustainability that directly relates to *collaboration* (a quality of sustainability described in section 2.4.1, p.39). The criteria for selection of sample works was:

- Works that engage the public whether by participating in the process, or by interacting with a communication design object, interaction or a space;
- Works that aim to generate a discussion on themes or concerns of sustainability;
- Works that collectively the works examined reflect the definition of an expanded practice.

The samples of works collected were placed in a matrix where the axes represent two considerations (as shown in Figure 2-7, p.43). The horizontal axis describes how participative the works are and if these solicit the public to interact in order to grasp the message. The vertical axis represents how tangible the work of communication design is, ranging from tangible objects to interactive systems and processes.
The key readings drawn from this mapping are as follows:

- Various multimodal approaches are used in participative works and including visual communication, data graphics, communicative objects, communicative spaces, interactions and experiences (digital or physical)
- Participative communication design works that are temporary (for example Urban Picnic[3] 2012 , Interactive Dinners[4] 2010)
- Works that solicit participation and through which the message is generated (for example Museum of Water[5] 2014 , Before I die 2010[6]).

3 Urban Picnic by designer Ju Yeun Kim, 2011-2012 is a social experiment of a mobile kitchen designed to foster a new type of urban community through food as a facilitator of communication. Available from: http://cargocollective.com/juyeunkim

4 Interactive Dinners by designer Marije Vogelzang 2010 focused on the verb 'to eat'. A series of dinners where participants are invited to share eating tools and interact with each other in unexpected ways. Available from: www.marijevogelzang.nl/

5 Museum of Water by Amy Sharrocks, 2012-2014, is a collection of publicly donated water and accompanying stories of participants accumulated over two years worldwide. The participatory experience aims to engage the public in redefining worth of water.

6 Before I die by Candy Chang, 2010, is a participatory global project that invites participants to reflect on their personal aspirations and share these on public walls.

Figure 2-7 Mapping different approaches to communication design in practice.
Examples of projects that require interaction/participation of public to diferent degrees. Mapped in relation to how public interacts, experiences and participates with the communication design artefact.

* agency ** studio *** independent designer

The key finding was the variety of different communication design modes used to solicit public participation. The upper right quadrant shows a number of works that trigger participation through interaction with design artefacts, for example, designer Joris van Tubergen "3D printed petition"[7] (2014) a campaign for World Animal Protection where a life size elephant comes to life through the input of participants' digital signatures. The sample of works in the lower-right quadrant are references that support the approach of this research because they foster engagement of the public not just through designed object but between the public itself, in some cases resulting in acts of collaboration. This is relevant because in the literature review of emerging sustainability frameworks (described in section 2.4, p.38) collaboration was identified as a quality of sustainability. These works particularly (in the lower-right quadrants) apply collaborative processes to deliver the sustainability message. For example, designer Ju Yeun Kim[8] communication design project Urban Picnic (2012) is a social experiment to prompt community building through an unusual picnic scenario, and Droog Design[9] project Go Slow (2004) invited participants to re-iterate their understanding of spending time exploring slowness (both illustrated in Figure 2-8, p.44). These examples of practice were used as a baseline to define communication design practice in the expanded field with a focus on sustainability and social innovation.

7 Van Tubergen (2014) 3D elephant petition | RooieJoris. Available from: http://www.rooiejoris.nl/3d-elephant-petition/ (Accessed 18 January 2017).

8 Kim (2012) Ju Yeun Kim. Available from: http://www.juyeunkim.co.uk (Accessed 18 January 2017).

9 Droog Design (2004) Go Slow | Droog – a different perspective on design. Available from: http://www.droog.com/project/go-slow (Accessed 18 January 2017).

Figure 2-8 Sample of communication design works that are participative. (left) Ju Yeun Kim (2012) Urban Picnic. (right) Droog Design (2004) Go Slow.

The review evidenced an opportunity to develop a framework for communication design practice that amplifies the *qualities of sustainability* and that applies (or fosters) collaboration. This finding was supported by primary data gathered through conversational interviews with designers, as the next section explains.

2.5.2 Conversations with communication designers (primary data)

This piece of exploratory research activity (Martin, 2012) was done to complement and reassess the review of practices (described in the previous section) with further information on approaches designers apply in practice. The method applied was that of semi-structured conversational interviews (Patton, 2002) with a selection of leading communication designers in the area of sustainability. The aim was not to do exhaustive interview research with a wide scope of designers but rather to focus on a select group in order to capture themes to contribute to develop the insights gathered from literature and practice review. This activity specifically questioned; what current practices are used for engagement and participation of publics, and what strategies are used by communication designers focused on communicating around issues of sustainability. The criteria for interviewees was designers that run their own practices and therefore have established a work ethos on sustainability; and designers across different areas of communication design including strategy, identity, systems thinking, visualisation and graphic design, as to capture a field representative of an expanded practice. Participants were:

- Arlene Britt[10] , visual data and storytelling designer.
- Thomas Kolster[11] , expert in sustainable corporate branding and founder of Goodvertising.

10 Britt, Arlene (no date) Visual Stories bring Sustainability to Life. Available from: http://backgroundstories.com/ (Accessed 15 January 2017).

11 Kolster, Thomas (no date) Goodvertising agency. Available from: http://www.goodvertisingagency.com/ (Accessed 15 January 2017).

- Eric Benson[12] , designer and founder of green graphic design resource Renourish.
- John Bielenberg[13] , graphic designer and founder of Project M Lab for social impact.
- Tracy Sutton[14] , expert in sustainable packaging design.

The method for interviews were informal with pre-defined guiding questions, such conversational interviews permit the interviewee to elaborate on issues they are experts in and to share personal experiences which could have been otherwise unforeseeable (Patton, 2002; Kvale, 2009). Interviews were done via Skype on average 30mins duration and recorded. The questions to guide these informal interviews were not shared beforehand with the interviewees as they only served to guide the research interest points and also allow room for a natural discussion to occur. The transcripts were analysed using qualitative open coding to draw out common themes (Turner, 2010) (Ryan & Bernard, 2003) that added to onto the insights drawn from the review of practices (section 2.5, p.41). Findings are summarised as :

- First theme addresses approaches to communication design practice. There was a common thread around visualisation, information design to address complexity, packaging design and materials. There was also a thread on the more expanded understanding of communication design that is centred on systems thinking and how communication design is also about having an overview.
- Second theme addresses how to engage participation of publics. The review of current practices identified a number of participative works. In conversations with designers this theme was also described from the perspective of how communication strategy can drive publics to interact, take action, and participate. A human-centred approach to communication design was also mentioned from the perspective of including the publics in the design process.
- Third theme is on the future of communication design in the sense of an expanded practice. In the conversations there was a thread around the potential of communication design practice to impact communities but also businesses through embedding principles in their activities.

Figure 2-9 Approaches to communicating sustainability and *communication strategies* identified.

Approaches to communicating sustainability		
In practice review	**In conversations with designers**	*Communication strategies*
Visual communication Data infographics Communicative objects Communicative spaces Participative experiences Participative interactions	Storytelling Visualisation Complexity Transparency Experiential Design artefacts Data infographics Design artefacts Communication strategy Systems design Engagement	i) Storytelling ii) Transparency iii) Experience iv) Interaction v) Authenticity

12 Benson, Eric (no date) Re-nourish. Available from: http://re-nourish.org/ (Accessed 15 January 2017).

13 Project M (2003) Thinking Wrong. Available from: http://www.projectmlab.com/ (Accessed 15 January 2017).

14 Sutton, Tracy (no date) Root Innovation. Available from: http://root-innovation.com/ (Accessed 15 January 2017).

2.5.3 Analysis: the communication strategies

From the findings drawn out of review of practices (section 2.5, p.41) and conversations with designers (section 2.5.2, p.44) a common set of *communication strategies* applied to produce communication design focused on sustainability was identified. These strategies were used as a starting point for practice (results shown in Figure 2-9, p.45). The left column shows the communication design modes identified in the review of practices and the keywords describe the different approaches to communicating sustainability found. The middle column shows keywords representative of the communication design approaches identified in conversations with designers. The right column shows the *communication strategies* as summarised from the two data sources. These *communication strategies* identified are described below. These were carried forward to inform the practice-led research.

i) Storytelling: describes the design of narratives in a compelling way that resonates with the audience. The element of narrative is at core of what defines communication design. Designers apply storytelling techniques to simplify complex data of products, supply chains, and the cause-effect of sustainability. Arlene Britt in her interview described her practice as "background stories" to explain where and how things are made. Examples of works include water visualisations[15] (2013) by Angela Morelli and the climate machine by Agency of Design[16].

> *"Simplify and stylise the process in a way that everyday people can understand what's going on." (Designer Arlene Britt)*

ii) Transparency: designing for open sharing information whether in a physical space or digitally and practices thinking at a systems-level rather than the design object. The increasingly sophisticated ways to communicate data is used in communication design to clarify complexity of systems, transparency of products and supply chains is also reflected in the work of designers Tracy Sutton and Thomas Kolster.

> *"…a driver in the design stage or in the product development stages." (Designer Tracy Sutton)*

iii) Experience: designing memorable experiences, whether ephemeral or not, appealing to performativity. Communication design to trigger communication between people such as the in case of social enterprise Pie Lab is a community shop designed to foster community dialogue. Designers working in a more 'expanded' practice where the design object is not the focus but instead the impact of the designed communication. Example of works: Tools for Action[17] (2011), Pie Lab[18] (2009).

> *"You can have pie and solve deep social issues." (Designer John Bielenberg)*

iv) Authenticity: designing to demonstrate authorship and craft, uniqueness. Graphic designer Eric Benson also co-founder of Re-Nourish a referential online platform on green graphics, highlighted the

15 Water infographics by designer Angela Morelli available from http://www.angelamorelli.com/water/

16 The climate machine by Agency of Design available from http://www.agencyofdesign.co.uk/projects/the-climate-machine/

17 Tools for Action is a community project using inflatable sculptures as a tool for intervention, these are available as instructions open to public online. Available from http://www.toolsforaction.net

18 Pie Lab was founded by Project M designers and is a pie shop meant to gather local communities together in discussions of community relevant issues. Available from http://pielab.org/

changing role of design and need for a systems thinking approach more holistic to the process and not just focused on the graphic product as the outcome. Designers exploring new approaches to represent sustainability concerns through graphic design objects, innovative materials, and the design object speaking for itself. Example of works: renourish.com[19] by Eric Benson (2008), The Smog Tasting by Genomic Gastronomy Center[20] (2011).

> *"The idea of closed loop systems, something goes in and something goes out. That's something I'm interested in." (Designer Eric Benson)*

v) Interaction - designing systems and contexts for participation of public. Interaction and experience design is gaining importance to engage public and impact change of behaviours.

> *"I don't want to be a consumer; I want to be a citizen." (Designer Thomas Kolster)*

From the review of practice presented in previous sections, a set of *communication strategies* for sustainability were identified, however, there was found to be no documentation of specific methods or tools to guide practice. For this reason, a review of tools for collaborative practice with a focus on social innovation and sustainability was also undertaken.

2.5.4 Review of methods and tools for collaborative practice

The literature review of communication design practice demonstrated a connection between the application of collaborative and participatory approaches within communication design and the application of communication design to fostering social change (section 2.2, p.33). The contextual review also identified a range of current practices that explore participatory and collaborative ways to foster more sustainable ways of living, or to deliver a message through experiential means (section 2.5.1, p.42). These findings revealed an oportunity to develop collaborative methods for communication design in practice. In this sense, a review of existing collaborative methods and tools was essential to create a suitable methodology for the research in practice (which includes the development of a tool, in response to the research aims in section 1.2, p.26). It also served to situate how the practice might make a novel contribution. A detailed analysis of design methods and tools for social innovation has been previously and extensively carried out by Kimbell and Julier (2012). Therefore the objective here was not to extensively review existing tools and methods but rather to situate the practice-led research in this landscape. The criteria for selection of methods and tools for review was based on the research aims;

- Accessible to designers and non-design experts.
- Collaborative and generative tools.
- Focus on communication design.

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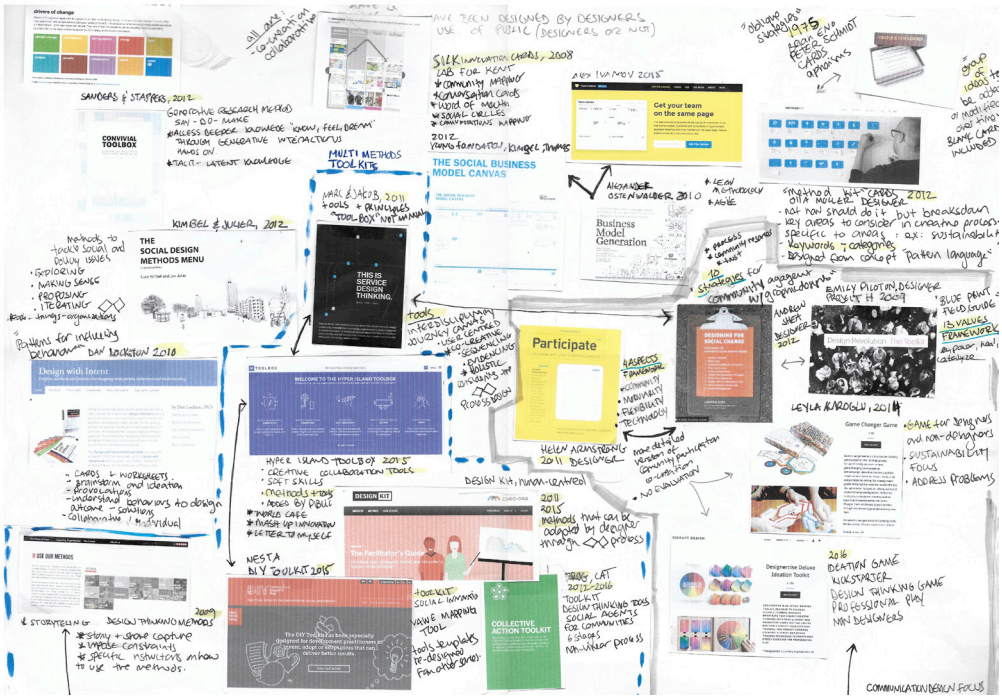
19 Re-nourish is a non-profit organization and online community providing online tools for sustainable systems thinking in the communication design community founded by Eric Benson & Yvette Perullo (2015) Re-nourish | Design Sustainably. Available from: http://www.re-nourish.com/ (Accessed 11 September 2015).

20 The Smog Tasting by Genomic Gastronomy Center materializes smog from different polluted cities in edible egg foam which can be tasted by the public. http://genomicgastronomy.com/work/2011-2/smog-tasting/

Figure 2-10 Clustering of methods and tools mapped relevant to the research focus.

Design Tools	Specific for Communication Design Practice	Collaborative Methods / Frameworks
2008 – SILK Innovation Cards, Social Innovation Lab for Kent. 2010 – Design with intent, Dan Lockton. 2012 – Method kit cards, Ola Moller. 2015 – Toolbox, Hyper Island. 2015 – DIY toolkit, NESTA.	2009 – Design revolution toolkit, Emily Piloton. 2011 – Participate, Helen Armstrong. 2012 – Designing for social change, Andrew Shea. 2014 – Game changer game, Leyla Acagolu.	2011 – This is service design thinking, Stickdorn and Schneider. 2012 – The social design methods menu, Julier and Kimble. 2012 – Convivial design toolkit, Sanders. 2011, 2015 – Designkit, IDEO.org 2012 – 2016 – Collective action toolkit, Frog Design.

Figure 2-11 Mind map review of existing methods and tools.
Methods considered applicable to communication design in social innovation and sustainability.



A visual mapping exercise was done to cluster the different methods and tools found for generative and collaborative practice (Figure 2-11, p.48 shows the mindmap and a comprehensive matrix of these tools is in Appendix 1). This section will briefly summarise the most relevant examples (Figure 2-10, p.48). The earliest example is Brian Eno and Peter Schmidt's Oblique Strategies cards[21] (1975) designed as prompts that are triggers for conversation. The card set included blank cards for participants to add their own strategies and in this sense was not a fixed repertoire. More recently, various sets of cards for strategic and creative thinking have been developed. These include the SILK Innovation Cards by Social Innovation Lab for Kent[22] (2008) which are a set of conversation cards designed for community

21 Oblique Strategies cards, 1975 by Brian Eno and artist Peter Schmidt: www.rtqe.net/ObliqueStrategies/OSintro.html

22 SILK Innovation Cards: http://socialinnovation.typepad.com/silk/silk-method-deck.html

mapping exercises and inclusive of various stakeholders including designers, project teams and economic development experts. Another set of cards is Design with Intent by researcher Dan Lockton[23] (2010) which are a set of provocation cards on to understand user behaviour, more geared towards designers and researchers rather than non-expert designers. A further example is Method kit cards[24] by designer Ola Moller (2016) which are a wide range of concept cards and categories for self and group reflection, breaking down complex concepts for a wide range of users. The use of a "canvas" and use of "cards" was also found to be a predominant format in collaborative tools. Another example is Business Model Canvas[25] (Osterwalder, 2010) a practical tool for start-ups and small businesses which has also inspired the design of other canvases. One of these focused on socially-driven innovation is the Social Business Model Canvas[26] (Kimbell, 2012). It is a canvas reinvented for social business, collective mapping, and co-design. A second example is Team Canvas[27] (Ivanov, 2015) designed for collective reflection on shared values.

Specific to communication design practice, there are sets of guidelines and recommendations for practice. The work of Andrew Shea (2012) and Emily Piloton (2009) for (graphic) communication design guidelines are particularly referenced examples in this area. In terms of methods and frameworks for participatory practice we can find several resources, including design research consultancies that have made their methods available to public. These include IDEO human centred design tools (IDEO, 2012) and Frog Design Action Toolkit for fieldwork (Frog Design, 2015). Others have a stronger research-oriented purpose such is the case of the extensive work by Sanders and Stappers on Convivial Design Tools (2012). An emerging range of methods and frameworks, particularly service design oriented, that explore collaboration are becoming available to a wider public, such as the case of Service Design tools (Stickdorn, & Schneider, 2011) (Tassi, 2012). The tools and methods developed for this research need to consider the following points in relation to the gap identified. In the light of the understanding of design for social innovation (Manzini, 2015) the methods and tools developed through practice in this research need to add value for non-designers (sustainable food initiatives) so to empower their social innovation initiatives.

> *"the role of design experts is to feed and support these individual and collective projects – and thus the social changes they may give rise to." (Manzini, 2015, p.1)*

2.6. Conclusion

This chapter focused on the *Discover* stage of research that constituted the contextual review. It set the theoretical landscape in communication design and in design for social innovation and sustainability. The historical context in relation to communication design, sustainability and social innovation, was crucial to

23 Design with Intent cards: http://designwithintent.co.uk/

24 Method Kit cards: https://methodkit.com/

25 Business model canvas: https://strategyzer.com/canvas

26 Social Business Model Canvas: www.socialbusinessmodelcanvas.com

27 Team Canvas, 2015 by Alex Ivanov, innovation designer www.teamcanvas.com

the motivations of this thesis. Communication design as a facilitator and mediator of social exchange and change informs the exploration of exactly how communication design fulfils this role and contributes to this process (Davis, 2012) (Pontis, 2012) (Poggenpohl, & Winkler, 2010). The literature review introduced the perspective of an expanded practice of communication design and the shift from designing products to designing experiences and processes that respond to the complexity of sustainability challenges. The potential of communication design practice to enable communications of social innovation initiatives to publics through design 'artefacts' (for example websites, maps, flyers, posters) is already established. The key insight gained is the potential of communication design to build understanding and relationships between people and to support the formation of publics. The approach taken forward here in relation to communication design practice is centred on the systems and processes rather than the artefacts of design.

The literature review on social innovation and sustainability provided an interpretation of sustainability extracted from three recent frameworks that express a trend in thinking about sustainability from a qualitative perspective rather than a quantitative perspective. An analysis was done of three theoretical frameworks which resulted in the findings of the framework *qualities of sustainability* (the four clusters described on page 39). The review of communication design practice focused on sustainability was done through mapping of contemporary works and conversations with leading designers. This revealed a landscape of works that solicit participation of the public to deliver, or collaboratively generate, the message of sustainability. From this mapping a set of *communication strategies* for sustainability were drawn. The *communication strategies* and *qualities of sustainability* chosen to take forward in the practice-led research covered the four areas described in the cluster exercise (Figure 2-12).

This chapter also reviewed tools and methods for collaborative practice. This demonstrated a range of guidelines for collaborative communication design practice but no clear guidance on methods for communication design, or specifically, to address the emerging paradigms in sustainability. These conclusions guided the *Define* stage of research which included the development of the methodology and the design of a fieldwork *discovery tool,* as explained in the next chapter.

Figure 2-12 *Qualities of sustainability* and *communication strategies* taken forward into practice.

Communication strategies	Qualities of sustainability
Storytelling Transparency Experience Interaction Authenticity	Place Work Scale Time Relationships Collaboration Complexity Spritual domain Personal meaning Domain of life

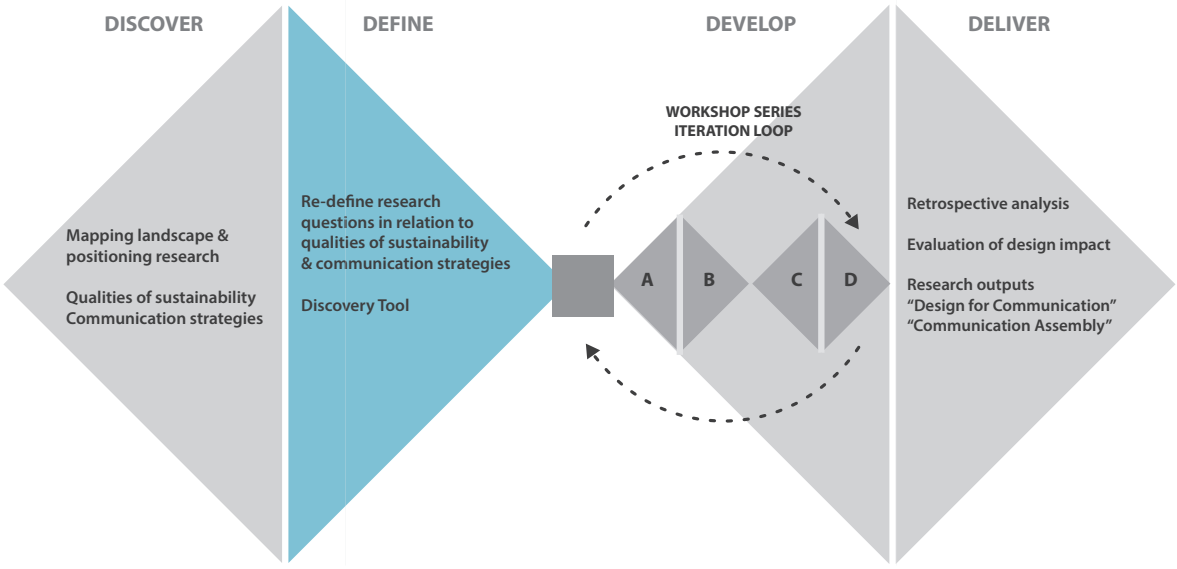
3 - Define stage: methodology and discovery tool

3.1. Introduction to the Define stage

The review of communication design literature and practice delivered in the Discover stage guided the development of a methodology to address the *qualities of sustainability* and *communication strategies* through collaborative practice. The development of a methodology and initial discovery tool were part of the *Define* stage of research which will be covered in this chapter (Figure 3-1 illustrates where this research stage is situated in the research process model).

This chapter begins by explaining the context for practice-led research in collaboration with a selection of sustainable food initiatives. It will then describe the methodology, the theory that underpins the research and the overarching research process (refer to Figure 2-1, p.33) including the methods applied in practice at the different research stages. It also provides a detailed description of the practice iteration loop which was the workshop series with sustainable food initiatives to develop a tool for communication design focused on *qualities of sustainability*. This define stage of research also included the first interaction with participants. This interaction was called discovery tool (as shown in Fig. 3.1 and described on page 58). This served to re-articulate the research questions in light of two key frameworks derived from the contextual review, the *qualities of sustainability* and *communication strategies*, as covered in chapter 2.

Figure 3-1 Research process highlighting define stage.



3.2. Context for practice: collaboration with sustainable food initiatives

The theme of global and local food production, distribution and consumption is currently a major sustainability challenge (FAO United Nations, 2016). A wicked problem (Rittel and Webber, 1973) that embodies all aspects of sustainability, whether in environmental, economic, social, ethical and cultural terms. The nature of the challenge involves multiple stakeholders with diverse motivations. Designing in such conditions benefits from the approaches of design for social innovation to research and prototype

new solutions of products, services and systems[1]. It is important to underline that, the theme of sustainable food per se is not the focus of this thesis, and neither is it focused on 'how to communicate about sustainable food'. The motivation for collaboration with sustainable food initiatives is because this established and growing area provides an appropriate context in which larger questions about the role of communication design in relation to design for social innovation may be addressed and be explored through practice.

Sustainable food initiatives are practical examples of a thriving sector for social innovation. A movement of alternatives to conventional food models matured out of the established Slow Food Movement[2]. These are typically social assemblages of people, some more complex than others, dealing with both biological and social systems, and therefore a rich context to explore innovative approaches to communication design in relation to the *qualities of sustainability*. They are social activities, organised by and for groups of people in interconnected and interdependent systems with a shared vision towards sustainable ways of living (Mulgan, 2006). This is extremely important from the perspective that, without active engagement of participants in these initiatives they would cease to exist. Communication design, being a discipline concerned with how messages are created, materialised, and disseminated, has a crucial role in supporting these dynamic systems. Furthermore, food production, distribution, preparation and consumption is also a subject that requires building trust and dialogue, so these initiatives offer rich potential to explore different communicative interactions.
The literature review on communication design presented in the previous chapter formulated the case for an expanded practice of communication design that aligns with the cases made for design for social innovation. What this research aims to find out is how communication design makes a contribution to expressing the *qualities of sustainability* in the context of this type of social innovation. More precisely, how exactly these qualities are communicated and materialised through their food activities and how communication design has a role in guiding publics towards more informed, engaged and sustainable ways of living.

3.3. Methodology theoretical framework

The research is qualitative, practice-led and applies a collaborative methodology. It adopts the theoretical view of communication design as a discipline with an expanded practice centred on the (co)creation and interpretation of meaning, whether through artefacts, interactions or experiences (as described in section 2.2.1, p.33). In this sense, the purpose of collaboration with sustainable food initiatives was

1 For example, the DESIS Food Cluster has presented a series of design research projects in the area of sustainable food solutions. DESIS Food Cluster (2015) [online]. Available from: http://desis-foodcluster.org/about/ (Accessed 1 November 2016).
2 The Slow Food Movement was established by Carlo Petrini and other activists in 1989 as a way to prevent the disappearance of local food traditions and production. Currently the network is present in over 160 countries. Slow Food International (2015) Slow Food International - About us [online]. Available from: http://www.slowfood.com/about-us/ (Accessed 3 November 2016).

to iteratively develop a tool and process to produce communication design that amplifies the *qualities of sustainability*. The points below underpin the methodology applied and the research process model explained in the next section (3.4 Research process: double-diamond model with iteration loop, p.51).

3.4. Collaborative practice of communication design

As described in the literature review, design for social innovation addresses complex challenges that require collaboration between various stakeholders. The methodology applies a collaborative approach on two levels. First, the collaboration with representatives of sustainable food initiatives for the iteration and development of a tool that supports the co-creation of communication design with a focus on *qualities of sustainability*. Second, the use of the tool itself enables the representatives of sustainable food initiatives to co-create communication design solutions working with participants assembled for this purpose. In this research process the communication designer researcher is positioned as the designer of a tool that enables co-creation and as the facilitator of the co-creation process.

In the area of participatory design, the notions of co-design and co-creation have been growing and are seen as distinct approaches by different authors. The perspectives of Sanders (2009), Faud-Luke (2009) Koskinen (2011) are relevant and have informed the methodology. Author Elizabeth Sanders (2012) has written extensively on collaborative creative tools and describes co-design as a specific instance of co-creation (Sanders & Simons, 2009). Co-creation, the author explains, is a broader term that describes a creative process placed in the hands of people not trained in design. Co-design refers to a joint work between designers and people not trained in design (Sanders & Simons, 2009). From an angle of design activism, Faud-Luke (2009) describes co-design as an open, democratic process, that implies designing with others. The premise is, the people who will be ultimately using an artefact are entitled to have a voice in how it is designed and implies the inclusion of stakeholders/actors in the process. Koskinen (2011) describes co-design as an approach driven also by the importance of fieldwork as "design is supposed to be an exploration people do together" (2011, p.83). This viewpoint of co-creation in design process (rather than co-design) is integrated in the methodology of this research. It supports the changing role of the designer towards that of a facilitator (Faud-Luke, 2009) (Sanders & Simon, 2009) (Koskinen, 2011) where in practice it becomes "increasingly difficult to draw a line between designers and non-designers" (Koskinen, 2011, p.83) or what Manzini (2015) called "diffused design". Considering the expanded understanding of communication design practice, the methodology for practice-led research here was based the on co-creation of a communication design tool.

3.4.1 Embracing diffused design

The methodology opened communication design practice to non-design experts: the sustainable food initiatives and a wider public. Diffused design describes people's natural design capacity. Given the subject area of sustainable food alternatives, by applying the approach of diffused design the process is open and inclusive of existing and potential new participants interested in making a contribution to

the sustainable food movement. As described by Sanders (2009) the public desires to be more than just consumers of messages but seek empowerment to create messages themselves, resulting in a shift from consumer to prosumer (producer-consumer)[3]. Collaboration between participants benefits them by identifying common interrelations and motivations that define the means and ends in response to complex social challenges. This approach requires a role shift for the participants to whom the design serves. They become collaborators and prosumers of the products and services they use.

3.4.2 Responsive design approach

The research took a responsive design approach (Thorpe and Gamman, 2011) to inform how the designer should be positioned through the collaborative design process. From this perspective, the communication designer responds to the context by creating the conditions for participants to generate their own communication design outputs (rather than being responsible for these outputs). The communication designer is a storyteller rather than an author. This approach can be seen to enhance the empowerment of the participants (here the sustainable food initiatives) when interpreted through Latour's perspective on matters of concern (2008). By using the word design to represent revolution, the approach renders matters of concern into matters of design. In this research, the matter of concern is the challenge to articulate the *qualities of sustainability*. Matter of design, is the capability to articulate which *communication strategies* can amplify which *qualities of sustainability*. The responsive design approach defined the role of the communication designer as the one who designs how to enable the communication, rather than design the piece of communication itself.

3.4.3 Reflexivity

Reflexivity, as opposed to subjectivity, is the process of examining both oneself as researcher in the research context, and the research itself. As a designer-researcher in this study, the participatory approaches employed were not just mechanisms to gather data, but also a way of being involved as a participative individual within a community of interest. Reflection on practice, as well as ongoing informative evaluation, was essential to inform the iterative practice-led research. Reflexivity was important because the methodology was deliberately open-ended. The emphasis was not to extensively iterate and test the tools and workshop format towards a final product, but rather, to understand the impact through the iteration with participants.

3 Prosumer is a term used to describe how the public becomes a collaborator in the process of communication design with the sustainable food initiatives. Prosumer is a person who both consumes and produces content, a term coined by futurist Alvin Toffler in the book *The Third Wave* published in 1980.

Figure 3-2 Methodology: diagram shows theoretical frameworks and methods used at each stage of research.

RESEARCH PROCESS	THEORETICAL FRAMES	METHODS	TOOLS
DISCOVER STAGE			
Map landscape and position research	• Exploratory Field Research (sustainable food initiatives) • Immersive Observation • Contextual Inquiry (Martin, 2012)	• Conversational interviews with designers (Patton, 2002) • Conversational interviews with food initiatives (Patton, 2002) • Find themes & patterns (Turner III, 2010) (Kvale, 2009)	• Visual mapping exercises
DEFINE STAGE			
Discovery tool **Re-define research questions in relation to frameworks qualities of sustainability & communication strategies**	• Framework Qualities of Sustainability (Manzini, 2013) (Walker, 2014) (Ben-Eli, 2011) • Design Things (Binder et al., 2011)	• Generative communication design	• Card sorting & mapping
DEVELOP STAGE [ITERATION LOOP]			
Brief **(re) iterate**	• Reflective practice (Schön, 1983) • Finding themes (Ryan and Bernard, 2003)	• Visual mapping	
A (re)develop **Design workshop tool**	• Communication design framework (Frascara, 2004, 2007) • Design things (Binder et al., 2011)	• Communication design (Frascara, 2004, 2007)	• Printed cards & canvas
B (re)deliver **Design workshop interaction & tool for collaborative practice**	• Participatory design (Martin, 2012) • Collective creativity (Sanders, 2001) • Scaffolding (Sanders, 2006) • Experience design framework (Shedroff, 2001)	• Generative practice	• Card sorting • Mapping
C (re)discover **Carry out workshop with sustainable food initiatives and wider public**	• Workshop facilitation & documentation (Hunter, 2009) (Doorley & Scott, 2012)	• Method kit for workshop planning (2015) • Documentation in film and voice recordings	• Semi-structured open ended interviews • Predefined questions • Open coding • Finding themes (Ryan and Bernard, 2003)
D (re)define **Analyse workshop results**	Analysis: • Qualitative interview (turner iii, 2010) (Kvale, 2009) • Finding themes (Ryan and Bernard, 2003)	• Informative conversational interviews (end of workshop and 6-8 weeks post workshop)	• In person interview or digital interview
DELIVER STAGE			
Retrospective analysis **Evaluate design impact**	Retrospective Analysis Framework: • analysis of workshop outputs • analysis of the outcomes • analysis of qualities of sustainability • analysis of communication strategies Valuing Impact Framework (Yee et al, 2015)	• Retrospective conversation • Transcript analysis (Ryan and Bernard, 2003)	• In person or digital interview

3.5. Research process: double-diamond model with iteration loop

As outlined in chapter 1, the research process was designed based on the double diamond model (Design Council, 2005) with stages: Discover, Define, Develop and Deliver. A complete outline of the methods used at each stage of research is shown in Figure 3-2, p.57. The research stages will be explained with a special focus on the iteration loop of the *Develop* stage and the retrospective analysis in the *Deliver* stage.

3.5.1 Discover stage

The *Discover* stage (covered in chapter 2) examined the research context and positioned the research questions in relation to the review of relevant literature and communication design practice. Research activities at this stage included informal conversational interviews with communication designers to identify a set of strategies used in practice (shown in Figure 2-9, p.45). This stage also included early exploratory field research in the area of sustainable food initiatives. The time spent in immersive field research was important to establish initial contacts and build trust between designer and participants for the next stages of collaborative practice-led research. Visual mappings of different kinds were used extensively used extensively at this stage of research to cluster information collected and to identify new opportunities for design intervention. These included the mapping of current communication design practices and the mapping of the communication practices of sustainable food initiatives[4].

3.5.2 Define stage

The *Define* stage served to establish the methodology for collaborative and iterative practice (covered in Figure 3-2, p.57). This stage also included the first fieldwork interaction titled discovery tool. This activity served as an exploration tool to extract from the sustainable food initiatives a set of practices on *communication strategies* and *qualities of sustainability*. These tools were developed through the theoretical framework of "design things", defined as "sociomaterial assembly [collectives of humans and non-humans] that deals with matters of concern" (Binder et al., 2011,p.1). The "things" used in practice were a set of prompt cards and a canvas to guide the conversation between sustainable food initiatives and designer. Also, the designers way of working with non-design participants, that drew upon the principles of diffuse and socially responsive design practices described earlier. A "thing" in this context is not just the design object but the interaction between participants itself.

3.5.3 Develop stage (iteration loop)

The *Develop* stage was adjusted from the original double-diamond structure to contain an iteration loop of practice (illustrated in Figure 3-3, p.59). The iteration process was a series of six collaborative workshops with sustainable food initiatives and participants of the public. Each workshop included 2 to

4 Visual mapping exercises as part of discover stage of research can be found in Thesis Volume II: practice documentation.

4 sustainable food initiatives and was open to a wider public including communities of interest in design, social impact and sustainability. These activities will be presented in the next chapter 4.

The objective of the collaborative workshops was the co-creation of a set of tools for communication design practice specific to *qualities of sustainability*. The iteration loop sub-stages are explained below:

- A (re)develop: develop the workshop tools based on the learnings of previous iteration.
- B (re)deliver: deliver the process of application of the tools so as to be ready for use in the next workshop. C (re)discover: carry out the workshop and discover how new tools are used by participants.
- D (re)define: analyse the workshop results through informative interviews with sustainable food initiatives and re-define a new brief for development of the tools.

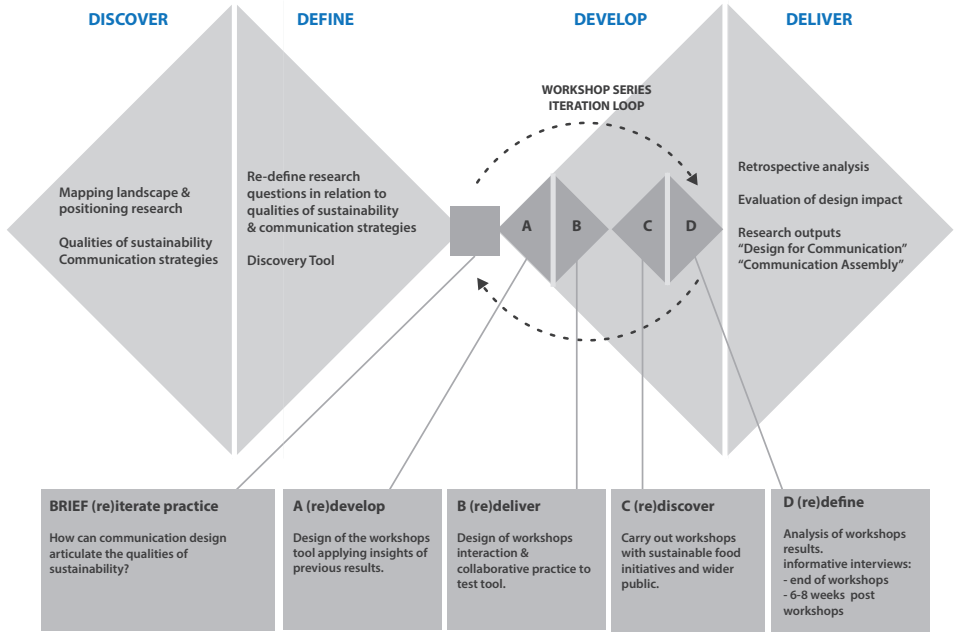
3.5.4 Iteration loop (re)develop: design the workshop tool

The first part of the iteration loop, (re)develop, was the design of the tools: the prompt cards, the working canvas and the brief to participants (see Figure 3-4, p.60). The tool design was guided by visual communication design framework (Frascara, 2004) that considered: the most appropriate medium, the form of the tools, the context in which they are used, and how meaning would be attributed to the tools by participants. It was also designed to be inclusive of all participants in language and format. For this, the graphic construction was considered including size, colour and font used in cards and canvas, the sequence of questions and wording used.

The tool is a set of prompt cards and a working canvas designed to guide users (here, the sustainable food initiatives) in a co-creation process with attendees of public through stages:

- Communication challenges – what is the story being told and what are the obstacles.
- *Qualities of sustainability* – which qualities the initiative aims to amplify or communicate about.

Figure 3-3 Methodology: research process. Adapted from double-diamond model to include an iteration loop (workshop series).



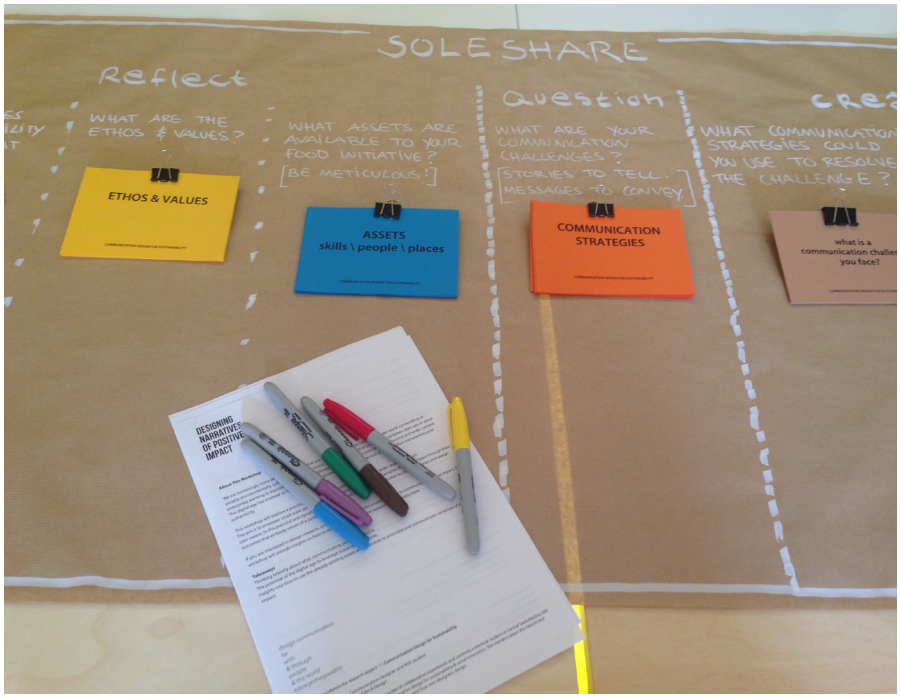
- Ethos of the initiative – values in the business or service model.
- Assets for communications – existing and available to the initiative.
- *Communication strategies* - new approaches to communication that can be applied in practice.
- Communication solutions – output of a new communication design brief.

The group interaction is both a process of discovery and a process of co-creation. As a process of discovery, the food initiative and participants find new relationships between existing assets and how to better communicate the existing *qualities of sustainability*. The role of participants of the public is to help identify things that apparently seem unnoticeable to the food initiatives themselves. As a process of co-creation, the group collectively generates new ideas on how to communicate the story of the food initiative and their *qualities of sustainability*. In this collaborative process the participants of public become co-creators of communication design alongside the sustainable food initiatives, facilitated by the tools and designer.

3.5.5 Iteration loop (re)deliver: design workshop process

The second part of the iteration loop (re)deliver, is the design of workshop process. Co-creation theories on scaffolding (Sanders, 2006) and collective creativity (Sanders, 2001) informed the design of the collaborative process considering also the of space for interaction. The design of interaction between participants became a "communication thing" in itself (Binder et al., 2011).
The workshops were not conducted individually with each food initiative as they were in the discovery tool. A selection of 2 to 4 sustainable food initiatives was invited for each workshop as the format

Figure 3-4 Example of tools designed for Workshop 2, prompt cards, canvas and brief to participants.



promoted cross-pollination of ideas within the same community of practice (Wenger, 1998). The workshops were open and shared with a wider public, communities of interest in design, social impact and sustainability The role of designer as facilitator was also important to consider at this stage. The tools were designed with the objective to be self-explanatory as much as possible. Certain tasks such as time keeping to complete activities were important to consider. The role of the communication designer during the workshops was also to observe the effectiveness of the strategically planned and unplanned interactions, activities and outcomes.

3.5.6 Iteration loop (re)discover: carry out workshop

The third part of iteration loop is (re)discover, to carry out the workshop itself and discover the effectiveness of the tools and process. Group facilitation was greatly informed by Dale Hunter's work on facilitation as movement (2009). During the workshop, participants moved from being individuals to being a collective, and moved from communication challenges to communication solutions. In this sense, how the designer-facilitator was positioned during the collaborative process was important to consider. Finding appropriate spaces to host the workshops was also important in terms of comfort for participants who are volunteers but also as a setting that inspires thinking around the *qualities of sustainability*. Guidance on creative facilitation and the setup of a space was taken from the Hyper Island Toolkit (2015) and Doorley and Witthoft's (2012) work on the importance of space as a stage for creation. An online event for the public was setup and published on social media to groups of social impact, design research, to the food initiatives and several sustainability focused organizations. This strategy to gather participants resulted in attendance of participants with a wide range of backgrounds and diversity to enrich the results. A social media presence also generated conversations about the research workshops and resulted in unforeseen connections with other designers and organisations.

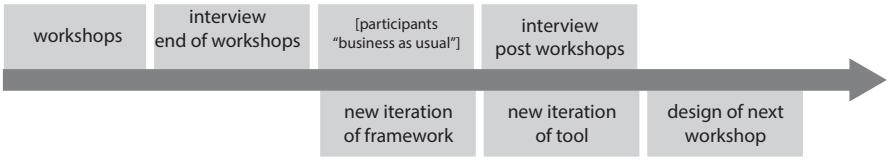
3.5.7 Iteration loop (re)define: analyse results

The last part of the iteration loop (re)define analysed the workshop results. This is what guided the re-iteration of each subsequent workshop design. The results of each workshop were mapped against the previous and informed the next. This was also important to validate the collaborative iterative practice, to validate the research outcomes and new knowledge emerged. The literature review revealed no specific tools to evaluate a collaborative practice of communication design so a specific approach was developed (refer to review of existing methods in section 2.5.4, p.47 and evaluative method developed and applied in section 5.2, p.136).

3.5.7.1. Informative evaluation interviews

Throughout the workshop series the tool and process of use was evaluated qualitatively through a series of interviews with participating representatives of sustainable food initiatives. The objective was to understand the effectiveness of the tool and process and also the value post-workshop for participanting

Figure 3-5 Diagram illustrates timeframe where informative interviews take place.



sustainable food initiatives. The data was captured in two ways. The observations during the workshop were captured on film and audio. Two sets of interviews were conducted with a representative of each sustainable food initiative (comprehensive list in section Appendix 4: Participating sustainable food initiatives, p.168). The first interview was staged at end of each workshop and the second interview 6-8 weeks later (Figure 3-5, p.62 illustrates a timeline of when these two types of interview took place).

3.5.7.2. Design of interview

The interviews were semi-structured and conversational (Turner III, 2010; Ryan and Bernard, 2003). Open coding was used to find themes that evidenced the effectiveness of the tools in relation to the indicators: People, Process, Prompts. These indicators are inspired by a typology from Cross (1999) for design research knowledge that considers the designerly ways of knowing, the processes of design and form of artefacts.

3.5.7.3. Interview at end of workshop

In the heat of the moment when participants are inspired by the activity they have just done, this interview focuses on insights relating to short-term impact. These interviews asked specific questions relating to the process, the group interaction, and the tool used in the workshop.

3.5.7.4. Interview post workshop (6-8 weeks after)

This interview was delivered either in person or via Skype when it was difficult to arrange a personal visit. It was particularly important for evaluation process because it is where the insights on mid-term impact are revealed. It follows up on the aspects participants remember from the workshop, what ideas they might have taken forward and what learnings emerged. Often the interesting elements were the unforeseen impacts, such as new collaborations and connections that emerge between participants who met at the workshop. Indicators used were:

- People - interaction between participants.
  The turnout of participants, the interaction of participants in each group, the interaction between the food initiatives themselves, the heterogeneity of participants and what it contributes to the collaborative process.
- Process – format and interaction towards outputs.
  Interactions and conversations that happened prompted by the tool cards and canvas. Considering placement of tools i.e. on the table or the wall, the arrangement of groups in the space itself, and the timing for the activities. This also considers any communication designs produced by

participants as a consequence of the workshop.

- Prompts – the tool itself.
  This refers to the graphic design elements such as; size and colour of cards, font size, number of cards, design of the canvas.

The interviews conducted through the research are referenced in the thesis using a specific notation (evaluation interview x,y). A reference list of the full set of interviews can be found in section Appendix 6: Reference list of informative evaluation interviews, p.170).

3.5.8 Deliver stage - retrospective analysis framework

The *Deliver* stage is the last in the research process and will be presented in detail in chapter 5. It is the retrospective analysis of practice, the evaluation of design impact and the research outcomes. For a summative evaluation of the research a "retrospective conversation" took place between the researcher and representatives of the 17 participating sustainable food initiatives to review what had changed since taking part in the workshops. These conversations were analysed through a framework developed, here referred to as the retrospective analysis framework (which will be explained in detail in chapter 5). To make sense of the transcript data the software Atlas.Ti[5] was used to identify and cluster themes (codes). The codes were derived from the transcripts (Turner III, 2010; Ryan and Bernard, 2003) according to categories:

a) New approaches to communications

b) Qualities of sustainability

c) References to workshop outputs.

Codes were clustered to draw findings on:

- The workshops output for each sustainable food initiative.
- The outcomes 12 months later for each sustainable food initiative.
- The *communication strategies* used.
- The *qualities of sustainability* amplified.

The retrospective material brings to light the connection between the key typologies in the research: the *qualities of sustainability* and the *communication strategies*. This structure brings to light insights to answer the research questions and identify the contribution to knowledge. This is further substantiated by evaluating the design impact.

5 ATLAS.ti is a software for the qualitative analysis of large bodies of textual, graphical, audio and video data. http://atlasti.com/

3.5.9 Evaluation of design impact

Given the research timeframe it was not be possible evaluate the impact of the communication design approaches on participants in the long term. However, as the research takes a standpoint on communication design as an expanded practice, impact is not about direct cause-effect and cannot be measured by, for example, public's reactions to a communications campaign (Frascara, 1997). To substantiate the results of retrospective analysis an existing framework developed in a recent Arts and Humanities Research Council funded study 'Identifying and Mapping Design Value Design' (Yee et al, 2015) on the value design-led service projects bring to stakeholders. Using this frame, the 'design impact' was evaluated in terms of, what value the communication design approach brought to participants.

3.6. Selection of participants

Various sustainable food initiatives took part in the research represented by either the founders or collaborators. The food initiatives were selected to take part on the basis of the following criteria. Each should:

- Display (some of) the *qualities of sustainability*.
- Be small-scale which permits them to be flexible, open to change and to take risk in innovation.
- Be open to experiment with new strategies to communicate *qualities of sustainability* as a result of taking part in this research.
- Be available for evaluation interviews and retrospective follow up.

Qualification of food initiatives in relation to these criteria was ascertained through field research and background check. Initiatives in the study are grouped according to the typologies:

- Food growing (local producers focused on the origin).
- Food distribution (innovative distribution schemes).
- Food making (focus on the social and cultural aspect of food experience).
- Food surplus (innovating re-purposing of waste).

Further commonalities among these food initiatives is captured in the literature about the emerging sustainable food movement (FAAN project, 2010) (Goodman et al., 2012). The participating food initiatives in this research are predominantly active in urban environments where achieving the balance of sustainability is challenging. Another commonality is, the sustainable food initiatives participants in this research are small-scale which permits flexibility in change, to take risk in innovation, and in this sense they express a certain "nomadism"[6]. This profile of sustainable food initiatives also arguably reflects a turning point in socio-economics as identified by Rifkin (2014)(2009) among others which is pertinent to the current conversation on design for transition, a post-material economy where activities and business focus is driven primarily by purpose and secondarily by profit. Therefore, the motivations for the

6 Nomadism is a term used by Bauman (2000) to describe a way of living in 'liquid modernity' where man easily moves through life in a nomadic like manner, easily changing jobs, geographic location, communities, and values.

representatives of these food iniatives to participate in the research were mainly centred on the exchange of practical knowledge around shared values.

3.7. Ethical considerations

What participating sustainable food initiatives might gain out of the research in exchange for their time was important to consider as part of ethical considerations. Consequently, it is relevant to mention their legal constitution and economic context. Some initiatives are social enterprises such as community food sharing schemes, others are for-profit small businesses of makers, or crowd-funded start-ups. It was important to clarify the focus of the research was not to assist the development of branding and marketing collateral, as the research focus is beyond this market-led role of communication design. However, it is important to recognise this might inevitably be a motivation to participate in the research and it is possible that sustainable food initiatives might utilise the ideas generated during the workshops for their own communications and branding. However, it was important to clarify that the research does not focus on, or offer support directly for any implementation.

In terms of the workshop procedures, sustainable food initiatives were informed a priori of the research purpose and recording of activities in a consent form. Participants of the public who took part in workshops were documented with informed consent. Example of consent forms can be found in section Appendix 5: Consent form for workshop participants, p.169. The conversations with designers that informed the review of practice were recorded and also documented in consent forms (refer to example in section Appendix 2: Consent form for conversations with designers, p.165).

3.8. Fieldwork method: discovery tool

The discovery tool was designed for fieldwork as part of the *Define* stage of research (illustrated in Figure 3-1, p.53). It was used as a way to test the iterative and collaborative methodology in practice and to re-articulate the research questions in light of the frameworks *qualities of sustainability* and *communication strategies* contextualised in the previous *Discover* stage (introduced in section 2.4.1, p.39 and section 2.5.3, p.46). It was the first interaction and generative activity with six sustainable food initiatives, and took place between December 2014 and January 2015. The discovery tool was developed because existing tools for scoping stage of research did not cover all the objectives needed. This discovery tool worked as both a fieldwork mapping and an early-stage generative tool. It was used to tackle the following objectives;

- To extract from food initiatives a set of practices and approaches to communication design (primary data) to complement the *communication strategies* and *qualities of sustainability* found in literature review (secondary data).
- To critique the existing frameworks in literature for communication design practice in terms of how these accommodate the *qualities of sustainability* by understanding how these initiatives communicate. What communication approaches are they taking that are different from expert

Figure 3-7 Example of discovery tool in use with sustainable food initiative House of Svere.

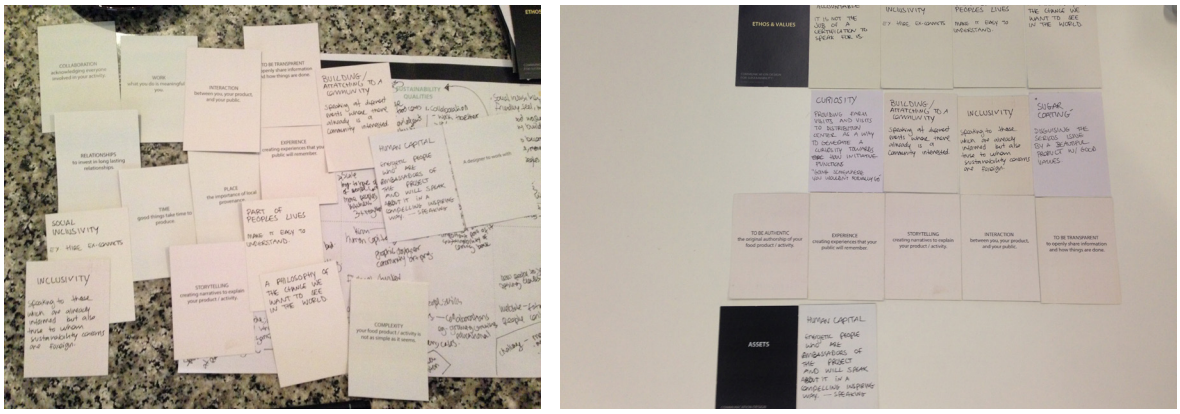
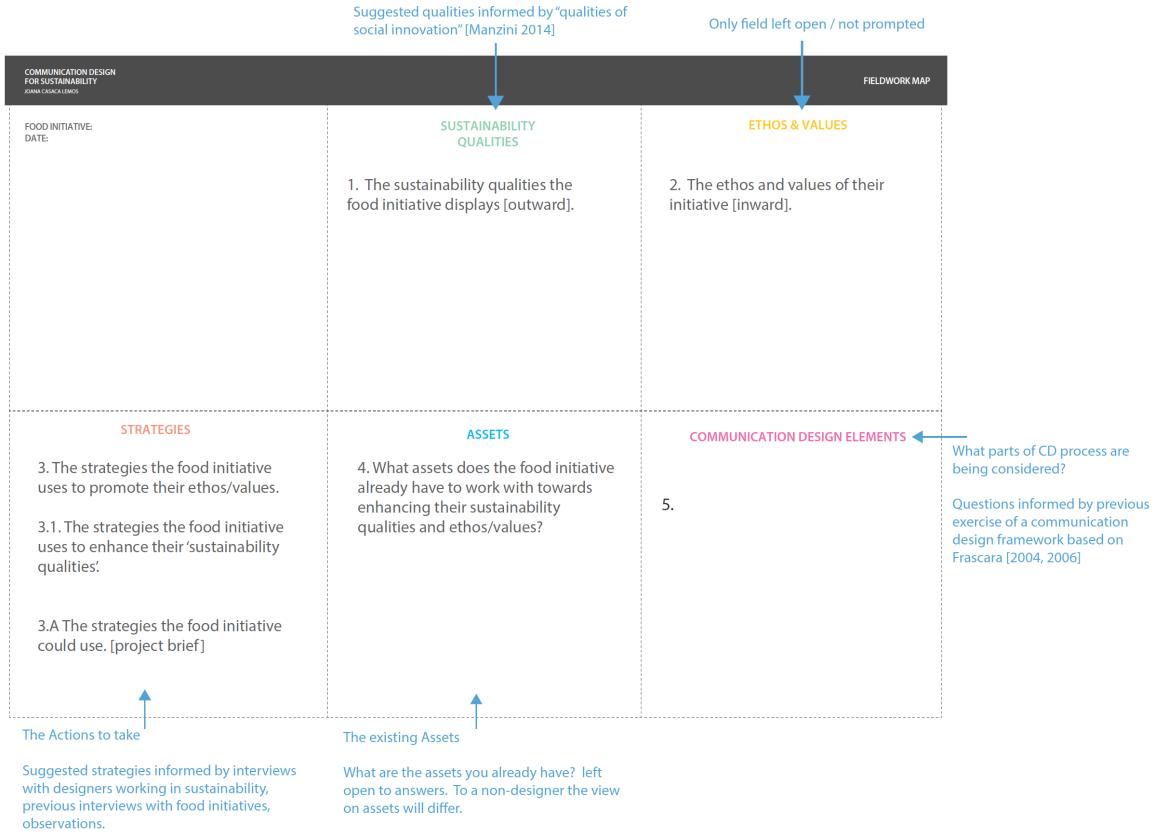


Figure 3-6 Discovery Tool: the canvas layout.



designers?

- To test a mechanism for a bottom up framework, by starting with the frameworks found in literature and identifying qualities and strategies that are not used or finding new ones.

The sustainable food initiatives were selected based on the criteria described earlier. Within the criteria, geographic location was not relevant for selection of participants because as literature review showed, initiatives demonstrating *qualities of sustainability* are not geographically specific (Cipolla, 2012) (Manzini & Tassinari, 2013). Seen that sustainable food initiatives are emerging in urban contexts where complex food sustainability challenges exist, the research workshops were hosted in different urban locations. The objective to open the research to participants in different places throughout the practice became an interesting research opportunity to gather new and diverse *qualities of sustainability*. Sustainable food initiatives explored with the *discovery tool* were: Juicebox London, House of Svere London, The People's Kitchen, London, Under The Mango Tree Mumbai and I Say Organic Delhi.

3.8.1 Design of the discovery tool

The discovery tool was designed as an interactive activity, one-on-one between designer and a participant representative of sustainable food initiative. The interactions were voice recorded. The activity took place in their own space (such as shop, market stall, office…) intentionally so as to develop a sense of trust, but also for the opportunity to understand their operational context and capture information on how each communicated what they do.

The discovery tool materials were a set of prompt cards and an A3 portable canvas that worked together (shown in Figure 3-7, p.66). The decision for this format was supported by theory underpinning the relevance of design things (Binder, 2011) for non-design experts as described earlier in the chapter. The choice of format also fitted within the review of adequate methods for collaborative design research (as explained in section 2.5.4, p.47). The canvas was the structure that guided the interaction and conversation between the designer and participant.

The canvas structure had different sections, each addressing a specific area considered important to assess how the food initiatives communicate their *qualities of sustainability* and to identify new approaches. The canvas was complemented by the prompt cards which were six different sets (listed in Figure 3-8, p.68) and the content was based on the contextual review of communication design and the analysis on *qualities of sustainability*[7]. Blank cards were also included for participants to add new approaches not covered by the ones suggested. The representatives of each food initiative selected and grouped the cards they identified with (see Figure 3-7, p.66). By adding new cards of *communication strategies* and *qualities of sustainability* the tool served the objective to identify new approaches through the vocabulary of participants themselves. In an iterative way, any new cards added by participants were

7 The review of existing approaches in communication design to communicate sustainability is in section 2.5, p.41.

Figure 3-8 Discovery Tool: the content of prompt cards.

OVERVIEW CARDS Set of cards designed to guide the conversation. General questions to understand how the food initiative communicates.
A brief introduction: how you would like your initiative / business to be described? How do you plan the way you deliver your sustainability message? What are you trying to say to your audience? Do you think the messages and communications might increase the participation of the public in your initiative? What do you believe to be the essential qualities of a business / initiative promoting sustainability? Can you give an example of a project / campaign you have done that you consider to have been effective?
QUALITIES OF SUSTAINABILITY CARDS The qualities of sustainability drawn from literature review Participants were asked to map the cards they identified with.
Drawn from the literature review Time Scale Complexity Place Relationships Work Collaboration
ETHOS & VALUES CARDS Cards started off blank and accumulated content as they were used, which was taken onto the next interaction. Participants were asked to map the cards they identified with. New ethos & values identified in the conversation were added.
Blank cards
COMMUNICATION STRATEGIES CARDS The communication strategies drawn from literature review. Participants were asked to map the cards they identified with. New strategies identified in the conversation were added.
Drawn from the contextual review Storytelling Transparency Experience Interaction Authenticity
ASSETS CARDS Cards started off blank and accumulated content as they were used, which was taken onto the next interaction. Assets identified in the conversation were added.
Blank cards
COMMUNICATION DESIGN ELEMENTS CARDS To guide the conversation specifically around communication design practice. The questions selected reflect important points designers should consider when developing new communications (Frascara, 2004, 2006)
Who is the designer? Through what medium(s) does this message travel? What physical form does the message take? What is the aesthetic you have chosen? Why? What is the content of your sustainability message? How does the location, culture, context influence your message? What is the meaning of your message? Is it something we can “see”? something we can “feel”? Are you aiming to form new publics or cement existing ones? What do you want the public to do when they read your message?

included in the next interaction with a new sustainable food initiative. In this way the guidance cards was co-developed with participant food initiatives.

The process of using the discovery tool ran as follows (refer to Figure 3-8, p.68):

i) First, an overview guided by cards with general questions on how the food initiative communicated.

ii) The second section, *qualities of sustainability*, asked participants to map the prompt cards they identified with.

iii) The section ethos and values were blank cards that accumulated content as they were used from one interaction to the next.

iv) The section *communication strategies* functioned similar to *qualities of sustainability*.

v) The assets section was similar to ethos and values and asked participants to write their own assets to communicate with.

vi) The section communication design elements was based on a set of points described by Frascara (2004) on things that communication designers should consider in practice (samples of mapping activities on this framework in Volume II).

Figure 3-9 Discovery tool outputs on the prompted qualities and strategies (drawn from literature).

	Juicebox	I say organic	House of svere	Under mango tree	Peoples Kitchen
Qualities of sustainability					
Time					
Scale					
Complexity					
Place					
Relationships					
Work					
Collaboration					
Communication strategies					
Storytelling					
Transparency					
Experience					
Interaction					
Authenticity					

3.8.2 Outputs of discovery tool

The outputs of the discovery tool were twofold.

i) the patterns found in the use of existing prompt cards (illustrated in Figure 3-9, p.69) and ii) the new *qualities of sustainability* and *communication strategies* extracted from sustainable food initiatives as they added new cards to the tool (as listed in Figure 3-10, p.70).

Figure 3-10 Outputs of discovery tool: qualities and strategies extracted from sustainable food initiatives.

QUALITIES OF SUSTAINABILITY CARDS Participants were asked to map the cards they identified with. New qualities identified in the conversation were added.	
Drawn from the literature review	**Extracted from Sustainable Food Initiatives**
Time Scale Complexity Place Relationships Work Collaboration	Purity of product Partnerships Local and familiar Health / Wellness
ETHOS & VALUES CARDS **New ethos & values identified in the conversation were added.**	
Extracted from Sustainable Food Initiatives	
Accessibility Contribute to community Inclusivity Communal Friendly feel Hire ex-convicts Health Philosophy of change Provenance Part of people's lives	
COMMUNICATION STRATEGIES CARDS **Participants were asked to map the cards they identified with.** **New strategies identified in the conversation were added.**	
Drawn from the contextual review	**Extracted from Sustainable Food Initiatives**
Storytelling Transparency Experience Interactions Authenticity	Sugar Coating Seeing is Believing Curiosity Community of Interest Personal Relationship

a) Outputs in relation to prompt *qualities of sustainability and communication strategies*

Participants selected the *qualities of sustainability* by inclusion/exclusion of the ones they identified with in cases where they identified with most prompts they arranged them in order of importance. It was found that there was generally a blur between the understanding of 'communicating about the qualities' and of 'fostering the qualities' through their activities, which might suggest a particular understanding of what communication design is, or a confusion with the language used. This is discussed in the reflection (section 3.8.3, p.72).

The most identified *qualities of sustainability* were *time, work and collaboration*, and these were exemplified by participants in different ways (see Figure 3-9, p.69). Collaboration, is already known to be an essential quality of initiatives that are social innovations (as described in literature review section 2.4, p.38). The most identified *communication strategies* were *storytelling, interaction and transparency*. These three correlate with the communication strategies found to be significant in designer's practices as reviewed in section 2.5.3, p.46). Participants in the sessions with the discovery tool provided examples of how the *communication strategies* and *qualities of sustainability* were applied in their communications. The examples given range from visual storytelling to interactive experiences, including;

- Applying transparency literally as a strategy in the choice of packaging for "what you see is what you get" (example from participant House of Svere).
- Applying experience by displaying the bee boxes in urban public space to raise awareness for the indigenous bees in "adopt a bee box scheme" (example from participant Under the Mango Tree).
- Applying storytelling by sharing a new story everyday on farming sources to fostering the quality of Place (example from participant I Say Organic).

b) Outputs of newly extracted *qualities of sustainability and communication strategies*

The new qualities and strategies found were important to justify the context for practice in collaboration with sustainable food initiatives. Through the use of the discovery tool it was found that participants did not always relate to the *communication strategies* suggested in the prompt cards (drawn from the contextual review). This did not mean the food initiatives were unsuccessful at communicating their qualities. If they enhanced *qualities of sustainability* in a different way not covered in the literature it meant they were potentially innovative (listing of new qualities and strategies in Figure 3-10, p.70).

Communication strategies extracted from food initiatives include:

- Sugar coating, describes communicating about a social project disguised as an appealing metaphor (i.e a honey brand).
- Seeing is believing, describes an approach to address the complexity in sustainability by allowing the public to visit.
- Curiosity, describes designing experiences to ignite potentially new participants.
- Community of Interest, describes giving talks at events in new communities.
- Personal Relationship, builds on the quality of relationships and describes designing one-on-one relationships with each of customers by personalising communications.

Qualities of sustainability extracted from food initiatives include:

- Health and Wellness, to provide educational content that public otherwise would not access.
- Purity of product, communicating the high standard of quality in the product itself.
- Partnerships, fostering collaborations with like-minded initiatives.

The section ethos and values also revealed content that potentially overlapped the *qualities of sustainability*.

- Accessibility, to take input from the public.
- Inclusivity, ethical hiring of people with diverse backgrounds.
- Communal (similar to quality community) bring together the local people.
- Part of people's lives, contributing to the local networks.
- Philosophy of change, making the change with the consumer.
- Provenance (similar to quality place).

3.8.3 Reflection on fieldwork method: discovery tool

The outputs and observations presented above drew insights and points of discussion in relation to the research questions. The design of the discovery tool itself as a portable fieldwork tool demonstrated to be effective. Some graphic aspects could be improved, for example the canvas size so that both designer and participant could fill in it together. As to content of prompt cards, throughout the interactions participants identified qualities or strategies they were not yet using and this gave them an opportunity to generate new ideas.

The first point of reflection is in relation to the research context. The use of the discovery tool as a "design thing", a tool that enables socio-material interaction as described by Binder (2011), was a useful way for participants to imagine the abstract concepts of *qualities of sustainability* and *communication strategies*. In this sense, it was a tangible way to capture new qualities and strategies from participants in relation to the existing ones suggested. The physical canvas and cards also worked as vehicles for the conversation around specific themes that participants were not experts in. This initial fieldwork interaction also confirmed the suitability of small-scale initiatives in sustainable food as participants for the research objectives (these include start-ups and local social enterprises, as presented in section 3.6, p.64). These participants were open to discuss what communication design is capable of doing and are not bound by a set of restrictions in terms of what they can innovate in their brand or communications. These interactions showed these types of initiatives make things possible and break boundaries. They privilege transparency in their businesses and collaborative practices. Another interesting observation was that, these initiatives begin as a story and for some time that is the key asset they have. In this sense, these participants understand what narrative is about and how stories are useful.

The second point is in relation to the discipline of communication design as defined in this research. A key observation was the blurring between the interpretation of communicating qualities (through

communications design) and fostering qualities through the food activity itself. This observation contributes to the discussion on the expanded practice of communication design supporting the notion of communication through experience (Grefé, 2011, as explained in section 2.2.1, p.33).
The outputs also showed that some *communication strategies* that are used by expert designers (exemplified in review of practices in section 2.5.3, p.46) match to the ones used by non-experts/diffuse designers, these sustainable food initiatives. However, some new *communication strategies* were also identified, such as curiosity (suggested by participants I Say Organic and Under The Mango Tree) which introduce a new vocabulary derived from "diffused design" by non-experts (Manzini, 2015).

Another observation concerns the existing frameworks for communication design practice, particularly the structure drawn from Frascara (2004) that provided a base for the discovery tool's questions on 'communication design elements' (see Figure 3-8, p.68). Looking at the literature on the expanded practice of communication design, a substantial outcome was the realisation that participants could design a brief for themselves. The process of clustering cards and adding new content could be interpreted as the beginning of "designing a brief", a process that is usually a dialogue between designer and client. The editing decisions made while in conversation and through card sorting resulted in a potential brief for the challenges they have and how to address them. A characteristic described by Mulgan (2006) of social innovations is the idea of 'how it could be'. The discovery tool, as a reflexive interaction of self-discovery could then be used to understand what the communication design brief is. This outcome adds to the vocabulary of communication design by highlighting the fact that, these food initiatives have the potential to develop their own communications [through their own assets] and this can challenge the understanding of what communication design is as a practice.

3.8.4 Next steps in practice

The insights introduced above informed the next research stage *Develop* (to be explained in chapter 4). The discovery tool was re-designed and refocused in the following ways. In regards to the main research question that is, to explore a new role for communication design practice in social innovation for sustainability (in the definition of an expanded practice), the discovery tool was re-designed from a fieldwork data capturing tool to also become a generative tool for non-design experts. This decision was informed by observations using the discovery tool where an opportunity was identified. While sorting through the prompt cards with *qualities of sustainability* and *communication strategies*, participants would identify the ones they had not yet explored and would like to, or the ones they felt were more challenging. Building upon this insight, the discovery tool was then re-designed to work around an existing communication challenge as a starting point and generate solutions that explore new qualities and strategies. In this sense, the participants would end up "designing a brief" for themselves in a simplified vocabulary. The discovery tool was also re-designed to become a collaborative tool and be used in interactions involvingat least 2 people. This decision was supported by the observed effectiveness of the interface between designer and participant applied within the discovery tool. The

process of card sorting through conversation was beneficial to gain clarity on existing communication practices and identify new approaches. Within the landscape of collaborative methods (reviewed in section 2.5.4, p.47) there was an opportunity to develop a generative tool for communication design that addresses the *qualities of sustainability*. Author Liz Sanders (2015) proposes that communication design plays a role in the materials that support collective creativity and co-construction of a shared narrative. Similarly, author Frascara described the purpose of visual communications as a means only to leverage participants towards desired changes (Frascara, 1997, p.5). These theoretical perspectives were noticeable in the first insights drawn from fieldwork through the discovery tool. Participants edited the prompt cards and added their own *qualities of sustainability* and *communication strategies* (section 3.8.2, p.69). Based on these early stage findings, it became apparent that the visual format of the discovery tool could be re-designed to become a generative and collaborative tool. This decision was also supported by the existing literature on social innovation initiatives, as initiatives that are social in their ends and in their means (Mulgan, 2006) (Manzini, 2015), suggesting potential for a tool that is social in its means i.e process and well as its ends i.e. socially impactful communication.

3.9. Conclusion

This chapter has set out the methodological framework for a collaborative practice and the methods used at each research stage. It described the research process model based on the double-diamond structure, the iteration loop for practice and its sub-components. It also introduced the discovery tool that was developed as part of the *Define* stage of research. The discovery tool was the first fieldwork activity in collaboration with a set of sustainable food initiatives. It served to extract from food initiatives primary data on how they communicate their *qualities of sustainability* and what *communication strategies* they use. The outcomes of the use of the discovery tool included new *qualities of sustainability* and communications strategies extracted but also findings that supported the development of the discovery tool into a collaborative tool. This informed the next stage of practice which is the iterative workshop series, to be described in the next chapter. The next chapter presents the workshop series which is the core of the iterative practice that realised the research aims: to identify a new communication design approach that can support the participation of public and empower sustainable food initiatives through more collaborative ways of designing communications.

4 - Develop stage: iterative workshop series

4.1. Introduction to the Define stage

Following the account of the *Define* stage and description of the fieldwork method *discovery tool*, this chapter covers the *Develop* stage of research. This stage focuses on the iterative practice that was carried out through a series of workshops . The aim was to develop and test a communication design tool (a canvas and set of prompt cards) that enabled the target users (in this research the sustainable food initiatives) to:

i) Articulate the *qualities of sustainability* relevant to their initiatives.

ii) Identify new *communication strategies* and maximise use of existing assets.

iii) Amplify their qualities through new communication designs.

The starting point to design the iterative workshop series was the insight gathered from the fieldwork using the *discovery tool* (explained in section 3.8, p.65). To restate and summarise:

i) The *discovery tool* supported the elicitation and identification of new *qualities of sustainability* and *communications strategies*.

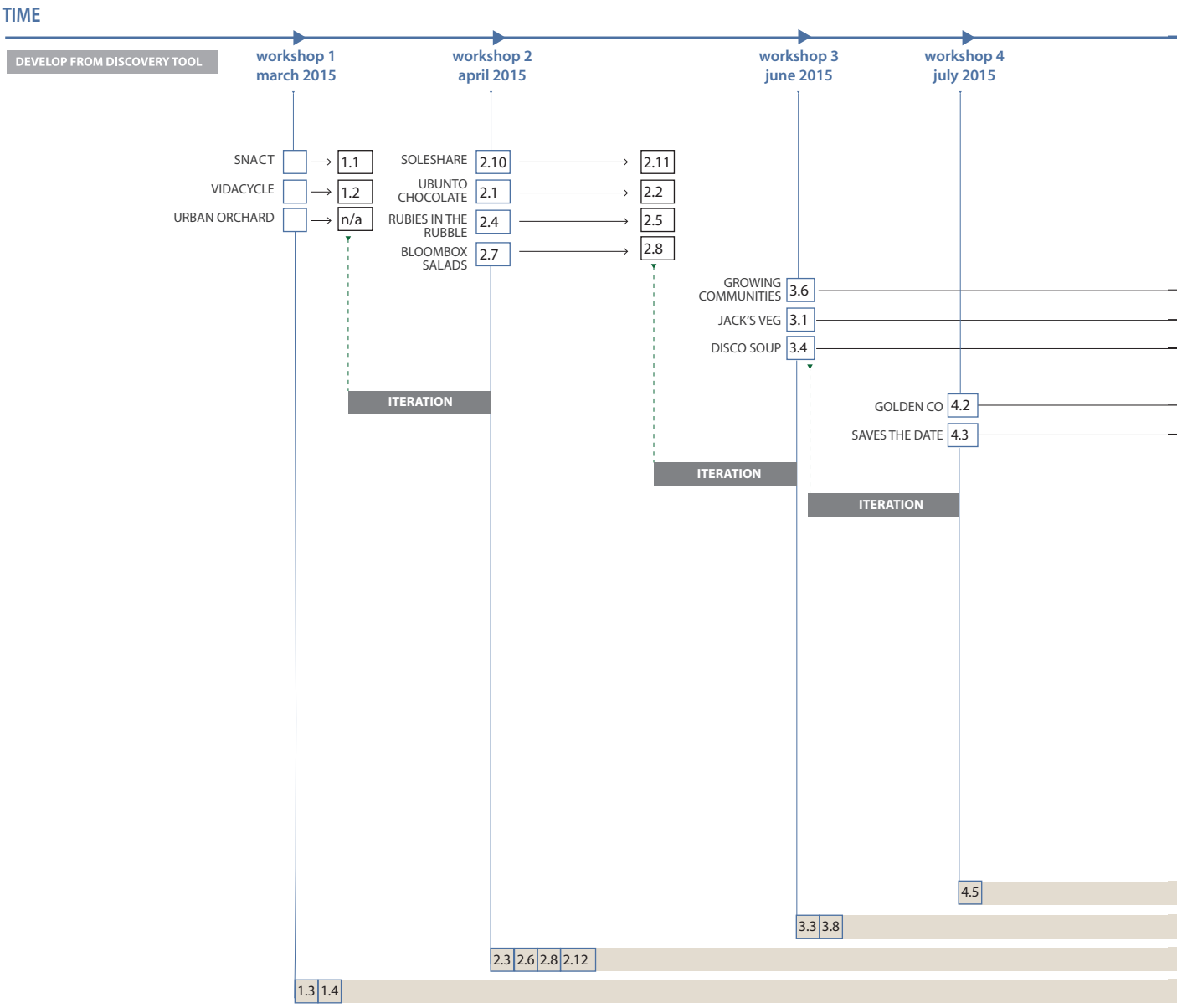
ii) Findings supported the potential for the discovery tool to be developed into a collaborative process using the tool.

iii) The interactive process of card sorting through conversation was beneficial to gain clarity on existing communication practices and identify new approaches.

In the workshop series the tool and process of use was iterated by representatives of sustainable food initiatives in collaboration with a sample of attendees of the public. This approach to practice looked to address a research objective: to explore how the process of communication design can become collaborative so as to amplify the social dynamics of these initiatives in their ways of operating.

This chapter presents the six workshops and the progression in terms of the main findings and how they informed the development of the discovery tool (the canvas and prompt cards set) and the process for its use towards a collaborative communication design tool (Figure 4-0 shows the timeline of iteration). The changes from one workshop to the next is the iterative loop of practice as explained in methodology

Figure 4-0 Timeline of workshops and evaluation interviews.

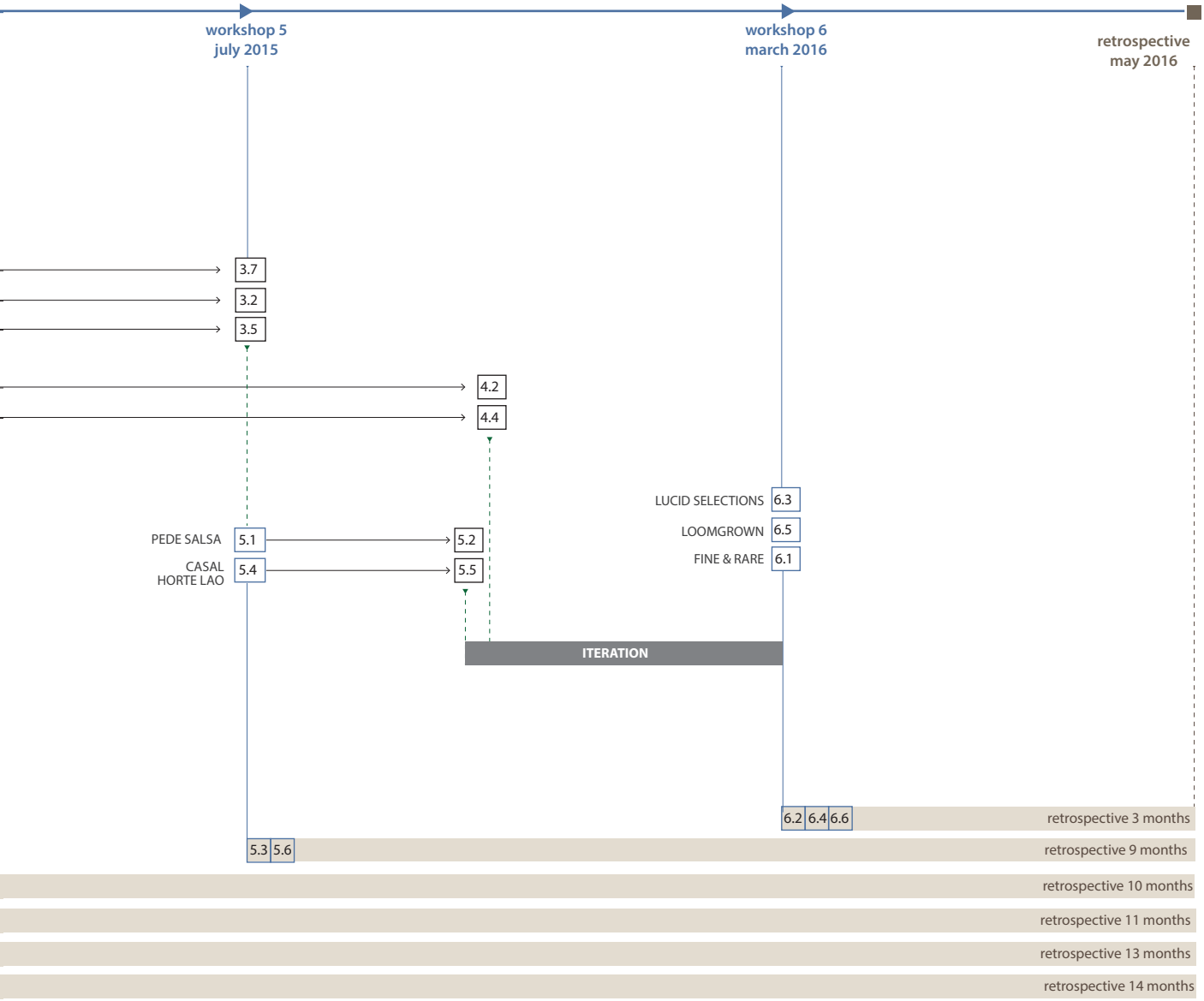


Reference list of interviews with sustainablood initiatives

Workshop 1 interviews
1.1 Snact post-workshop interview
1.2 Vidacycle post-workshop interview
1.3 Vidacycle retrospective conversation
1.4 Urban Orchard retrospective conversation

Workshop 2 interviews
2.1 Ubuntu Chocolate end of workshop interview
2.2 Ubuntu Chocolate post-workshop interview
2.3 Ubuntu Chocolate retrospective conversation
2.4 Rubies in the Rubble end of workshop interview
2.5 Rubies in the Rubble post-workshop interview
2.6 Rubies in the Rubble retrospective conversation
2.7 Bloombox Salad end of workshop interview
2.8 Bloombox Salad post-workshop interview
2.9 Bloombox Salad retrospective conversation
2.10 Soleshare end of workshop interview
2.11 Soleshare post-workshop interview
2.12 Soleshare retrospective conversation

Workshop 3 Interviews
3.1 Jack's Veg end of workshop interview
3.2 Jack's Veg post-workshop interview
3.3 Jack's Veg retrospective conversation
3.4 Disco Soup end of workshop interview
3.5 Disco Soup post-workshop interview



3.6 Growing Communities end of workshop interview
3.7 Growing Communities post-workshop interview
3.8 Growing Communities retrospective conversation

Workshop 4 Interviews
4.1 Saves The Date end of workshop interview
4.2 Saves The Date post-workshop interview
4.3 Golden Company end of workshop interview
4.4 Golden Company post- workshop interview
4.5 Golden Company retrospective conversation

Workshop 5 Interviews
5.1 Pede Salsa end of workshop interview
5.2 Pede Salsa post-workshop interview
5.3 Pede Salsa retrospective conversation
5.4 Casal Hortelao end of workshop interview
5.5 Casal Hortelao post-workshop interview
5.6 Casal Hortelao retrospective conversation

Workshop 6 Interviews
6.1 Fine and Rare end of workshop interview
6.2 Fine and Rare retrospective conversation
6.3 Lucid Selections end of workshop interview
6.4 Lucid Selections retrospective conversation
6.5 Loomgrown end of workshop interview
6.6 Loomgrown retrospective conversation

(section 3.5, p.58). The iterative workshop series was informed by informative evaluation interviews also presented in this chapter (a numbered reference list of interviews can be found in section Appendix 6: Reference list of informative evaluation interviews, p.170). A complete listing of participating sustainable food initiatives can be found in section Appendix 4: Participating sustainable food initiatives, p.168. The consent form used for all participants in the workshop series is in section Appendix 5: Consent form for workshop participants, p.169.

4.2. Iterative practice (workshop series)

A total of 6 workshops took place between March 2015 and February 2016 with 17 representatives of sustainable food initiatives and a total sample of 86 individuals from the wider public. Sustainable food initiatives were personally invited to join the workshops according to the criteria for selection (described in section 3.6, p.64) and a public invitation shared on social media for the wider public to join (Figure 4-1, p.81) shows workshop attendance and group structure). The decision to include a sample of wider public in the workshops was based on the findings of using the discovery tool in fieldwork (explained in section 3.8, p.65). It had also revealed the potential for the tool initially designed for discovering *qualities of sustainability* and communications strategies, to also become a collaborative and generative tool for new communication design briefs (see section 3.8.3, p.72). On this basis, the format of the workshops was centred on using the tool in groups, each representative of a sustainable food initiative with a small group of people from the general public (as set out in methodology section 3.5.7, p.61). To guide the iterative process, the workshops included informative evaluation interviews. These were qualitative and focused on the effectiveness of the tool, including the canvas and the card prompts, the outputs, and value to participants. The emphasis was to understand the impact of the collaborative approach to communication design facilitated by the tool. A reference listing of workshops interviews with representatives of sustainable food initiatives is in section Appendix 6: Reference list of informative evaluation interviews, p.170. Extensive visual documentation of the workshop series is presented in thesis volume II.

Figure 4-1 Summary of workshops attendance.

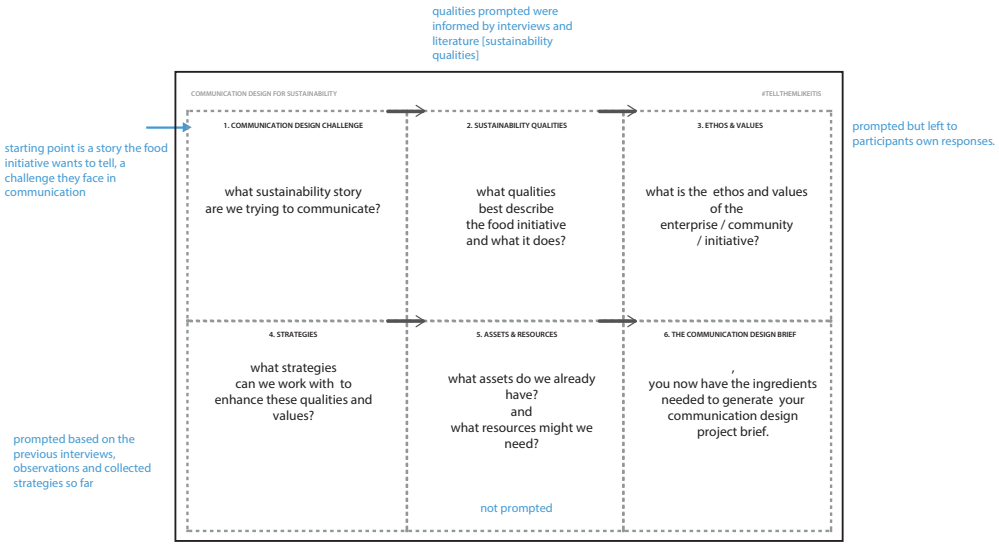
	Participating Sustainable Food Initiatives	Number of participants from wider public	Number of participants in each food initiative group	Total participants
Workshop 1	Snact Vidacycle The Urban Orchard	10	3	13
Workshop 2	Soleshare Ubuntu Chocolate Bloombox Salads Rubies in the Rubble	23	5	28
Workshop 3	Jack's Veg Growing communities Disco Soup	15	4	19
Workshop 4	Saves The Date Golden Company	7	3	10
Workshop 5	Casal Hortelao Pede salsa	15	7	22
Workshop 6	Fine and Rare Loomgrown Lucid Selections	16	5	21

4.3. Workshop 1 "tell them like it is"

This initial workshop worked as a trial in terms of the format designed in response to the practice objectives (described in section 3.5, p.58). It focused on the questions; how can the *discovery tool* be re-designed for generative practice? How can the tool lead the workshop participants to reflect on communication challenges and generate solutions collaboratively?

This was the smallest workshop in the series. It was held in March 2015 during Research Fortnight at Central Saint Martins and participants were food initiatives representatives, research students, staff, and few participants from the external public. The workshop agenda was set at the beginning of the two-hour workshop and handouts distributed. This included an overview of the objectives for the session and an introduction to the sustainable food initiative representatives in the room: Snact[1], Vidacycle[2] and Urban Orchard[3]. Participants from the external public were encouraged to freely assemble themselves in three groups each with a sustainable food initiative to collaborate with using the tool.

Figure 4-2 Plan for canvas in workshop 1. Indicates the plan for use.



4.3.1 Design of tool and process (workshop 1)

As described earlier, the tool designed for this workshop was developed from the fieldwork *discovery tool* and comprised of a canvas and set of prompt cards. The changes made were based on the findings identified and the opportunity to develop a tool for collaborative communication design practice (explained in section 3.8, p.65). This first iteration was also supported by the underpinning theory on collaborative methods (see section 2.5.4, p.47). The specific literature focused on "design things" (Binder et al., 2011, p.1) as a collective of human and non-human elements brought together to tackle matters

1 Snact is a start-up re-purposing fruit waste. www.snact.co.uk

2 Vidacycle is a family run organic farm in Chile pioneering mobile phone technology to support farmers. tech.vidacycle.com

3 Urban Orchard creates public orchards across urban areas. www.theorchardproject.org.uk

A Full listing of sustainable food initiatives participating in research in section Appendix 4: Participating sustainable food initiatives, p.168

Figure 4-3 Workshop 1 in progress.

of concern, the discourse of participation in communication design (Armstrong, 2011), and the potential to develop and test a new approach to co-creation (in communication design) to amplify the *qualities of sustainability* (as defined in section 2.4, p.38).

The tool originally designed for the fieldwork discovery tool (canvas and set of prompt cards) was iterated and designed to be generative and collaborative. The method of use was designed to take users on a process from articulating communication challenges to a communication design solution. This iteration focused on:

a) Assets and resources mapping because the discovery tool showed that sustainable food initiatives reflected on maximising the assets they have to communicate with (section 3.8.3, p.72).

b) Designed for group collaborative format as a canvas displayed on the wall, inspired by effectiveness of canvases as collaborative tools (section 2.5.4, p.47).

c) The tool itself was designed with the intention of a low-fidelity feel so as to encourage interaction.

The process of using the tool:

The canvas guided participants through six sections. It started off with a reflection on the story the sustainable food initiative tries to communicate (illustrated in canvas Figure 4-2, p.82). It guided participants through remaining stages towards the end objective to develop a new communication design brief. The sections in the canvas were led by questions and a set of prompt cards (the content of prompt cards is listed in "Appendix 12: Workshop 1 prompt cards" p.180) these were:

- Sustainability qualities – the content was developed from the frameworks analysed in the literature review and new content added through the discovery tool.
- Ethos & values – content developed from discovery tool and blank cards
- Assets & resources – blank cards, to be filled out by participants according to context.
- *Communication strategies* – the content was developed from the review of practice and new content added through the discovery tool.

The design of the tool (canvas and prompt cards set):

The tool itself was designed with a low-fidelity look and feel as to invite participants to interact and write on it. The focus at this stage was not on the graphics but the process of use. The simple typeface used

and large font size made it easier for participants to read the cards from a distance working in groups, and this was important to encourage participation of everyone (for example Figure 4-3, p.83).

4.3.2 Outputs (workshop 1)

As the first iteration of using the tool in a group co-creation format it was shown to be fruitful as a discovery process to map the *qualities of sustainability* and *communication strategies* the groups identified (similarly to the discovery tool experiment). It proved to successfully encourage identifying new and potentially unexplored *qualities of sustainability* and *communication strategies* (see Figure 4-5, p.85).
Each group produced a range of output ideas addressing the communication challenges identified by each sustainable food initiative. At the end of the workshop participants were asked to share one example they considered valuable and accessible to implement (see Figure 4-4, p.84).
The outputs are a wide scope of communication design approaches that fit within the expanded practice definition, including the design of experiences and interactions, such as an apple juice stall or a crowd-sourced book.
The canvas structure helped participants to have a specific conversation about *qualities of sustainability* and *communication strategies* with a sample of the public they might not otherwise have engaged with. Although participants edited the prompt cards, feedback showed the canvas itself was not self-explanatory. Feedback also showed the clearer sections were the communication challenge and the ideation at the end. The ideas created in response to the communication challenge (Figure 4-4, p.84) suggested the beginning of designing a brief for communication design challenges (Figure 4-6, p.85).

Figure 4-4 Workshop 1 outputs. The communication challenges identified by each food initiative in the workshop and the output brief generated by the group.

Participating food initiatives	Communication challenge	Output idea generated by group
Snact	The story and use of fruit waste. Different ways of thinking about fruit waste.	A crowd-sourced imagery and text for products A crowd-sourced recipe book for uses of fruit jerky
Vidacycle	The story of the simple process of growing grapes using old methods, how it impacts a lot of families, the community story.	A photojournalism story / novelist to come write about daily lives of people in the farm.
Urban Orchard	Leasing between the PR agency and a corporate investment fund, and small groups of orchard farmers.	An apple juice stall ran by PR company and community group

4.3.3 Informative evaluation (workshop 1)

To restate, the set objectives for this first workshop were: (i) explore the potential of a tool for collaborative practice enabling the output of a communication design brief, (ii) lead the food initiative and participants to reflect on their *qualities of sustainability* and communications strategies collaboratively, (iii) identify how the communication design briefs respond to the emerging paradigm of an expanded practice.
Feedback was collected at the end in a group discussion, however, this was not voice recorded (a learning

Figure 4-5 Workshop 1 example of communication strategy prompt cards in use.

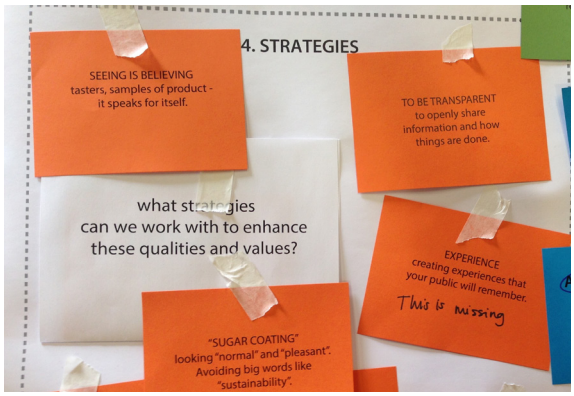


Figure 4-6 Workshop 1 example of outputs in post-its.

taken on-board for the following workshops) and also collected over email in evaluation questions[4]. From feedback the key points were taken forward. These were:

a) Participant responses overall suggested the collaborative process to discover and construct new stories was valuable to understand how their message is interpreted.

> *"Notably the fact that we're not telling a story of food waste, we're telling a story of using food! That's actually quite a big difference." (evaluation interview 1.1)*

> *"Joint creative process definitely shifted my excitement about the project" (evaluation interview 1.2)*

b) Ideas generated by participants evidence an understanding of the expanded practice of communication design, for example the interest in collaborative and experiential approaches such as "crowd-sourcing" for creative content (image).

> *"some of the ideas around collaborations/ partnerships as well as inviting a photojournalist" (evaluation interview 1.2)*

c) Similarly to findings from the discovery tool (section 3.8.3, p.72) there was a general understanding of the qualities of communicating sustainability as an experience, for example, photojournalism to capture the everyday on a farm, or the apple juice stand as a way to trigger new conversations between different stakeholder (Figure 4-4, p.84).

> *"we don't necessarily take the time to make a strategy/think about it actively as we did in the workshop. " (evaluation interview 1.1)*

d) Value of pluralism in the group as all participants bring their own experience and add to the collaborative process through that. Participants shared personal stories and observations from their everyday and own expertise that contributed to new ideas.

> *"I wouldn't say it changed anything but it brought up some new interesting perspectives and*

4 Refer to "Appendix 7: End of workshop interview questions" p.172

thoughts" (evaluation interview 1.1)

Regarding shortcomings identified for the workshop, representatives of sustainable food initiatives identified the following improvements for the tool itself. These were:

- The card prompts were helpful but some too open, others too specific.
- To clarify terms used: qualities, assets, resources, the brief.
- Indicate a path of process, for example, numbering the canvas sections.

4.3.4 Input for next iteration

As part of methodology for practice through the iterative loop (explained in section 3.5, p.58) it was essential to consider the input carried forward into the next iteration. In terms of the tool design and process of use, the following points for next iteration were taken onwards. These were based on feedback of representatives of sustainable food initiatives in post-workshop interviews:

- Clarify how to use the canvas in terms of the different sections.
- Design a way for participants to keep documentation of outcomes post-workshop.
- Consider the importance of words and how it conveys meaning and the understanding of what a brief is to a non-design expert.
- Design a way to identify link between all sections in the canvas and how these lead to the idea created.

4.3.5 Reflection (workshop 1)

As the first workshop in the series, it generated insights that can be discussed in relation to the research objectives (section 1.3, p.26).

a) Frameworks: *communication strategies* and *qualities of sustainability*

The two frameworks are the result of the analysis of existing literature (section 2.4.1, p.39 and section 2.5.3, p.46) and are central to the first research objective. To provide a visual overview of the strategies and qualities identified by the participants in the workshops infographics were designed (see Figure 4-7, p.88). These show the qualities and strategies prompted by the tool, the ones selected by each food initiative and the new ones added. This supports understanding of the potential link between the communication design challenge proposed, the *qualities of sustainability* to be enhanced and the *communication strategies* to be used. These can be seen as the ingredients for a communication design solution in response to the challenge set. In analysis of this workshop it can be identified that in terms of *qualities of sustainability*, *relationships* and *collaboration* seem to be most selected. In terms of strategies, *community building, storytelling* and *transparency* are common across all three food initiatives.

b) This iteration brought up the question of what the purpose of the tool and collaborative practice is. Whether the contribution is about leveraging communication between different stakeholders (of the

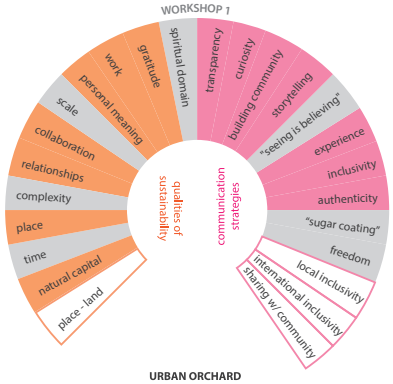
sustainable food initiative itself) or is it to leverage communication between the food initiative and their public (as seen in the workshop). The literature review proposed there is a commonality among social innovation projects that are about fostering change. The starting point is a shared vision in order to be able to make that change (Mulgan, 2006) and this is where articulating the narrative is important as the review of practice showed (section 2.5, p.41). Recent research in the area of design for social innovation by the DESIS cluster[5] on storytelling has proposed new insights on the importance of engaging publics through narrative.

c) Review of literature and practice revealed recent works where the communication designer plays a role as facilitator in participatory practice (section 2.5, p.41) and also as a designer of (communication design) tools (Ali, 2016) (Choukeir, 2015) both of which can be understood as examples of an expanded practice of communication design (section 2.2, p.33). The practice explored in this workshop supported the shift from the communication designer as a facilitator in participatory process (Armstrong) to designer (and facilitator) of a co-creation process. Communication designer Armstrong (2011) suggested that co-creation involves "flattening hierarchical orders" (Armstrong, 2011, p.43). This first workshop showed instances of how the tool might empower non-design experts (here the sustainable food initiatives) to generate a communication design brief for themselves in collaboration with their public (instead of, collaboration with the designer).

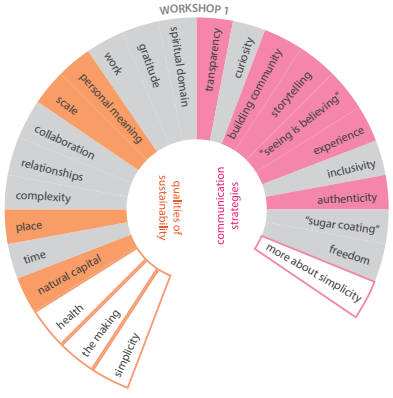
5 At this time of research I contributed an article for the DESIS Storytelling publication Lemos, J. (2016) 'The Designer as a Lens', in Elisa Bertolotti et al. (eds.) The Pearl Diver: the designer as storyteller. DESIS philosophy talks: storytelling & design for social innovation. 2016. Milano: DESIS Network Association - Dipartimento di Design, Politecnico di Milano. p. [online]. Available from: https://lirias.kuleuven.be/handle/123456789/571109 (Accessed 10 February 2017).

Figure 4-7 Workshop 1 outputs. Left: tool suggested these *qualities of sustainability* and *communication strategies*. Right: chosen or new added by sustainable food initiative.

VIDACYCLE



URBAN ORCHARD



SNACT

4.4. Workshop 2 "Narratives of positive impact"

The second workshop in the iterative series happened in April 2015. It took place at co-working space Second Home[6] hosted by General Assembly London[7] (Figure 4-12, p.91 and Figure 4-13, p.91 show the workshop underway). At this point in the practice it became apparent the subject of the research project was of interest to several organisations who freely offered the hosting space. It became valuable to welcome partnerships with organisations that supported the research ethos as a way to extend the conversation to wider audiences, which is one of the research objectives. For this workshop, General Assembly promoted the free event on their website and through the online register it gathered 30 participants of very diverse backgrounds and mostly unfamiliar with the participating sustainable food initiatives. Representatives of sustainable food initiatives were; Soleshare[8], Rubies in the Rubble[9], Ubuntu Chocolate[10] and Bloombox Salads[11]. The agenda was similar to the workshop 1. Starting with a short introduction about the research and distribution of briefs and consent forms. Then each representative of sustainable food initiatives described their activities. The public attending freely assembled themselves into four groups each with a sustainable food initiative. Overall the workshop lasted for 3 hours and was video recorded.

The research questions explored in this workshop addressed the points for development extracted from the previous workshop: How can the tool be designed for participants to understand their own narrative, using sustainability qualities from a communication challenge to developing communication solutions? How can the tool be designed so it invites participants to generate more content?

4.4.1 Design of tool and process (workshop 2)

This workshop was built on the inputs gathered by workshop 1 as part of the iterative process (described in section 4.3.4, p.86). The most substantial point for development was to re-design the tool so participants could identify the link between all sections in the canvas and how these led to the final outcomes. To address this, the double diamond (Design Council, 2014) was used as a blueprint for the tool design (Figure 4-8, p.90). The divergent and convergent structure of the double-diamond is a simple and robust method to guide creative ideation towards a solution. It proved useful for this iteration of the tool.

This iteration of the tool proved to be more effective than the one used in previous workshop 1 (section 4.3.1, p.82) because the previous version had been designed based on the discovery tool (section 3.8.1, p.67) which was fit for the purpose of discovery rather than ideation. The canvas designed for this workshop was divided into sections (see Figure 4-9, p.90).

6 Second Home is a co-working space in London developed on principles of biophilia and sustainability.
7 General Assembly is campus around the world for courses in digital skills and technology.
8 Soleshare is a start-up for sustainable fishing scheme.
9 Rubies in the rubble is a start-up making chutneys made from fruit surplus.
10 Ubuntu Chocolate is a start-up of artesanal fair-trade chocolate.
11 Bloombox Salads is a small business of organic food delivery by bicycle.

Figure 4-8 Plan for design of tool in workshop 2 based on double-diamond structure.

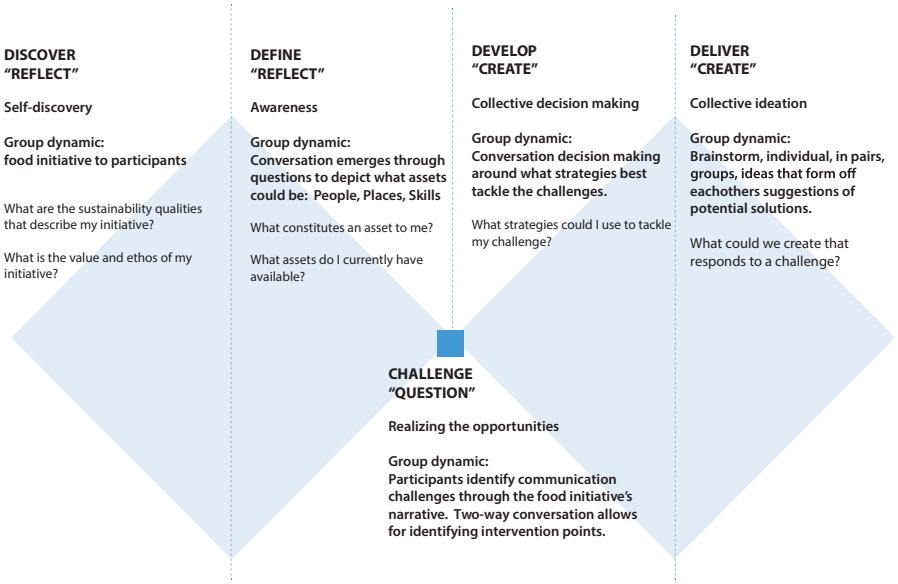


Figure 4-9 Plan for canvas in workshop 2. Indicates the plan for use.

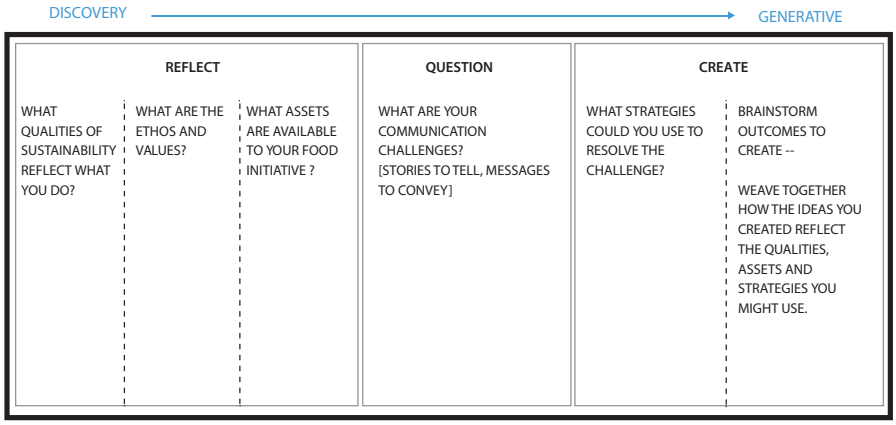


Figure 4-10 Workshop 2 tool canvas and cards used.

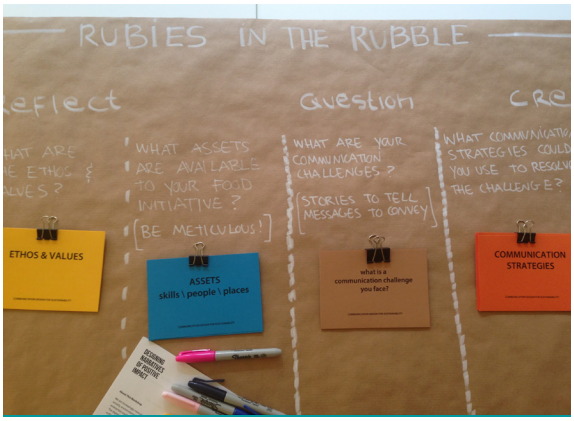
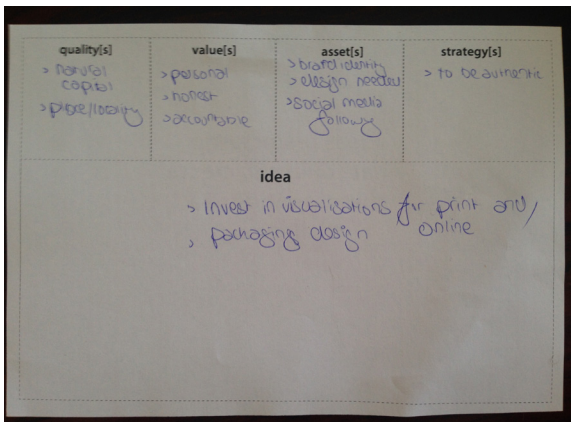


Figure 4-11 Workshop 2 output card.



The process of using the tool:

a) Reflect – this section was designed upon the double diamond stages "discover and define". This section invited participants in self-discovery of their *qualities of sustainability* and values.

b) Question – the point where participants discussed what is the communication challenge and potential opportunities for solutions.

c) Create – this included the double diamond stages develop and deliver. Participants analyse which *communication strategies* could be used to tackle the communication challenge, then are invited to generate solutions for the challenge.

The objective of this canvas was to guide participants to understand each stage individually and also the relationship between them. It was designed with the intention to clarify the journey between the input (communication challenge) and the output (design of a brief for communication design solution).

The design of the tool (canvas and prompt cards set):

The look of the tool was more "low-fidelity" than in workshop 1 with the intent to engage participants in generative process (Figure 4-10, p.90). The cards were re-designed in terms of content in response to feedback from workshop 1: the content was edited with intention of clarifying terminology (namely, brief, *qualities of sustainability*, *communication strategies*). The new *qualities of sustainability* and communications strategies extracted from workshop 1 (section 4.3.5, p.86) were also incorporated into this iteration. To encourage participants to generate content, new cards were introduced: (i) add a new strategy" (ii) "add your ethos and values" (iii) "add your assets". The full description of prompt cards can be found in "Appendix 13: Workshop 2 prompt cards" p.181. Each card set had a different colour so participants were able to keep track of each component when combining the cards to generate new communication design ideas. The main challenge identified in workshop 1 was to guide participants to establish a link between the communication challenge, the *qualities of sustainability*, the communications strategies, and the output solution. To address this, a new card was designed (Figure 4-11, p.90) and solicited participants to fill in the boxes relating to each stage of the process to arrive at a final communication design brief. (This attempt failed as only a couple of participants understood the prompt as the next section will explain).

Figure 4-12 Workshop 2 in session.

Figure 4-13 Workshop 2 in progress at Second Home.

4.4.2 Outputs (workshop 2)

At the end of workshop each sustainable food initiative representative was asked to share the main communication challenge tackled and the output solution generated by the group (these are listed in Figure 4-14, p.92). The card that had been designed specifically to help participants articulate the output idea had failed as only a couple participants understood how to fill in each of the boxes (Figure 4-11, p.90). The point of this card was to develop a weaving of the different elements and understand how it supports the output of the communication design brief (*qualities of sustainability*, *communication strategies*, assets). The communication design solutions (outputs) shared by participants (examples Figure 4-15, p.92 and Figure 4-16, p.92) address their communication challenge. It is interesting to note that all outputs described the design of a brief that could be implemented in practice. The approaches to communication design for the most part can be defined under the expanded practice. With the exception of Bloombox Salads who presented a brief to design a set of icons that explains food sourcing. Other sustainable food initiatives presented briefs to design experiences, interactions and services that fall within the expanded practice of communication design (as introduced in literature review section 2.2, p.33).

Figure 4-14 Workshop 2 communication challenge and outputs generated by the group.

Food initiative	Communication challenges of food initiative	Output generated by group
Ubuntu Chocolate	Communicating the sharing ethos - what is Ubuntu?	Chocolate with individual personalities ex: fruity, spicy - like wine.
Soleshare	How do they make the product more experiential even when the founders aren't meeting the consumer at point of sale?	Partner with wine vineyards to cross sell. Wines that could go with fish dishes. How: show on website, ad revenue from vineyard.
Rubies in the Rubble	Crowd support	Be vocal about statistic of wasted food in order to get more support from consumers for crowd-funding Engage larger consumer groups through self-feeding social media awareness/campaigns.
Bloombox Salads	Telling story powerfully and effectively	Farm icons on packaging [visual]. packaging needs to tell story farm-bike-you.

Figure 4-15 Workshop 2 example of output card.

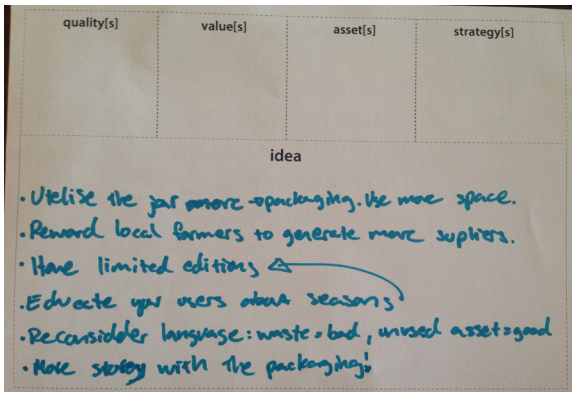
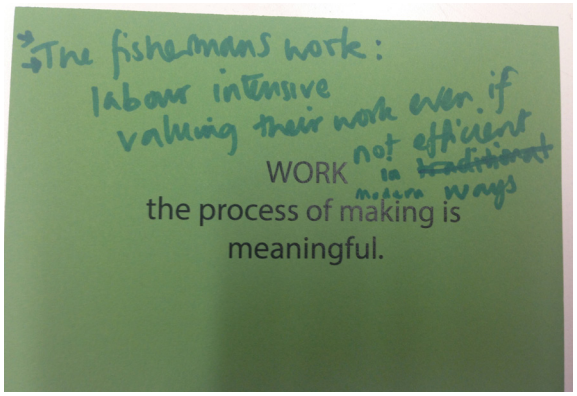


Figure 4-16 Workshop 2 example of *qualities of sustainability* card.



4.4.3 Informative evaluation (workshop 2)

The informative evaluation of this workshop collected the first complete set of interview data: end of workshop interview and post-workshop interview 6-8 weeks later. These qualitative interviews were essential to inform the iterative practice (discussed in methodology section 3.5, p.58) and were more substantially insightful in comparison with the first taster workshop 1. The two sets of interviews focused on the effectiveness of the prompt tools, workshop process, and general value to participants. The interview questions are provided in "Appendix 7: End of workshop interview questions" p.172.

4.4.3.1. Insights from end of workshop interview

a) Feedback from participants showed interest in a framework tailored to sustainability because their initiatives are built on those principles and ethos. The tool supports these initiatives with a structure that helps to articulate experiential things like *qualities of sustainability* in way they can communicate about it (example of interview taking place after workshop 2 in Figure 4-17, p.93).

> *"really detailed, and it was tailored to the sustainability side of the business" (evaluation interview 2.7)*
>
> *"it was valuable to think about it in a structured way." (evaluation interview 2.10)*

b) The group interaction showed to be of value to participants. The focus of a group on each initiative individually was a highlight in the feedback interview. It was also highlighted the value of collaboration with a sample of public unfamiliar with the initiative. Participants felt at ease being asked questions about their activities, a sort of interaction that can be argued to remove any instance of "greenwashing" in terms of their ambitions and practices in sustainability and social innovation.

> *"everyone was very focused on my business and my problems which was really nice, didn't feel like anyone had agendas they were trying to push, it was like therapy for me!" (evaluation interview 2.4)*
>
> *"it brought up questions i hadn't even asked" (evaluation interview 2.1)*

Figure 4-17 Workshop 2 end of workshop interview.

Figure 4-18 Workshop 2 output implemented by Rubies in the Rubble "street team" meet-up.

c) In terms of the tool design itself, participant feedback highlighted a clear and logical process where solutions came naturally. The workshop was described as a "novel" experience focused on communication and sustainability.

d) In terms workshop shortcomings, there was general feedback that more time was necessary to use the tool thoroughly and generate concrete solutions. There was also a suggestion of introducing a designer facilitator at each group. This was taken onboard as a point for improvement of the tool and process because the objective was for participants to be able to use this tool themselves. The aim was to design a process to empower non-design experts.

4.4.3.2. Insights from post-workshop interview

The post workshop interview focused on what participants remembered as valuable since the workshop (6-8 weeks prior) and what changed for them as a consequence of the workshop in terms of new approaches to communication design (in the expanded sense of the practice).

Feedback showed that participants took action on the communication challenge discussed in the workshop and implemented a variation of the workshop output. Soleshare is an example, inspired by the workshop output, the initiative re-designed their communication structure with members so to be more accessible. Bloombox Salads also looked at how to implement the workshop output and develop a set of icons that explain the supply chain. Rubies in the Rubble was inspired by the workshop to develop a new approach more inclusive of potential new customers by creating "street team" meet-ups to provide a space to discuss food waste (Figure 4-18, p.93).

> *"It kind of re-ordered our to do list. …It's really important that people really value. So we now actually send our emails every fortnight, whether as before people would get something every couple of months when we had something important to say, but now we communicate with them more."*

> *"emphasizing the source of food and supply chain make sure we say that in our story, don't miss that out. And then also, the thing about the logo being a 5 second thing."*

> *"…tonight we are having this meeting with volunteers and I guess it will be a similar type of discussion [to the workshop] where we sit down and say how can we get people like you who care about it [food waste] to be more involved." (evaluation interview 2.5)*

Interviews highlighted the potential of the workshop as a collaborative space to expand beyond the workshop timeframe. New collaborations were developed by participants who met each other. An example is Ubuntu Chocolate who started a new project with another participant and developed two new products.

> *"Since that workshop I developed two new products. I think it stimulated some creativity having done it, definitely helped. " (evaluation interview 2.2)*

Important points drawn from these interviews were; i) the overall positive outlook on the workshop as a collaborative and generative activity, ii) the memorable aspects namely the group dynamics, ii) the coloured cards as a useful element in the tool itself.

> *"everyone is influenced by each other […] everyone takes on different roles in the group" (evaluation interview 2.8)*

4.4.4 Input for next iteration

In terms of the tool design and process of use, the following points were taken onwards to design the next workshop. These points were based on feedback of representatives of sustainable food initiatives in post-workshop interviews:

- The design journey to be less prescriptive and allow participants to spend more time discovering and mapping their *qualities of sustainability*.
- Enabling pluralism and diversity of participants shows to be beneficial in co-creation.
- How to re-design the 'output card' that failed in this iteration.
- Consider how food initiatives can introduce themselves to the group at start of workshop and allow time for questions.
- Reconsider the timing of the workshop and how long each section of the tool takes to complete. Allocate specific time for each of the process parts.
- Specify that all group participants need to be contributing, there is not a leader unless allocated by the group itself.
- Narrow down the card set and simplify language in long sentences.
- Highlight the communication challenge cards and the output cards as important moments in tool process.
- Final note is on spaces for hosting workshops, it shows to be valuable to work with those host organisations that support the ethos of research and attracts diverse public interested in participating.

4.4.5 Reflection (workshop 2)

This workshop brought out results that support and develop on the previous workshop 1 as well as new discussions. The following points contribute critique and reflections towards the set research objectives (section 1.3, p.26).

a) Frameworks *communication strategies* and *qualities of sustainability*.
In the visualisation for analysis of this workshop (Figure 4-19, p.97) we can identify certain qualities and strategies that were common to all participants. *Health* is a particularly common quality to all sustainable food initiatives and this was a quality added in workshop 1. In terms of strategies, storytelling is still prominent as is building community. *Simplicity* of vocabulary used to explain sustainability, was also a strategy added in workshop 1 and seemed to resonate with this set of

participants (refer to section 4.3.5, p.86).

b) One of the research objectives is to recognize how communication design supports the formation of 'publics' and 'communities' in transition to more sustainable ways of living (section 2.5, p.41). The decision of opening the workshops to participants of the wider public was a way to explore this potential. This second workshop fruitfully gathered 30 participants and was also the first hosted by an external organisation willing to support it. This reflection does not focus on the motivations of the public (as these were not asked at the time) it focuses instead on the potential of public joining the co-creation process of communication design and the value of partnerships.

c) The contemporary context revealed that communication design has a role in steering publics towards sustainability, as demonstrated by the participatory approaches in recent practice (section 2.5, p.41). This research takes a different angle as it explores co-creation rather than participation (as discussed in section 2.5.4, p.47). This is reflected in the way the tool enables non-design experts (sustainable food initiatives and sample of public) to co-create communication design solutions focused on *qualities of sustainability*. In the process of analysing *qualities of sustainability* and generating communication design solutions it can be argued that the group builds a shared narrative. For example, the representative of initiative Rubies in the Rubble referred to this process as a "forum for discussion" (evaluation interview 2.4). This interaction can be analysed through a theoretical lens of DiSalvo's discourse on publics and pluralism in design. DiSalvo (2009) builds on Dewey's seminal book *The Public and Its Problems* (1927) and discusses that, a fundamental challenge in the formation of publics is making the conditions and consequences of an issue apparent and known (DiSalvo, 2009, P.52). The approach in this research facilitates a conversation between the public who voluntarily joins and the sustainable food initiatives coming together around issues of concern. The tool designed for purpose is itself the means to articulate this interaction. The use of the tool can be argued to answer the challenge identified by DiSalvo because it "makes the conditions unknown into known" (DiSalvo, 2009, P.37). The tool mediates the co-creation process between sustainable food initiatives and a sample of the public around *qualities of sustainability*.

d) The informative evaluation of this workshop, in particular the post-workshop interview, brought up a discussion on "soft outcomes" of the research. Valuable outcomes of the workshops are not only about following up on the ideas that sustainable food initiatives might apply in practice the next day. It is about how the interaction might have impacted their understanding of what they are trying to communicate and how to communicate it. This is based on participant feedback on collaboration and co-creation particularly with a self-selecting sample of the public. This observation raised a question on the practice of communication design in this context as being "designing for communication". Armstrong (2011) describes ownership in the co-creation process as "often distributed across the project to everyone involved" (Armstrong, 2011, P.43). This resonates with the workshop interviews where participants described positive experiences in the act of collaboration.

Figure 4-19 Workshop 2 outputs. Left: tool suggested these *qualities of sustainability* and *communication strategies*. Right: chosen or new added by sustainable food initiative.

4.5. Workshop 3 "Startup stories & positive impact"

This workshop took place in June 2015 at the co-working space of charity Shoreditch Trust[12]. Like the previous workshop, a public online register was setup and shared on social media and a total of 15 attendees of the public joined (Figure 4-22, p.100 and Figure 4-23, p.100 show the workshop taking place). Representatives of sustainable food initiatives were Jack's Veg[13], Disco Soup[14] and Growing Communities[15]. The workshop was video recorded to capture interactions and in the closing discussion each group shared the outputs in terms of the communication challenge and solutions generated. The objective of this workshop was to work with a further iteration of the tool in order for participants to generate more outputs that reflect the *qualities of sustainability* identified. To address this challenge the workshop process was strict in time keeping to ensure all canvas stages were fully covered.

4.5.1 Design of tool and process (workshop 3)

The decisions made in this iteration of the tool and process of use were based on the input gained through the previous workshop 2 (section 4.4, p.89). The main challenge was to design a way for participants to generate more output ideas for new communication design that reflect the *qualities of sustainability* identified. This had been previously attempted in workshop 2 through the output card which turned out to be unsuccessful.

The process of using the tool:

In this version the challenge was tackled through re-design of the tool structure and timing each section strictly. The canvas as the guiding structure was removed entirely and replaced with a sequence of four envelopes that contained the prompt questions, cards, and instructions for use (see Figure 4-20, p.99). A new section was inserted titled 'Plan' as a point mid-process for participants to plan how the *qualities of sustainability* connected to the *communication strategies*. Process of using the tool in this iteration had the following stages (refer to Figure 4-21, p.99):

1. Reflect – discussion and mapping of the ethos and values of the sustainable food initiative.
2. Question – identify 10 communication challenges and write down on the communication challenges cards provided.
3. Plan –reflect on previous stages and plan how the *qualities of sustainability*, assets available and *communication strategies* can be useful to resolve the challenge.
4. Create – ideate as a group and generate 10 output ideas for new communication design.

The design of the tool (canvas and prompt cards set):

The content of prompt cards was edited based on feedback from previous workshop concerning

12 "Shoreditch Trust delivers workspace to micro, small and medium sized creative and tech businesses. All income generated through Shoreditch Trust's Workspace and Enterprise Programme is re-invested in our charitable initiatives." http://www.shoreditchtrust.org.uk/

13 Jack's Veg is a small organic farm. www.jacksveg.co.uk

14 Disco Soup is a monthly public event on food waste run by charity Feedback. www.feedbackglobal.org

15 Growing Communities is a organic box scheme operating for 20 years. www.growingcommunities.org

Figure 4-20 Workshop 3 envelopes containing instructions and prompt cards.

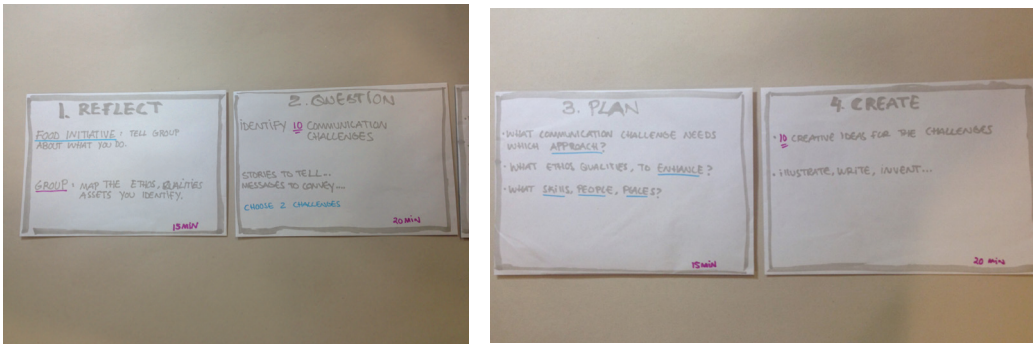
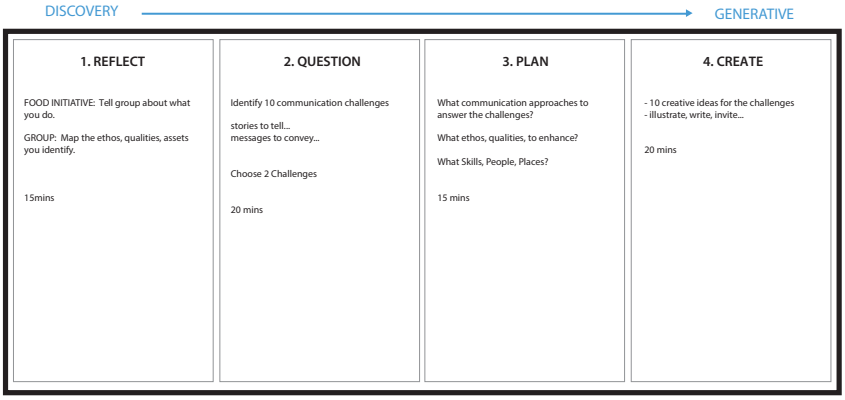


Figure 4-21 Workshop 3 sketch for canvas sketch.



terminology (section 4.4.4, p.95). For example, the word *sustainability* was removed to test if this had any impact on the interpretation of what the *qualities* were. However during the workshop participants added *sustainability* as a quality itself (description of prompt cards in "Appendix 14: Workshop 3 prompt cards" p.182).

4.5.2 Outputs (workshop 3)

This workshop showed that in comparison to previous workshops assigning time for completion and constraining the use of the tool was not necessarily more productive in terms of generating output solutions focused on *qualities of sustainability* and *communication strategies*. Observations during the workshop showed that, the envelopes containing the prompt cards were confusing because participants could not have a general overview of the tool and the prompt cards in each envelope were unexpected. However, the outputs of each group revealed the tool did support to deliver a range of new output solutions for each food initiative (Figure 4-24, p.101 and Figure 4-25, p.101 show examples of workshop outputs). Similarly to previous workshops, these included communication design solutions that fall within the expanded practice (defined in 2.2.1, p.33). For example, the output of Disco Soup group was a new collaborative service in partnership with local charities that deal with loneliness (see Figure 4-26, p.101).

Figure 4-22 Workshop 3 in process.

Figure 4-23 Workshop 3 communication challenge presented in the workshop by each food initiative and the output solution generated by the group.

Food initiative	Communication challenge of food initiative	Output generated by the group
Disco Soup	Communicating the societal benefits beyond food. Reaching a larger audience beyond environmentalists. How do you do it?	Partner with charities dealing with loneliness, e.g. Collaborate to reach larger audience.
Growing Communities	Communicating the story in a bag versus box. What best captures the ethos?	Branded bag well designed with return option. No plastic bags. Catchy name appealing to emotions.
Jacks Veg	Re-educating people of what agriculture is. Sharing good practices with other farmers.	Food testing. Learn through workshops at the farm.

4.5.3 Informative evaluation (workshop 3)

Two qualitative interviews[16] were carried out with the representatives of each of the food initiatives, the first at the end of workshop and the second 6-8 weeks later (see time-line Figure 4-0). These conversations focused on; (i) the development of new solutions viable to implement, (ii) need to clarify who the facilitator should be, (iii) benefits of collaborating with a group.

4.5.3.1. Insights: end of workshop interviews

Feedback showed that timing each section of the tool was not efficient because the amount of time each group spends on each element varies. Participants described the tool as being flexible to use. In addition to this insight the following was captured;

a) Participants mentioned the tool facilitated the development of new solutions viable to implement. This insight was useful because it guided new iteration of the tool with the objective to develop outputs (communication design briefs) that are tangible for the users.

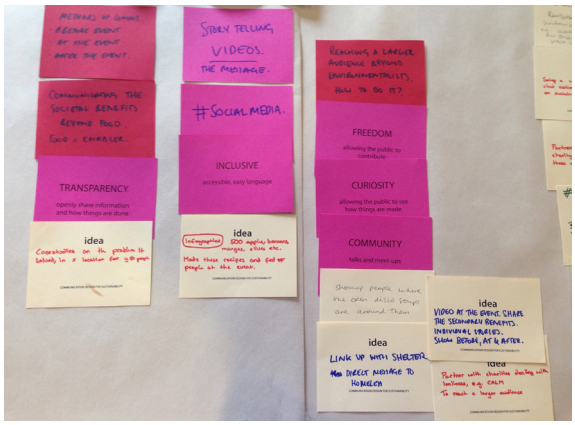
> *"specific new ideas that we can easily take forward, those are the ones I think have been most useful" (evaluation interview 3.4)*

16 Refer to interview questions with representatives of sustainable food initiatives in "Appendix 7: End of workshop interview questions" p.172 and "Appendix 8: Post workshop interview questions" p.173

Figure 4-24 Workshop 3 complete set of outputs for Jack's Veg.

Figure 4-25 Workshop 3 set of outputs for Growing Communities.

Figure 4-26 Workshop 3 set of outputs for Disco Soup.



"there were ideas that we've talked about before a lot but i think it crystallized that we need to focus on." (evaluation interview 3.6)

c) Similarly to findings from workshop 2 (section 4.4.3, p.93) feedback revealed the need to clarify who the facilitator should be. This evidences the tool is not self-explanatory and the role of the designer as facilitator was at this stage essential.

"we didn't use the cards as usefully as we could have done. So we didn't necessarily use those prompts" (evaluation interview 3.6)

"I wasn't sure how much I should be leading it or how much I should let other people… I didn't want to give them ideas, I wanted to hear ideas from them." (evaluation interview 3.6)

d) It was highlighted that the benefit of collaboration with a group of people unfamiliar with the activities of food initiatives and the motives given were similar to those found in previous workshops (#1-2). One particular observation focused on the attendees of the general public, describing them as "self-selective". This comment supports the reflection on 'publics' presented in the previous workshop discussion (section 4.4.5, p.95). It also further supports the reflection on pluralism as discussed in reflection of workshop 1 (section 4.3.5, p.86).

"people that are interested in these events it is a self-selected audience" (evaluation interview 3.4)

"it was a bit daunting at first but you are all there for a reason so it all fits... it just flows" (evaluation interview 3.6)

"people had very different backgrounds I think worked well" (evaluation interview 3.4)

4.5.3.2. Insights: from post-workshop interviews

The second interviews took place 6-8 weeks after the workshop and looked for significant changes as result of participation, in terms of new approaches to communication design for each sustainable food initiative.

e) In regards to the workshop outputs, sustainable food initiatives commented on the value of the ideas generated, as well as, their intention to implement or to re-consider the output. For example, the representative of Growing Communities shared that they were looking into how to implement a new way to resolve the use of plastic bags as consequence of the workshop discussion. Representative of Jack's Veg shared that the workshop helped to maximize the use of the farm as a communication asset through providing public visits. Representative of Disco Soup shared that they were considering to implement the workshop output of designing a partnership scheme with other social initiatives to tackle elderly loneliness.

"We haven't implemented anything immediately but it helped us to think about what we are going to do next, so some of those were around the bags we use and what we could do instead we are certainly looking at." (evaluation interview 3.7)

"It reinforced the idea that actually this is quite something I need to get on pretty sharp because it's more effective than wasting money going to big events when it costs nothing for me to do" (evaluation interview 3.2)

f) This workshop confirmed one particular insight, namely the value of the interaction as a means to build a community of practice between the food initiatives themselves. Described in previous workshop (#2) as "an arena for discussion" (section 4.4.3, p.93) it proved to also be a space to cross-pollinate skills and collaboration. For example, Disco Soup shared that they were inspired by the discussion on importance of communications and felt it was necessary to hire a person for that role. Representative of Jack's Veg highlighted how the workshop discussion provided new perspectives on similar struggles of other farmers, conversations he followed up on post-workshop.

"…The fact that these events [disco soups] tackle loneliness, a massive problem as well, and thinking about the positive social aspects, communicating about those more explicitly, connecting to organizations that might not necessarily have food waste as their core mission but actually would really benefit from those kinds of exchanges." (evaluation interview 3.4)

4.5.4 Input for next iteration

In terms of the tool design and process of use, the following points were taken onwards to design the next workshop. These points were based on feedback of representatives of sustainable food initiatives in post-workshop interviews:

- Timing the use of the tool showed to be less productive because in previous iterations participants benefited in taking ownership of using the tool.
- Take into consideration how the interaction and space foster a community of practice between sustainable food initiatives (section 4.4.5, p.95).
- In terms of prompt cards, feedback showed that fewer prompt cards were beneficial. Participants shared they found it more valuable to drill down on one communication design rather than generate a range.

4.5.5 Reflection (workshop 3)

The main reflections on this workshop respond to the research objective centred on how the expanded practice of communication design can amplify the social dynamics of these types of relational initiatives (as described in section 4.4.5, p.95).

a) In terms of the frameworks *qualities of sustainability* and *communication strategies*, reflections can be drawn from the illustrative infographic (Figure 4-27, p.104). In terms of *communication strategies*, community was found to be a relevant strategy to all three groups of sustainable food initiatives. The quality of health as well as collaboration were predominant as a quality of sustainability, a result similar to the previous workshop (#2). The new *qualities of sustainability* added were *social inclusive, nutrition* and *purpose*, the latter is ambiguous.

b) One of the research aims is to identify how a collaborative process of communication design (understood as an expanded practice) can amplify the existing social dynamics of these types of social initiatives. The evaluation interviews in this workshop evidenced one insight that contributes to this objective. Representative of Jack's Veg described how the workshop proved to be valuable as a platform for discussion not just with a sample of the public but with other sustainable food initiatives that face similar challenges. The value lies in the exchange of best practices, communication approaches and common problems. This insight can be analysed through a theoretical lens of current research into "relational services" (Cipolla 2012) (Manzini 2015). The term "relational" gained its origin in the study of initiatives which are social in both their means and their ends (social innovations as described in the literature). This term is defined by Cipolla (2012) as cases of social innovation initiatives with the particular requirement of intense interpersonal relationships that drive the activities. Under this definition of relational initiatives, the interview insight suggests the tool (including the workshop format) can be an instrument to aggregate a community of practice and articulate a conversation specific to their shared purpose. To address the research objectives, this observation suggests an evident role for communication design practice (defined as an expanded practice) that supports fostering knowledge through engagement and relationships. Design for communication that is relational in its means and its ends.

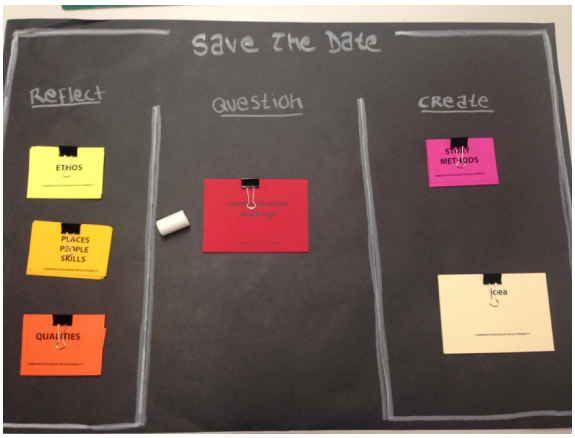
Figure 4-27 Workshop 3 outputs. Left: tool suggested these *qualities of sustainability* and *communication strategies*. Right: chosen or new added by sustainable food initiative.

4.6. Workshop 4 "More stories of positive impact"

This iteration follows up on the main insight of the previous workshop (#3), namely the potential to foster a community of interest between the food initiatives themselves and the wider public (section 4.5.5, p.103). To address this, the role of environment in communication was taken on-board as previously experienced in the fieldwork *discovery tool* (section 3.8, p.65). In this iteration, the workshop was moved out of third party environments and into the work spaces of sustainable food initiatives. This workshop was hosted in July 2015 in the garden space of initiative Saves The Date Cafe[17], a volunteer base run café operating only on donated food surplus. In terms of attendance it was smallest group in the series (Figure 4-28, p.105). The public call for participation was published on social media and networks such as Impact Hub[18] and Makesense[19] gathered 8 attendees of the public. Representatives of sustainable food initiatives were from; Saves The Date Café and the Golden Company[20].

Figure 4-28 Workshop 4 in progress.

Figure 4-29 Workshop 4 canvas and card set used.



4.6.1 Design of tool and process (workshop 4)

The tool was redeveloped in response to the feedback gained in the previous workshop. This iteration removed the timings for completion of each section as introduced in the previous workshop (#3) and returned to malleable work-flow (as in iteration #2). In the previous workshop the canvas had been removed entirely and replaced with a sequence of envelopes containing the prompt questions and cards (Figure 4-20, p.99).

17 Saves The Date is a successful cafe using only surplus foods and applying a 'pay as you feel' model. The Junk Food Project (2016) Saves The Date [online]. Available from: https://savethedate.london/ (Accessed 5 May 2017).

18 Impact Hub is a global social enterprise community center. Impact Hub Network [online]. Available from: http://www.impacthub.net/ (Accessed 5 May 2017).

19 Makesense is a worldwide community of social enterprises. MakeSense [online]. Available from: https://www.makesense.org/ (Accessed 5 May 2017).

20 A social enterprise honey producer that teaches entrepreneurial skills to underprivileged youth. The Golden Company [online]. Available from: http://www.thegolden.co/ (Accessed 5 May 2017).

The process of using the tool:

In this iteration the canvas was re-introduced, in a similar way to workshop 2. The use of a canvas had showed to be an efficient way for users to keep track of the process. In this iteration, like the previous workshops, the prompt cards had a colour scheme to distinguish between the various sections (the canvas layout is shown on Figure 4-29, p.105). Procedure for this iteration was:

1. Reflect – This section had three parts. It questioned what is the ethos, what assets are available in terms of people, skills and places, and what are the *qualities of sustainability* of the initiative. Participants were invited to edit the prompt cards or add new ones.
2. Question – This section prompted participants to identify 6 communication challenges and prompted examples of what these could be. A decision made following an observation of previous workshop where many communication challenges generated by participants focused more on business model rather than communications.
3. Create – This section asked participants to pick 2 communication challenges and generate 10 ideas in response. It then prompted the *communication strategies* to support the ideation process.

The design of the tool (canvas and prompt cards set):

The prompt cards were re-designed to address participant feedback. The range of qualities cards and *communication strategies* were edited down and rephrased (refer to "Appendix 15: Workshop 4 prompt cards" p.183). In this iteration the term sustainability was intentionally removed from the *qualities of sustainability* cards in order to test if participants would be able to identify the qualities presented as building blocks. This worked successfully. In terms of visual design, the size of cards was scaled down, to test if 'post-it' sized cards would stimulate more ideation. Two card sets were kept larger size intentionally to trigger participants to spend longer on those sections; the communication challenges and the new idea output (the tool as used in the workshop shown on Figure 4-29, p.105).

4.6.2 Outputs (workshop 4)

The dynamics of smaller groups resulted in fewer but more focused output ideas in response to the communication challenge of each sustainable food initiative (overall outputs in Figure 4-30, p.107). In terms of generating new communication design solutions, it was possible to observe that representative of Saves The Date Cafe benefited from using the tool in their own space because the group could generate site specific ideas (for example, the idea card shown in Figure 4-31, p.107). In this version of the tool, results showed participants established a clearer connection between the *qualities of sustainability* and the *communication strategies* to produce new communication design solutions. This was evident through some ideas in writing expressing this connection (for example Figure 4-32, p.107). The communication design solutions presented by each group reflect their understanding of communication design in the definition of an expanded practice. For example, Saves The Date suggested to create system of volunteers in their physical space, or Golden Company proposed to explore authenticity in their products by new experiences (Figure 4-32, p.107).

Figure 4-30 Workshop 4 communication challenge presented in the workshop by each food initiative and the outcomes response generated by the group.

Food initiative	Communication challenges of food initiative	Output generated by the group
Golden Company	How to adapt to a niche market with edible crickets?	Personalizing the product using authenticity and labelling who was it made by.
Saves The Date	Setting up a wider community of volunteers.	Create a volunteer network or jobs board in the cafe itself rather than social media.

Figure 4-31 Workshop 4 - example of 'idea' card (output).

Figure 4-32 Workshop 4 - example of communication challenge card.

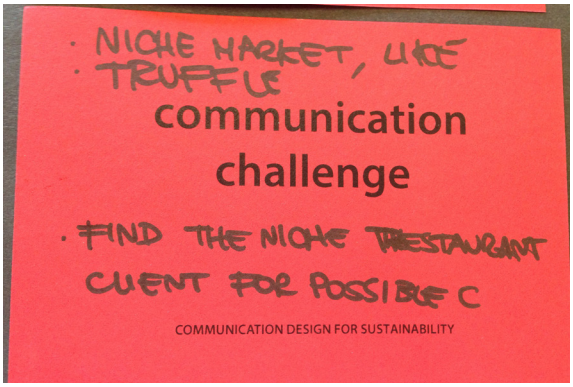


Figure 4-33 Workshop 4 complete output of participant The Golden Company.

4.6.3 Informative evaluation (workshop 4)

The evaluation interviews for this workshop highlighted insights also found in previous workshops namely, (i) how the workshop fosters a community of interest between sustainable food initiatives and the wider public, (ii) the value of external input into communication approaches of sustainable food initiatives, (iii) the 'low-fidelity' feel of the tool itself is inviting, (iv) the workshop outputs are points of departure that can be taken forward in different way.

4.6.3.1. Insights: end of workshop interview

a) Participant feedback revealed the outputs generated were practical and feasible to implement. The tool provided how to organise thoughts specific to communications all in one place and the group

interaction provided new ideas that would not be possible to generate otherwise.

"it throws up ideas that you wouldn't necessarily think about yourself" (evaluation interview 4.2)

"it's good to collect all your ideas about what can be done into one place" (evaluation interview 4.3)

b) One of the design challenges so far had been to design the canvas in a way participants related one stage to the next. This workshop provided the insight that participants are able to understand how one stage leads to the next and the overall connections.

"The different strategies were a really useful conversation piece. So we started 'oh yes this fits', so it gave us a framework to talk about things. (evaluation interview 4.2)

"we could then connect the 'people places things'... so assets that we had, ethos that we had"(evaluation interview 4.3)

4.6.3.2. Insights: post- workshop interview

Several weeks after the workshop one interviewee shared a noteworthy outcome. The Golden Company had been inspired by the workshop format and re-created a session for themselves between expert designers and the youth group part of their social enterprise. A similar outcome had also been noted in the evaluation interview of workshop 2 (section 4.4.5, p.95). This finding suggests the workshop in itself is a prompt for new ways initiatives can collaborate more with their public.

a) One of the participants implemented the workshop output focused on communicating authenticity of the products.

"What I did do, was the personalizing for instance, when we gave the young people examples of other types of things […] that message was something they picked up on around the personalizing." (evaluation interview 4.4)

b) A new connection and collaboration between an attendee from the public and a food initiative was another result. This insight supports the reflection introduced previously, on the role of communication design as an expanded practice to aggregate communities of shared interests for initiatives that are 'relational' (Cipolla, 2012).

c) In this iteration participants noted the ability to establish links between the different canvas stages to generate new communication design solutions.

"One thing led to another and thought process was quite structured [...] so any ideas that you had before you could see the reasons behind it." (evaluation interview 4.2)

4.6.4 Input for next iteration

In terms of the tool design and process of use, the following points were taken onwards to design the next workshop. These points were based on feedback of representatives of sustainable food initiatives in post-workshop interviews:

- This iteration revealed one positive aspect of the tool that is able to adapt to different contexts for collaboration, larger or smaller groups of participants.

- To assess the potential of the tool to be a contribution of research, at this point it would benefit from the critique of other design experts, understand how they use the tool, and if it makes a difference in terms of outputs (new solutions for communication design).
- Feedback in this iteration commented on the colour scheme of the tool as a useful guide. The next iteration tests this assumption by removing the colour and check if the tool framework in itself is logical.

4.6.5 Reflection (workshop 4)

a) The first point concerns the frameworks *communication strategies* and *qualities of sustainability*. In the post-workshop interview, representative of The Golden Company highlighted that communication strategy *authenticity* and *transparency* were particularly relevant and applied in practice for the development of new approaches to communication.

b) The second point for reflection is on the longer-term outcomes for the sustainable food initiatives as result of workshops. At this point in the iterative practice, the informative evaluations evidenced a wider impact beyond the moment workshops take place. This shows through the actions sustainable food initiatives take to develop more collaborative ways of communicating. To reiterate the examples presented so far in the thesis; Rubies in the Rubble created "street team meet-ups" to build community and public discussion on fruit waste (section 4.4.5, p.95) and Golden Company explored a new way to bring out *authenticity* of products made by youth groups by running a creative workshop themselves (section 4.6.3, p.107). Both of these examples contribute with learnings that address one of the research aims that is, to empowering social innovation initiatives through more collaborative ways of communicating (section 1.2, p.26).

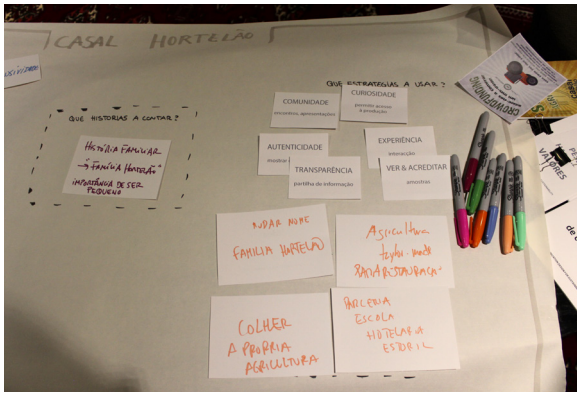
Figure 4-34 Workshop 4 outputs. Left: tool suggested these *qualities of sustainability* and *communication strategies*. Right: chosen or new added by sustainable food initiative.

4.7. Workshop 5 "Designing for impact"

The previous iteration (#4) revealed positive aspects of the tool namely, the ability to adapt to different sized groups for collaboration, and a clearer connection between the various prompts to produce the final output (a new communication design solution).

Workshop 5 took place in July 2015 at BAR design agency Lisbon[21]. At this stage in the practice, the results of informative evaluation interviews indicated the tool itself had potential to be a research contribution (Figure 4-35, p.111 shows workshop in progress). This iteration had two intentions. First, it served to explore how the tool and workshop process worked in a different cultural context, in relation to how *qualities of sustainability* are locally interpreted, for example. Second, it served to validate the tool as a contribution by observing how expert designers use and critique it (the sample of designers at Bar agency). The representatives of sustainable food initiatives were from Casal Hortelao[22] and Pede Salsa[23] both local organic box delivery initiatives. The participants in this workshop were a combination of members of the wider public who signed-up via social media and designers of BAR Agency. The intention to include communication designers in this iteration was to understand how they might respond to the tool and if it was potentially effective to support liaising with the 'client' (here, the sustainable food initiatives). Throughout the workshop series, it was noted that some of the wider public attendees had been designers curious to learn about a new framework specific to communication design and sustainability. Considering the gap identified in the landscape of methods and tools for communication design practice (contextual review section 2.5.4, p.47) at this point in the practice the tool and process would benefit from the critique of communication designers.

Figure 4-35 Workshop 5 in progress at BAR Agency Lisbon.



21 BAR is a design agency in Lisbon. BAR Publicidade [online]. Available from: http://www.barlisboa.com/ (Accessed 5 May 2017).

22 Casal Hortelao is a small-scale organic farm in Portugal. Casal Hortelão [online]. Available from: http://doishectaresemeio.com/ultimo-post-do-casal-hortelao/?i=1 (Accessed 5 May 2017).

23 Pede Salsa is a small-scale organic veg box delivery business in Portugal. Pede Salsa – Aromáticas e Hortícolas [online]. Available from: http://pedesalsa.pt/ (Accessed 5 May 2017).

4.7.1 Design of tool and process (workshop 5)

This iteration of the tool and process of use kept the aspects that were successful this far in the workshop series (workshops #1-4).

The design of the tool (canvas and prompt cards set):

In the design of the prompt cards, colour was first introduced in the fieldwork *discovery tool* as a way to distinguish between the different sections and clearly understand the combinations participants made between *qualities of sustainability*, *communication strategies* and existing assets for communication design (section 3.8.1, p.67). Throughout the previous workshops, participant feedback showed the colour scheme was a useful way to guide through these components (for example, section 4.6.4, p.108). In this iteration the colour scheme was removed intentionally to test if the framework in itself (the canvas and prompt card content) was robust and logical without the support of colour (result in Figure 4-37, p.112). The canvas design built upon on the successful aspects of iteration #4. The section 'communication challenges' was kept as the central focus of the canvas to emphasise the focus of the activity (Figure 4-36, p.112).

The process of using the tool:

1. The canvas structure enabled users to establish a connection between the starting point (communication challenge) and end point (output of a new communication design solution).
2. Without the use of colour used to distinguish the various prompt cards, participants were invited to look closer at the meaning of the *qualities of sustainability* and *communication strategies*.
3. This iteration maintained the 'low-fidelity visual look and feel' and invited users to engage by adding in their own content.

4.7.2 Outputs (workshop 5)

This iteration showed the tool enables users to generate a range of different communication design solutions for initiatives with similar practices depending on the *qualities of sustainability* and communications strategies identified and assets available for each initiative (Figure 4-38, p.113). In

Figure 4-36 Workshop 5 sketch for canvas design.

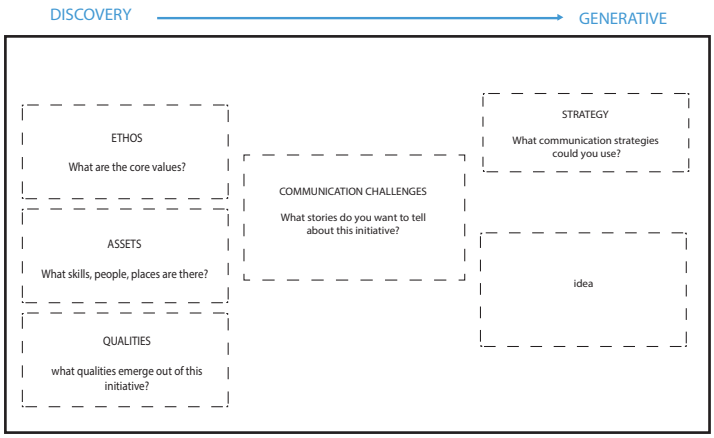


Figure 4-37 Workshop 5 tool prompt cards and canvas.

Figure 4-38 Overview of the communication challenges identified in the workshop by each food initiative and the outcomes response generated by the group.

Food initiative	Communication challenges of food initiative	Output generated by group
Casal Hortelao	How to tell the story of the family business in a compelling way that demystifies organic farming and shares the importance of being small.	The problem identified is, the story of the business is not told at all, instead a lot of facts about organic farming in general.
PedeSalsa	How to reach more members keeping a personalized approach to the service.	Offer a free sample to friends of customers which should be delivered by hand (in the same way PedeSalsa delivers, maintain aspect of slow food).

terms of visual design of the tool, the removal of the colour scheme did not affect participants using the tool which reaffirmed the framework in itself is logical Figure 4-39, p.114, Figure 4-40, p.114). At the end of workshop, each group shared the main communication challenge addressed and the output idea to address it. The two sustainable food initiatives participating in this workshop had similar activities however, different communication challenges. At the end of workshop, in a conversational discussion, the expert designers BAR agency also shared their feedback on the tool itself. The designers made the following key observations;

a) The tool should begin with a short introduction to context of each initiative because design experts will know what questions to ask to get those insights but non-experts might not.
b) Review the *communication strategies* because some terminology is too similar, for example, transparency and authenticity.
c) The tool structure is designed to address communication challenges of small-scale initiatives, however, it can be difficult to separate the communication challenges from the business or service model challenges.

> *"we are not just discussing communication design challenges, this is something more, it is about how they are structured" (designer in workshop 5, extract from audio)*

The last observation supports the central discussion of the research on the role of an expanded practice of communication design in socially-innovative initiatives, a point that will be further expanded in the next section.

4.7.3 Informative evaluation (workshop 5)

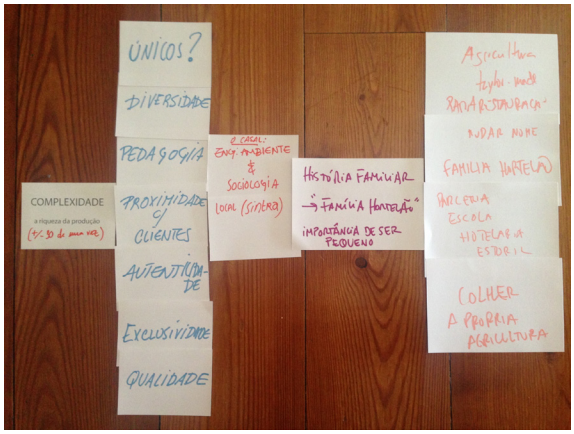
The evaluation interviews with representative of sustainable food initiatives revealed insights coherent with previous workshops; (i) the tool supports to articulate existing communication challenges, (ii) the value of co-creation with a heterogeneous sample of public.

4.7.4 Insights: end of workshop interview

The two sustainable food representatives were interviewed at the end of workshop and the conversations revealed insights similar to previous workshops;

Figure 4-40 Workshop 5 set of output for Pede Salsa.

Figure 4-39 Workshop 5 set of output for Casal Hortelao.



a) The tool enabled users to gain new perspectives on existing communication challenges and generate new solutions as output.

> *"enriching experience, to have a fresh view on things […] we can identify things and think of ideas that would not have" (evaluation interview 5.1)*

b) To identify the *qualities of sustainability* and *communication strategies* through group discussion is useful.

> *"the input reminded myself of our values" (evaluation interview 5.4)*

c) The outputs generated are feasible ideas to implement.

> *"I think a good idea came out of it and could work." (evaluation interview 5.1)*

4.7.5 Insights: post- workshop interview

The interviews conducted 6-8 weeks after the workshop showed what was most valuable for participants in the longer term.

d) One of the sustainable food initiatives (Pede Salsa) developed and tested the output idea. It was a new way to approach potential new members built on trust. This reflects the *qualities of sustainability* selected during the workshop; *relationships, collaboration, time, provenance* (Figure 4-40, p.114113).

e) A new collaboration was established between one of the food initiatives representatives and a workshop attendee. The attendee created a new digital strategy to expand the online presence.

f) The second food initiative Casal Hortelao had to close down business, however feedback focused on the value gained for future practices (workshop output in Figure 4-39, p.114).

> *"As creative people I think they focused on how we tell our story to the world and how we should value our business itself more, not just the organic farming." (evaluation interview 5.5)*

4.7.6 Input for next iteration

This workshop in the series was unique because it emphasised the inclusion of expert designers. This was helpful for critiquing the effectiveness of the tool, as presented in previous section outputs. One of the

sustainable food initiative representatives brought up the point on the benefit of a more heterogeneous sample of public (a point raised in the previous workshops). The input suggested that a diverse sample of public is rich to generate communication solutions.

> *"For me, maybe having a more heterogeneous group of potential customers and not just design people, that would have been useful. Heterogeneity. But maybe on other workshops you have done that? Maybe this one happened to be just designers? Aside of that I think it worked well." (evaluation interview 5.1)*

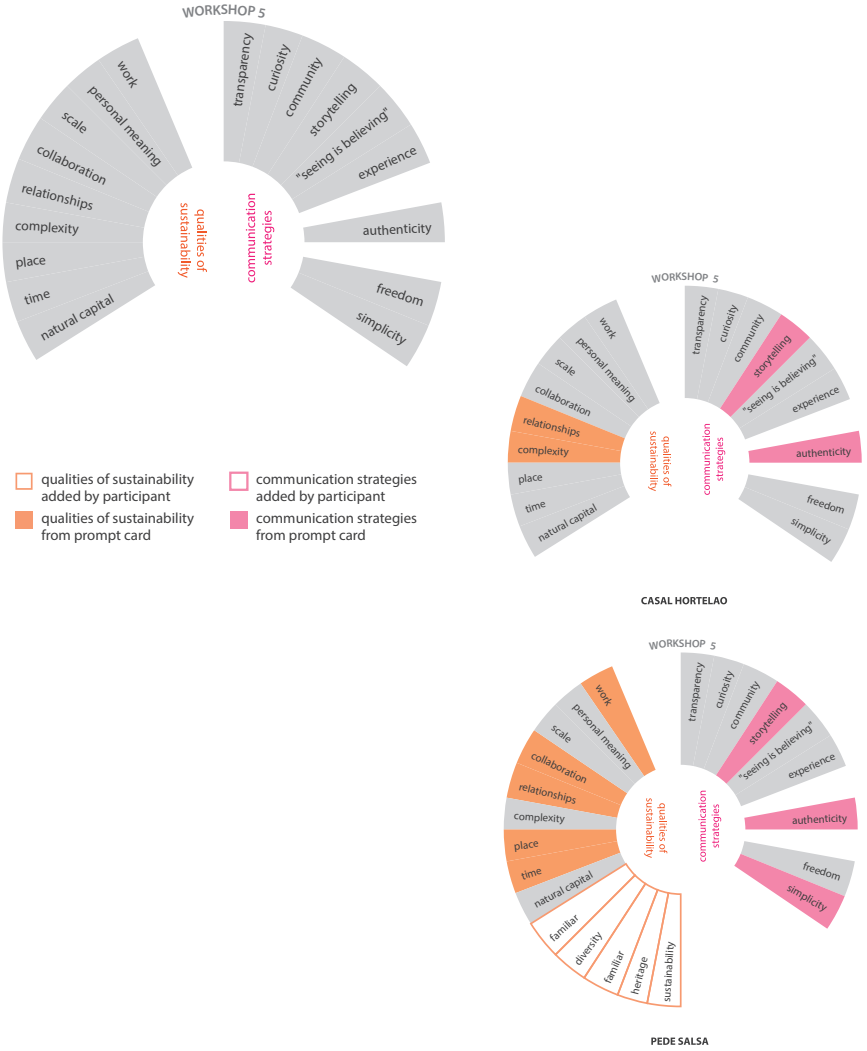
4.7.7 Reflection (workshop 5)

a) This iteration was done in a new cultural context and language. The main obstacle in holding this workshop in a location that required a different language was the translation of prompt cards content to retain the meaning. The insights gathered in this workshop looked to identify what changed in terms of *qualities of sustainability* and *communication strategies* that could be context specific. The workshop outcomes on qualities and strategies showed that authenticity and relationships are common *qualities of sustainability* to both participating sustainable food initiatives in this workshop (infographic Figure 4-41, p.116). In terms of strategies, storytelling is also common to both. A new quality of sustainability added by participants in this iteration was heritage, meaning the traditional way of making. This shows that new features, such as 'heritage' can be proposed by participants and incorporated into the use of the tool.

b) The designers in this workshop noted that while using the tool with the representatives of sustainable food initiatives, it was difficult to separate the challenges specific to communication from challenges of the service model (mentioned in outputs section 4.7.2, p.112). This observation validates this tool that was intentionally designed to produce communication design solutions that consider experience and interaction of participants (the expanded practice of communication design as defined in section 2.2.1, p.33). This observation also brings up the discussion on the value of designing for communication between participants in service models. One of the premises of service design is the value of relations between people (Schneider, 2011). A principle also aligned with the current research into "relational services" (Manzini 2015, Cipolla 2012) presented earlier and that defines these types of social initiatives. The interpersonal relationships that drive the service models of these types of initiatives (here, the sustainable food initiatives) are consequently inseparable from the way communications should be designed. This reflection contributes to the research aim; how the tool contributes to the expanded practice of communication design in social innovation and sustainability (section 1.2, p.26).

> *"...understanding value and the nature of relations between people and other people, between people and things, between people and organizations, and between organizations of different kinds, are now understood to be central to designing services." (Schneider, 2011, P.31)*

Figure 4-41 Workshop 5 outputs. Left: tool suggested these *qualities of sustainability* and *communication strategies*. Right: chosen or new added by sustainable food initiative.



4.8. Workshop 6 "Stories of sustainability"

This was the last workshop in the iterative series and took place in March 2016 and was hosted by the Embassy Network[24], a social cooperative of co-working and co-living spaces (refer to timeline in Figure 4-0). The previous workshop (#5) with expert-designers served to validate the procedure of the workshop and use of the tool (canvas and card set) resulting in this iteration of a prototype (section 4.7.2, p.112). At this point in the iterative practice, a series of reflections had also emerged with insights responding to the research aims. The remaining aspect to explore was the question of 'agency' in this collaborative practice through using the tool. Specifically, who has agency over the communication design outputs and how is it mediated between the representatives of sustainable food initiatives, the attendees of wider public and the designer-researcher as "workshop facilitator". This was an important point to explore because one of the research aims is to empower sustainable food initiatives themselves with more collaborative ways of communicating. Representatives of the following sustainable food initiatives attended this workshop, LoomGrown[25] , Fine & Rare[26] and Lucid Selections[27]. Similarly to previous workshops, a public call to join was shared on social media with communities of designers,groups engaged in social and environmental impact, gathering a total of 16 attendees of public (workshop in progress Figure 4-42, p.118).

4.8.1 Design of tool and process (workshop 6)

To address the focus of this iteration described previously, this version of the canvas introduced a new section titled "to act" for users to produce a communication design brief as output. Another section was also introduced titled "reflect again" for users to evaluate the effectiveness of the communication design once implemented post-workshop (refer to Figure 4-43, p.118).

The process of using the tool:

1. To reflect: introduction to contextualise the initiative through "the story card", revise business values through "ethos cards" and map assets available (similar to workshops #2, #3, #4).
2. To identify: use prompt cards to identify *qualities of sustainability* that resonate (similar to workshops #5 and #4) and to identify the communication challenges (as in workshop #4).
3. To create: use prompt cards on *communication strategies* (similar to workshops #2, #3, #4, #5) to generate new communication design solutions (suggestive ten solutions as in workshop #4).
4. To act: structure a brief with next steps for implementation.
5. To reflect again: consider how communication design enhanced the *qualities of sustainability*.

24 The Embassy Network is a cooperative of co-working and co-living spaces. Embassy Network [online]. Available from: https://embassynetwork.com/ (Accessed 10 May 2017).

25 A kit for growing food in sync with a phone app and supported by the community of users. Loom | Grow better crops using fewer resources [online]. Available from: http://loomgrown.com/ (Accessed 10 May 2017).

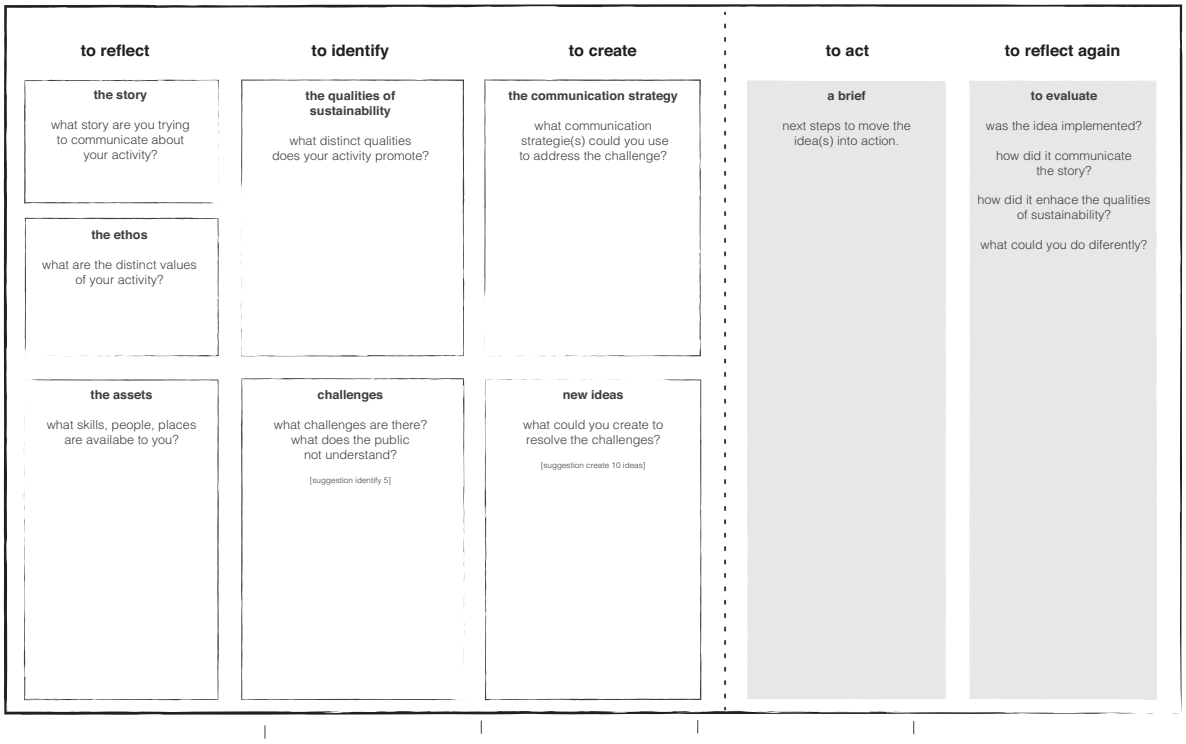
26 Local restaurant with small batch production and sourcing sustainable fisheries. Fine & Rare [online]. Available from: http://www.fandrsf.com/ (Accessed 10 May 2017).

27 Wine merchant focused on transparency and storytelling. Lucid Selections [online]. Available from: http://www.lucidselections.com/ (Accessed 10 May 2017).

Figure 4-42 Workshop 6 in progress.

Figure 4-44 Workshop 6 tool (canvas and prompt cards set).

Figure 4-43 Workshop 6 canvas design testing two new sections.



The design of the tool (canvas and prompt cards set):

The visual design evolved from the low-fidelity look of previous workshops into a more finished prototype[28] (shown in Figure 4-44, p.118).

4.8.2 Outputs (workshop 6)

In a lengthy discussion at the end of the workshop, the three groups shared the main communication challenge addressed and the output solution co-created (summarised in Figure 4-47, p.120). As observed in previous workshops, the communication design solutions can be described through the lens of an expanded practice of communication design. These ranged from graphic communication design of food sourcing to the design of interactive experiences for their consumers to experience specific *qualities of sustainability*. Some *communication strategies* were noticeable, for example, the output of Fine & Rare was a simple graphic solution that resulted out of a lengthy discussion on transparency of food sourcing. The output of Lucid Selections aimed to highlight the quality authenticity by connecting producers and consumers through hand-crafted letters. Finally, LoomGrown proposed ideas for how to engage communities in aquaponics farming through gamification and experiences. These outputs are aligned with the key insight gained in the previous workshop (#5) by observation of expert designers (section 4.7.6, p.114). The design of communications in these types of initiatives shows to be closely tied to the design of the (relational) service itself. The outputs indicate that participants discussed the touch-points of customer journeys and identified new opportunities for communications that might have been previously unnoticed, for example;

> *"the first thing, that's going to be interesting, going to move the bottom of our menu where has all the farmers that we use and source from, move it to the top of the menu. That was one of the suggestions today, just make it really obvious… what you do and who you source from, why is at the bottom?" (evaluation interview 6.1)*

In terms of the tool design and process, the feedback noted the comments for future improvement:

- Participants suggested to use the canvas as the surface to write on instead of the cards (for example Figure 4-45, p.120). This was not taken forward because the cards had through the iterations shown to be useful to engage a wider group.
- It was also suggested the canvas layout should include a brief explanation of what to do in each of the stages.
- Lastly, to use the prompt cards only as inspiration and blank cards to write the content.

4.8.3 Informative Evaluation (workshop 6)

The following insights were drawn based on the end of workshop interviews. The post-workshop

28 The description of prompt card sets in section Appendix 17: Workshop 6 prompt cards, p.185

Figure 4-45 Workshop 6 example of communication challenge card.

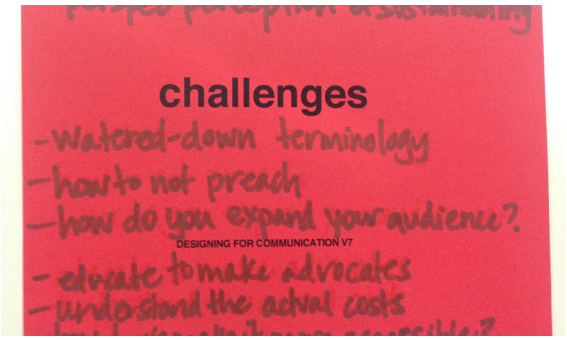


Figure 4-46 Workshop 6 example of 'story' card.

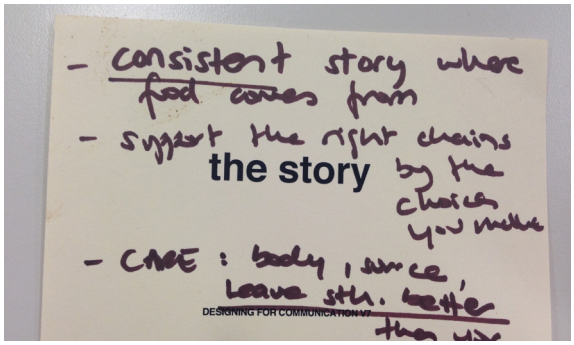
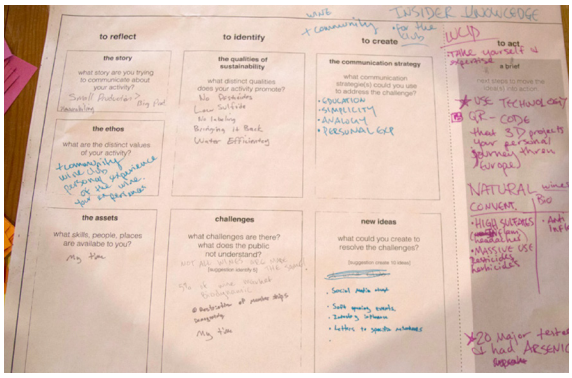


Figure 4-47 Outputs for workshop 6.

Food initiative	Communication challenges presented	Output generated by the group
Fine & Rare	To better communicate the sourcing of the fish.	Simple suggestion, re-design menu with sourcing at the top. Make it a priority.
Lucid Selections	How to tell the story of wines sourced in faraway locations keeping authenticity.	Letters from the winemakers directed to consumers.
LoomGrown	Engage a community of users with LoomGrown indoor farming.	Neighbourhoods, schools, local, contest, know what your neighbours are growing.

Figure 4-48 Workshop 6 complete output of Lucid Selections.



interviews (6-8 weeks later) were not done at this point because the timing coincided with the final retrospective evaluation (as shown in timeline in Figure 4-0) which will be presented in the next chapter.

4.8.3.1. Insights: end of workshop interview

a) The workshop supported reflection on existing approaches to communications and provided new vocabulary (through prompt cards on *qualities of sustainability* and *communication strategies*).

> *"being able to define sustainable, local, and organic without using those words but still conveying the strength of those messages" (evaluation interview 6.1)*

> *"you walk away with something from being more transparent, to being more accountable … getting motivated to provide people a good experience, to defining what value is." (evaluation interview 6.1)*

b) Valuable beyond the workshop (outputs used as a resource to refer back to).

"I am definitely taking this, I'm going to lay it down, write some more things down, and refine more ideas." (evaluation interview 6.3)

"really see what stuck with people and identifying the key things that I want to focus on" (evaluation interview 6.5)

"it will make our businesses better, it will give people a voice that will have an impact on us, and then we can be motivated and inspired to go out and make things better." (evaluation interview 6.1)

c) Coherent with feedback from previous workshops, the input of attendees from wider public was valuable to generate new communication design solutions. In this workshop it was also noticeable that representatives of food initiatives took the lead in facilitation. Perhaps encouraged by the first step in the tool, the 'story card', designed to contextualise and frame the challenge of each initiative (Figure 4-46, p.120).

"there were some strong people in the group that I was with […] 'what do we all think of this?' and it was more of a collaborative, organic, slow process" (evaluation interview 6.1)

"I felt the need to take the lead. Because they were there for me so I was also just grateful for their presence and their thoughts." (evaluation interview 6.5)

4.8.4 Reflection (workshop 6)

Through analysing the workshop outputs the following insights were drawn.

a) In relation to the frameworks *communication strategies* and *qualities of sustainability*, the visualisation (Figure 4-49, p.123) shows that participants added new qualities and strategies and used fewer ones suggested. This is interpreted as a positive outcome because the tool is designed to be a generative apparatus.

b) This iteration reflected on the question of 'agency' in the approach to collaborative practice explored in the workshops. Specifically, who has agency over the communication design outputs and how is it mediated between the actors in the workshops which are: (a) the designer-researcher (b) representatives of sustainable food initiatives (c) members of the public attending.

- The designer-researcher - in the workshop series (#1 to #6) the involvement as facilitator tentatively lessened as the tool itself became more self-explanatory for users who were non-design experts. The designer evidently had agency over the design of the tool, the prompts, and how it guided participants to output new communication design solutions. There was also agency in what can be described as designing the conditions for collaboration. The designer-researcher brought together the representatives of sustainable food initiative and attendees of public around the issue of sustainable food. The designer-researcher exercises 'flexible' agency in this collaborative practice as Armstrong (2011) describes flexibility in user-centred design; "The designer puts a system into motion and then lets go" (Armstrong, 2011, P.81). The designer did not have agency over

the attendees of the public who joined nor over the benefits of interaction between actors. The designer also did not have agency over the workshop outputs and whether the communication design solutions were effective (as this was not an objective of practice in section 1.3, p.26). This approach to co-creation of communication design valued less the finished design product and more the open-ended design system.

- Representatives of sustainable food initiatives - were given the opportunity to exercise agency by facilitating their working group with attendees of public, using the tool, and addressing their communication challenges. In this workshop (#6) this was referenced as a positive aspect (section 4.8.3, p.119) contrary to other workshops (#5) where there was a lack of leadership in groups.
- Members of the public attending - had agency over the communication design outputs by contributing their input, own expertise, and critique in conversation with the group. As a sample of a wider public, agency was also exercised by drawing together a community of shared interest around the issue of concern at hand.

Figure 4-49 Workshop 6 outputs. Left: tool suggested these *qualities of sustainability* and *communication strategies*. Right: chosen or new added by sustainable food initiative.

4.9. General analysis of workshops outputs

The informative evaluation interviews done throughout the workshops (#1-6) served to guide the re-iteration of the tool in terms of usability. A total of 14 representatives of sustainable food initiatives that took part in the workshop series were interviewed at end of workshop and 6-8 weeks post workshops. This section presents an analysis on the overall effect the workshop outputs had for sustainable food initiatives (Figure 4-50, p.125):

- Representatives of 5 food initiatives implemented the outputs as a communication design brief.
- For 9 representatives of food initiatives the workshop output served them differently, as it inspired other new ideas, or informed existing ideas not necessarily developed during the workshop session.

This section provides some illustrative examples shared by the representatives of food initiatives in the informative evaluation interviews on how workshop outputs were taken forward (Figure 4-50, p.125). In relation to the examples where food initiatives who are non-design experts created the communication artefacts themselves (whether graphics or interactions) it is worth commenting on the communicative 'quality' of these artefacts (for example the icons designed by Bloombox Salads, or the flyer designed by Pede Salsa). It is important to note the evaluation does not contemplate the 'quality' of these designs through the lens of an expert communication designer. The choice of typeface, colour scheme or layout for example, is not what is evaluated in this analysis. What is of value is, the ability participants developed to define their own brief clearly. This reveals what impact the workshop structure and tool had in terms of supporting food initiatives with little or no expertise in design to articulate a communication design brief for themselves.

a) Bloombox Salads (#2) worked on a communication challenge of how to tell the story more effectively through visual language. The output from the workshop was to create a set of icons that tell the story from farm to salad box delivery which they attempted to design themselves (image shared by participant in Figure 4-51, p.126).

> *"I tried to then go onto a design software and write it, make all those icons and stuff..." (evaluation interview 2.9)*

b) Pede Salsa (#5) implemented the workshop output as a pilot test (image shared by participant in Figure 4-52, p.126).

c) Vidacycle (#1) communication challenge focused on how to develop ways to communicate the daily activities of the farm that is located in Chile and how to connect the daily activities of producers in Chile to the customers in Europe. The output idea used the communication strategy "storytelling" to enable more transparency and an on-going dialogue with their public . The output was a proposal to invite a photojournalist to live on the farm and capture the everyday activities. In the retrospective conversation they shared that the workshop enabled the development of a communication strategy for social media as an "interim" solution as well as a storytelling-experience dinner (image shared by participant in Figure 4-53, p.127).

> *"I definitely remember the moment someone suggested about having [a] photographer on site*

[…] that's our interim solution and that was also suggested on the day. That whole way of communicating is basically a product of the workshop" (evaluation interview 1.3)

d) Some sustainable food initiatives developed new ideas as consequence of the workshop activities. Rubies in the Rubble (#2) explored a challenge that was how to reach broader audiences and get more crowd support. The output idea was to "be more vocal" about food waste and engage audiences through social media campaigns. In the post-workshop interview weeks after the workshop, Rubies in the Rubble shared that they had been inspired by the workshop format and created a "street team brand ambassadors meet-up" where the public was invited for a session that enabled decision-making on communications and branding. The workshop had indirectly enabled them to develop a new way to involve the public in the co-creation of their brand.

"(…) I think we are going to keep doing that kind of thing as more things come up and get peoples input. Just because it's great to have feedback from customers and also have people feel more involved in the whole process." (evaluation interview 2.6)

e) Jack's Veg (#3) highlighted that one of the takeaways from the workshop was the notion of building community between food initiatives. Since the workshop he had developed a personal goal to meet as many farmers as possible and share best practices. He felt the workshop provided a valuable experience in this sense. As a consequence, he developed a platform to share best practices - "farm

Figure 4-50 The effect of workshop output for each sustainable food initiative.

	Implemented workshop output	Intends to implement	Inspired a new idea	Informed an existing idea	Had other effect	Had no effect
Workshop 1						
Urban Orchard						1
Snact	n/a					
Vidacycle		1	1			
Workshop 2						
Soleshare			1	1		
Bloombox Salads	1		1			
Rubies in the Rubble			1	1		
Ubuntu Chocolate			1		1	
Workshop 3						
Growing Communities		1	1	1		
Jacks Veg	1			1	1	
Disco Soup	n/a					
Workshop 4						
Saves the Date	n/a					
Golden Co	1				1	
Workshop 5						
Casal Hortelao			1			
Pede Salsa				1	1	
Workshop 6						
Fine and Rare	1					1
Loom Grown		1	1			
Lucid Selections	1		1			
Total	5	3	9	5	4	2

hacks" - with other small-growers but also a new business selling specific tools to the community.

"I launched the platform called "Growers Friend" a month ago and already had two or three sales." (evaluation interview 3.3)

f) Lucid Selections (#6) as a platform that represents small-scale wine producers focused on the challenge of how to tell the story of origin of wines produced in different locations and convey their authenticity to consumers. The output idea was a set of handwritten letters with the story of the wine-making process from maker to consumer which he realised would not be feasible and instead implemented a more feasible strategy so as to retain authenticity in the story being told (sample shown in Figure 4-54, p.127).

"I definitely put a couple things into action, not necessarily specific action points that the group came up with but... I created two movies in iMovie that give a good explanation of what lucid selection does that the focus is" (evaluation interview 6.4)

g) Soleshare (#2) had the challenge of how to grow the membership base of the fish box scheme without losing the personal relationships with customers . They have been able to successfully do this by collaborating with other similar minded local businesses. Although Soleshare did not implement the wine and fish service idea which was the output of the workshop, the conversation inspired them to re think about how to position themselves through a better understanding of their values and priorities.

"…something that's really stayed in my mind is that we don't make money by selling fish, on one day, we make money out of our customers staying with us and keeping on-board and us making money from them very week." (evaluation interview 2.11)

Figure 4-51 Bloombox Salads workshop output and icons designed afterwards sent by participant.

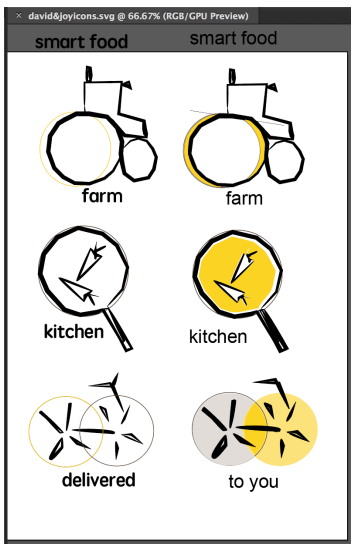


Figure 4-52 Pede Salsa workshop output and image received of a pilot test implementing the output.

Figure 4-53 Vidacycle workshop output and the storytelling-experience dinner created post-workshop.

Figure 4-54 Lucid Selections film created after workshop output.

4.10. Conclusion

The objective of the workshop series was to develop and test a communication design tool and process of use that enabled the target users (in this research the sustainable food initiatives) to:

i) Articulate their *qualities of sustainability*.

ii) Identify new *communication strategies* and maximise use of existing assets for communication with their public.

iii) Amplify the *qualities of sustainability* through new communication designs.

This chapter presented six workshops that were the iterative practice component of research (as introduced in methodology section 3.3, p.54). These workshops were designed to iterate and develop a specific tool and process of use to produce communication design solutions with a selection of sustainable food initiatives that had participated in the workshop. The end of workshop interviews with representatives of sustainable food initiatives provided the input to design the next iteration of the canvas and prompt cards by adding or editing *qualities of sustainability* and *communication strategies* (progress of the canvas iterations in section Appendix 18: Illustration of canvas iterations, p.186). From the iterative practice, reflections were drawn and supported by the informative evaluation interviews which delivered key insights to address the research aims. To summarise;

Workshop 1

In this first workshop the outputs produced by participants (new communication design solutions) showed an interpretation of communication design as an expanded practice, for example, the design of new collaborations and experiences with their public. The main insight taken forward from this first workshop was how the tool (the canvas and prompt card set) as well as the process of use were effective to generate new communication design solutions. It also evidenced that participants were able to identify and add new qualities and strategies to the existing set of prompt cards. Similarly to the findings from fieldwork *discovery tool*, there was an overall understanding of the *qualities of sustainability* as something people experience. For example, one of the workshop outputs was using photojournalism to capture the everyday life on a farm (Vidacycle) or the apple juice stand as a way to trigger new conversations between different stakeholders (Urban Orchard).

Workshop 2

This iteration was a turning point in the workshop series because both the setup in a co-working space and the greater sample of wider public helped to generate a diversity of insights. One the research objectives was to recognize how communication design supports the formation of 'publics' and 'communities' in transition to more sustainable ways of living. This workshop revealed one insight taken forward, which was the potential of the workshop (the collaborative process using the tool) to facilitate a conversation between sustainable food initiatives and members of the wider public. An "arena for discussion" as described by one representative of food initiatives. A second insight taken forward emerged from the informative evaluation interviews. Representatives of sustainable food initiatives highlighted not just the value of the communication design outputs they could apply in practice, but also how the interaction with the sample of public impacted their understanding of what they are trying to communicate and how to communicate it.

Workshop 3

Building onto the findings of previous iteration, this workshop generated insights that responded to the research objective centred on how the expanded practice of communication design could amplify the social dynamics of these types of relational initiatives. The communication strategy *building community* was found to be relevant to all three sustainable food initiatives. The quality of sustainability *collaboration* was predominant, a result similar to the previous workshop. In addition to this finding, the informative evaluation interviews also revealed the value of the workshop interaction as a platform for discussion amongst initiatives with similar values. The value lies in the exchanging best practices, communication approaches and common problems. This insight was taken forward through a theoretical lens of current research into "relational services" (Manzini 2015, Cipolla 2012).

Workshop 4

With the objective to draw on the 'relational' aspect of these types of initiatives, this workshop was held at the location of one sustainable food initiative open to the public (differently to previous workshops). At

this point in the iterative practice the informative evaluation interviews had shown the workshops had impact on participants beyond the moment in which they take place. The sustainable food initiatives were developing more collaborative ways of communicating. For example, after workshop 2 participant Rubies in the Rubble had implemented the "street team meet-ups" as a communication strategy in building community. After this workshop Golden Company implemented a new way to bring out the authenticity of their youth run social enterprise by partnering them with expert designers that support the design of youth's vision. Both of these examples contributed with insights to address one research aim that is, to empower social innovation initiatives through more collaborative ways of communicating.

Workshop 5

At this point in the iterative workshop series, the benefits of this collaborative process and tool (the canvas and prompt cards) were becoming more evident through the post-workshop evaluation interviews. This workshop explored the potential of the tool and collaborative process to also benefit expert communication designers when liaising with a client (here, the sustainable food initiatives). Although it became clear that expert designers were not the target users for this tool, at this point in research their feedback was beneficial. The discussion with communication designers revealed an important insight that was carried forward to the final iteration. This focused on the intersection between communication design (in the expanded sense) and the design of the service model. The interpersonal relationships that drive the service models of these types of social initiatives (here, the sustainable food initiatives) were seen to be inseparable from the way communications are designed. Therefore the aspect of agency in this collaborative process of designing new communications was the main question taken forward to the final iteration.

Workshop 6

At this point in practice (12 months after workshop 1) the informative evaluation interviews had revealed results for the sustainable food initiatives as consequence of taking part in a workshop. Some of these results included new communication designs taken forward since the workshop or inspired by the workshop but also new connections and collaborations as result of the workshop. As the tool itself evolved towards a working prototype, the question of agency between the actors involved in the collaborative process using the tool was the focus for reflection in this workshop. It was identified that, the designer-researcher exercised what can be described as a 'flexible' agency (Armstrong, 2011). The role of the designer was focused on implementing the design tool and process but not to have agency over the workshop outputs and whether the communication design solutions were implemented. An approach that can be described as facilitation of the co-creation (of communication design) which values less the finished design product and more the open-ended design process.

Conclusions can also be drawn in terms of how this tool and process of use compare to other existing methods and tools. The literature review of methods identified a range of collaborative tools and guidelines for communication design practice in the area of social innovation (section 2.5.4, p.47). In

comparison, the new tool and process developed through practice differs and adds value to the current landscape in the following ways:

a) It focuses on communication design practice

The review of methods and tools covered in chapter 2 evidenced no clear frameworks for communication design practice in the area of social innovation and sustainability (section 2.5.4, p.47). The tool developed through this iterative practice differs from the existing guidelines for communication design practice in this area (as for example the work of Piloton, 2009 and Shea, 2012). It provides a more tangible process through the use of specific materials (canvas and prompt cards) designed for the context of social innovation initiatives. It specifically helps users to articulate their communications through an 'expanded practice' of communication design (as defined in section 2.2.1, p.33) and generate a brief to themselves as output. The prompt cards with *communication strategies* and *qualities of sustainability* were effective to support the development of new communication design solutions that include the design of experiences and interactions between people. This is an important benefit of the tool because it supports the service model that is core to these types of initiatives built on interrelations between people.

b) It is a collaborative tool

The review of methods and tools also covered a range of existing approaches designed to facilitate collaborative processes which greatly focus on collaboration between expert designers and participants of the public (for example Armstrong, 2010; Lockton, 2010). This tool and process of use differs in the sense that, it has been designed to be used by non-design experts while facilitated by an expert designer. An important insight gained from the informative evaluation interviews with representatives of sustainable food initiatives was the value of the collaborative process itself. Participants highlighted the benefit of gathering with a sample of wider public around the shared interest (here sustainable food initiatives). The importance of designing the process for both communication and collaboration was highlighted in workshop 2 end of workshop interview as one participant described it as "an arena for discussion". In this sense, the benefits these workshops brought to participants can be supported through Binder's definition of "design things" as *a socio-material assembly*. This is defined as a collective of humans and non-humans that deals with matters of concern (Binder et al., 2011,p.1). The term *assembly* can be here used to describe the workshop environment; using a new tool to produce communication design in a collaborative process while fostering dialogue between actors around a common issue of concern. The final recommendations for use of this *communications assembly* tool were based on the effectiveness of the workshop series and will be introduced in the following chapter.

c) It is accessible to non-design experts

In the process of using the *communications assembly* tool (canvas and prompt cards) the designer becomes a facilitator rather than the co-producer of the final design output. In this sense, this tool can be grouped with a sub-set of current tools designed for non-experts (for example DIY toolkit 2015, Designkit 2015). Although the tool has been developed to focus on non-design experts, workshop 5 showed it

shows potential to also benefit expert designers as a process to liaise with the client.

To conclude, the iterative practice clarified how the role for **expanded practice of communication design (defined in section 2.2.1, p.33) can support the relational qualities of these types of social initiatives.**

The next chapter presents a retrospective evaluation that looks at workshop outcomes and impact over a longer period of time. The objective was to understand what changed for sustainable food initiatives as a consequence of taking part in the workshops and interacting with the tool.

5 - Deliver stage: retrospective evaluation & research outputs

5.1. Introduction to the Deliver stage

This chapter focuses on the *Deliver* stage of research which includes a closing retrospective evaluation of the practice, the main findings, and the research outcomes (Figure 5-1, p.136). The first part, is an analysis that looks at the outcomes of the workshops and use of the tool. Interview data was gathered through a retrospective conversation with the representatives of food initiatives, the longest timeframe 12 months after workshop and the shortest 3 months (illustrated in Figure 4-0). This retrospective analysis looked to derive findings and check assumptions from the reflections on practice during the workshop series (the reflections shared at the end of each workshop in chapter 4). This interview data was analysed to find the longer term outcomes resulting from involvement in the workshops and if there were changes to communication practices as a consequence.

The second part, evaluates the impact of design (the workshop series) on the activities of the sustainable food initiatives as viewed through the framework "valuing design" (Yee et al, 2015). The framework is borrowed from a recent AHRC study 'Identifying and Mapping Design Value Design' (Yee et al, 2015) on the value design-led service projects bring to stakeholders. This section analyses 'design impact' in terms of what value the communication design approach brought to participants.

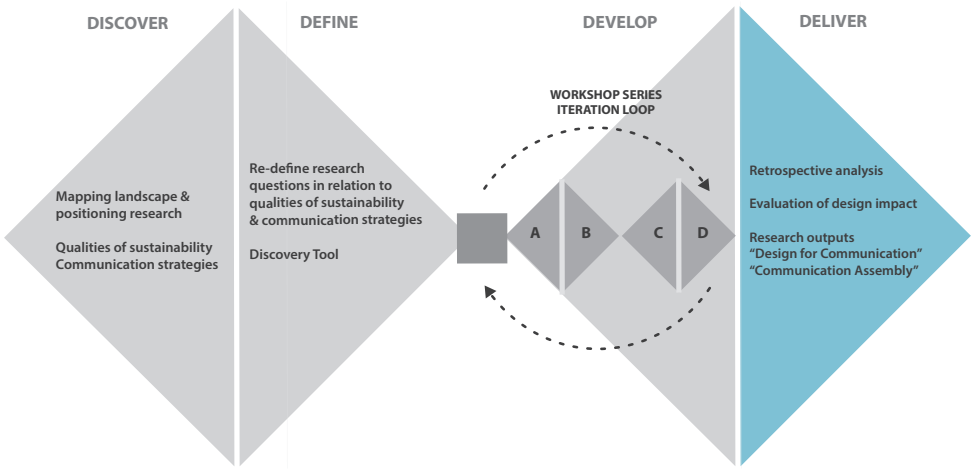
The third part of the chapter presents the two outcomes of this research; the framework for communication design practice in social innovation for sustainability titled *design for communication* and the tool developed through the workshop series titled *communications assembly*.
Finally, the chapter presents the contribution to knowledge of this research.

i) The contributions to the discipline of communication design in the form of the new framework that emerged through practice to specifically addresses qualities of sustainability.

ii) Practical recommendations for setting up a *communications assembly,* which is of value to a wider audience beyond the design discipline including other social innovation initiatives outside the area of food.

The chapter concludes by describing the research challenges experienced and the potential for future development.

Figure 5-1 Where Deliver stage is situated in the research methodology.



5.2. Retrospective analysis

The evaluation of this research is qualitative. The methodology stressed the importance of understanding the "impact" collaborative practice has on participants, in order to validate the communication design tool as effective and also to identify new knowledge drawn from this approach to practice (methodology section 3.3, p.54). A literature review revealed insufficient methods to evaluate communication design interventions that fall within "an expanded field" of practice, in this sense, Frascara (1997) is the a key reference on assessment of visual communication design.

> *"post-implementation evaluation must form part of the design strategy and serves to adjust and improve the effects of the campaign." (Frascara, 1997, p.5)*

The practice was positioned in the discipline of communication design from the standpoint of an expanded practice centred on creation and interpretation of meaning, whether through artefacts, interactions or experiences (as discussed in literature section 2.2.1, p.33). Practice-led research evidenced that communication design that applies collaborative methods requires an approach to not only assesses the effectiveness of the design artefact, as Frascara (1997) proposed, but also the effectiveness of the process to change the pre-existing conditions for participants. This retrospective analysis focuses on the practice and this definition of impact - what change the workshops using the collaborative tool brought about for initiatives involved. The intended (measurable) outcome of this practice was whether it enabled the sustainable food initiatives to develop and apply more collaborative ways of communicating and to cultivate the *qualities of sustainability* through the process and products of communication design. The focus was not to evaluate the 'quality' of the communication design artefacts per se, because these were not created by trained designers.

5.3. Data collection through retrospective conversations

The retrospective conversations were semi-structured interviews recorded in person or via Skype (Figure 4-0 locates these when in the practice time-line). The objectives were; (I) to find themes of how communications have changed for the sustainable food initiatives as consequence of the workshop, (ii) to verify the insights drawn from the practice (the reflections presented in workshop series of Chapter 4) namely[1];

- The value of involving publics in the co-creation of new communication design solutions that reflect the *qualities of sustainability* of participating sustainable food initiatives; seen as enabling pluralism was a finding of theworkshop series.
- How communications are developed integrated with the service model and activities of these types of initiatives; a practice centred on *relational* communication design.
- Response to the need identified for "spaces that enable dialogue" between initiatives with similar values; communities of interest that foster best practices was a finding of the workshop series.
- Wider impact of workshop and results of new collaborations established; what can be described as soft outcomes of the tool and workshop context, also a finding of the workshop series.

5.4. Retrospective conversation transcript analysis

To make sense of the transcript data the software Atlas.Ti was used to apply codes and derive themes[2]. Using a simple qualitative interview analysis (Turner III, 2010; Ryan and Bernard, 2003) the following two sets of themes were found. The first set of themes refers to type of workshop outcome. The second set of themes refers to the type of assets used within *communication strategies* to mobilize brand values and deliver those outcomes.

- Workshop outcome theme 1: references the effect of workshop output
- Workshop outcome theme 2: references new communications developed since the workshop
- Workshop outcome theme 3: references *qualities of sustainability* applied
- Workshop outcome theme 4: references *communication strategies* used

- Asset theme 1: drawing on people relations.
- Asset theme 2: drawing on community of interest between initiatives.
- Asset theme 3: drawing on designed "artefacts".

These themes are described below with examples that show how *qualities of sustainability (theme 3)* (Figure 5-3, p.141) and *communication strategies (theme 4) were applied* (Figure 5-2, p.140).

1 The questions of retrospective conversation in section Appendix 10: Retrospective conversation questions, p.177

2 Sample of coding process in section Appendix 11: Sample - analysis of retrospective conversations using software Atlas.ti, p.178

5.4.1 Asset theme 1 - workshop outcomes drawing on people relations

These outcomes support the insight from workshop #5 which focuses on the accord of communication design of these types of initiatives with 'relational services' as described by Cipolla (2012). This accord suggests a 'relational approach to communication design' that amplifies *qualities of sustainability* like relationships and collaboration via *communication strategies* like experience and interaction.

- For example, the design of gamified interactions between service users to foster a sense of community, as the representative of Loomgrown shared at end of workshop interview.

  "we weren't talking about the community or the experiment at all. So this will be the first time we try to present it to people." (evaluation interview 6.6)

- As to fostering relationships, representative of Soleshare shared their new approach to bring their customers together around shared values. This approach recognises the 'people' around their brand as an important asset for the brand.

  "sharing their stories is a bit more tempting than just the dead fish in a box." (evaluation interview 2.11)

5.4.2 Asset theme 2 - workshop outcomes drawing on community of interest between initiatives

These outcomes are examples of communication design approaches that draw on a community of like-minded initiatives. This was an insight gained in the workshop series (#2 and #3) and expressed in the informative interviews with different participants. The workshops were described as "an arena for discussion" (workshop #2) to share best practices in both their activities and in communication design.

- For example, food initiative Vidacycle drew on a pool of other food initiatives and invited them for a food experience using their products to share the story and potentially cross-collaborate.

  "the aim was to allow people to taste what we had and to share the flavours of the farm and the story and to have other people share about that through their social media" (evaluation interview 1.3)

- A second example is that initiative of Jack's Veg who designed a new platform inspired by the need to exchange best practices between food initiatives, which he previously referenced as a personal outcome in his post-workshop interview (section 4.5.3, p.100).
- To explore the value of fostering a community of interest, Soleshare developed a way to expand the reach of communications through a networked approach relying on other initiatives that share the same values.

  "collaborating together in networks that are already in place and kind of buddying up and working with one another to share the burden and costs of setting things up." (evaluation interview 2.11)

5.4.3 Asset theme 3 - workshop outcomes drawing on designed "artefacts"

These outcomes show two different approaches to produce communication design through using the tool. Some initiatives took on the role of designing the communications themselves regardless of not being expert designers. Other initiatives took the workshop output as a brief to be executed by professional designers. For example, the representative of Golden Company shared in the post-workshop interview that he recruited expert designers to co-create new brand communications with the youth group that runs the social enterprise. Both of these outcomes support a discussion on the emerging role for the communication designer, as facilitator to design the brief but also executing the design artefacts (to be discussed in the section contribution to knowledge, section 5.11.4, p.152). For example, the representative of Growing Communities took the workshop output as a brief for professional designers and collaborated to create a language more accessible to a younger customer, as discussed in the long term retrospective interview following workshop (#3).

> *"working with young designers, I asked them to do the bags and will be re-designing the website, so I'll get some professional help with that." (evaluation interview 3.8)*

A second example is that a representative of Lucid Selections took the workshop output as brief to himself and created a series of videos exploring the quality of authenticity. Since he is the only one who has met the producers he felt his own designs would communicate more authentically than an external designer.

> *"…it took me three days, took forever, to take a two-minute video, you'd never imagine! [...] I basically just refined wording a lot more, you know we talked about the message, making it more clear and understandable, more humbling to the average consumer." (evaluation interview 6.2)*

5.5. Summary of communication strategies identified in retrospective analysis

The initial framework of *communication strategies* was drawn from the review of contemporary practice as well as conversational interviews with designers in the area of sustainability (refer to section 2.5.2, p.44). Throughout the workshop series the *communication strategies* were developed and added based on participants' input and applicability of these strategies. From the transcripts of retrospective conversations the following insights can be drawn (Figure 5-2, p.140):

- Building *community* was shown in the workshop outcomes as a strategy most used and examples provided by participants discuss range different mediums including the design of *experiences*.
- *Experience* is the second strategy most identified. In the examples provided by participants it is closely tied to *building community* and displaying the *authenticity* of their products.
- *Storytelling* and *transparency* are also linked in the examples provided by participants. These are applied in more visual mediums, like film and visual representations of process of production, or origin of products.

Definitions of most used communication strategies:

Authenticity - showcase the authorship of making (extracted from contextual review of practice, section 2.4.1, p.39 and iterated in workshop series).

Building community - share the story of the initiative through talks, events and new communities (extracted from sustainable food initiatives through discovery tool, section 3.8.2, p.69).

Experience - create physical interactions (extracted from contextual review of practice, section 2.4.1, p.39 and iterated in workshop series).

Freedom - allow the wider public to contribute to co-creation of communications.

See and believe - address the complexity in sustainability by allowing public to visit (extracted from sustainable food initiatives through discovery tool, section 3.8.2, p.69).

Simplicity - avoid ambiguous vocabulary like 'sustainability' and use simpler language (added in workshop 2, section 4.4.5, p.95).

Storytelling - use narratives to explain the activities of initiatives (extracted from contextual review of practice, section 2.4.1, p.39 and iterated in workshop series).

Transparency - share information openly (extracted from contextual review of practice, section 2.4.1, p.39 and iterated in workshop series).

5.6. Summary of qualities of sustainability identified in retrospective analysis

The initial framework on *qualities of sustainability* was drawn from the literature review reflecting an emerging conversation of how sustainability is discussed in design practice. The framework was then developed through the fieldwork using the discovery tool where new qualities were extracted 'in the field' with sustainable food initiatives. During the workshops the framework developed based on

Figure 5-2 *Communication strategies* identified in retrospective conversation interviews.

	communication strategies							
Food Initiatives	Authenticity	Building community	Experience	Freedom	See & believe	Simplicity	Storytelling	Transparency
Vidacycle		1	1	1			2	2
Bloombox salads			1				2	1
Fine and rare		1	1					
Golden co	5	1						
Growing communities		1				1		
Jacks veg	1	1	2		1			
Loom grown		2		1				
Lucid selections	1	1				1	2	1
Rubies in the rubble			1	3				
Soleshare		2	2				2	
Ubuntu Chocolate		2						
Casal Hortelao								2
Pede salsa	1		1					1
Urban orchard								1
Total	8	12	9	5	1	2	8	8

participants' input on meaning and how the qualities are materialised in practice for them. To summarise the qualities found in the retrospective conversations (Figure 5-2, p.140):

- Collaboration and relationships were the most prominent qualities found, whether communicating about *relationships* and *collaboration*, or designing interactions and experiences that foster those qualities.
- From the theoretical frameworks from which these were originally drawn, the qualities *collaboration*, *place*, *relationships*, *scale, work* and *personal meaning* were the most identified.

Definitions of most used qualities of sustainability:

Collaboration - highlight the importance of stakeholders' contributions (extracted from analysis of emerging sustainability frameworks section 2.4.1, p.39 and iterated in workshop series).

Health - educate the public on well-being (added in workshop 2 section 4.4.5, p.95).

Personal meaning - communicate about the personal story of participating initiatives (extracted from analysis of emerging sustainability frameworks section 2.4.1, p.39 and iterated in workshop series).

Place - communicate about provenance of product/service (extracted from analysis of emerging sustainability frameworks section 2.4.1, p.39 and iterated in workshop series).

Relationships - invest in relationships with each of your customers by personalising communications (extracted from analysis of emerging sustainability frameworks section 2.4.1, p.39 and iterated in workshop series).

Scale - enhancing the local and small-scale aspects of the participating initiative (extracted from analysis of emerging sustainability frameworks section 2.4.1, p.39 and iterated in workshop series).

Work - highlight the process of making the product/service (extracted from analysis of emerging sustainability frameworks section 2.4.1, p.39 and iterated in workshop series).

Figure 5-3 *Qualities of sustainability* identified in retrospective conversation interviews.

	the qualities of sustainability						
Food Initiatives	collaboration	health	personal meaning	place	relationships	scale	work
Vidacycle				1	2		2
Bloombox Salads				1	1		
Fine And Rare	1						
Golden Co	1						
Growing Communities	2			1	1		
Jacks Veg	4			1	1		
Loomgrown	1				1		
Lucid selections				1			1
Rubies In The Rubble	1						
Soleshare	4				3	1	1
Ubuntu Chocolate	2	1	1				
Casal Hortelao							
Pede Salsa	2				1		
Urban Orchard	1						1
total	19	1	1	5	10	1	5

5.7. Connection between qualities of sustainability and communication strategies

In terms of workshop outcomes, it was valuable to analyse the relationship between communication strategies and qualities of sustainability to understand if there was a connection between specific communication strategies and specific qualities of sustainability. This is important in response to the research objective; what communication design can do towards contributing to the emerging paradigm on qualities of sustainability. A pattern in this qualitative data was not clear, however this research has shown that qualities of sustainability are context based and so are the approaches to communication in these types of initiatives (as the examples of workshop outputs demonstrated in section 5.2, p.136). The *communication strategies* most identified in retrospective interviews are *building community* and *experience*; and the *qualities of sustainability* most identified are *collaboration* and *relationships*. Considering the theoretical standpoint of communication design as an expanded practice, the relevance of *communication strategies building community* and *experience* are significant to understand how communication design is interpreted by participants. The retrospective interviews identified a greater number of outcomes produced by participants exploring design of experiences and interactions (i.e. workshops, dinners, meet-ups) and less on design of websites, flyers, posters. It revealed that for these food initiatives, the design of approaches that assemble new and existing publics to experience their qualities is important. This finding also supports the current research on "relational services" (Manzini 2015, Cipolla 2012), a term that gained its origin in the study of initiatives which are social in both their means and their ends. The term "relational services" referred to in this thesis, was defined by Cipolla (2012) as cases of social innovation initiatives with the particular requirement of intense interpersonal relationships that drive the activities. This research has demonstrated through the practice with sustainable food initiatives that they find value in communicating this quality. Furthermore, it has demonstrated they find value in a communication design practice based on the quality of relationships. This revelation brings up a new conversation on the role of communication design practice to support social innovation initiatives, which is the intent of this research. This role is not about communication design, but rather about, design for communication. A new approach to collaborative practice that builds on the assets of relational initiatives and services. This finding reveals the contribution of 'non-designers' in starting stage of the communication design process to be important – defining clearly the brief through a collaborative practice. In sum, this can be described as design for co-design for design: the design of tools (for example, the tool used in workshop series) for co-design practice (in this research, involving the food initiatives and sample of public) for design (a new communication design brief as output).

Figure 5-4 Cross-comparison of Retrospective Analysis with Valuing Design framework (Yee et al, 2015)

		Retrospective Analysis framework			
		A. Effect of workshops	**B. Outcomes of workshop**	**C. Qualities of Sustainability**	**D. Communication Strategies**
Valuing Design framework (Yee at al, 2015)	**1.Building Capacity and Skills**	A.1 Workshops provided a new tool to think through communication strategy and values to output a new communications design brief.	B.2 New communication practices developed show an 'expanded' practice of communication design.	C.3 Provided new vocabulary to articulate existing values.	D.4 Provided new specific set of strategies to maximize potential of existing communication assets.
	2. Culture Change	A.2 Enabling pluralism. New experience of collaborating with sample of public unfamiliar with their activities.	B.2 Community of interest. The value of an "arena for discussion" between likeminded initiatives.	C.2 Awareness of how communications reflect the culture of their activities.	D.2 Empowering "non-design experts" to articulate a clearer brief for themselves.
	3. New Business Models	A.3 New potential business ideas as result of workshop series.	B.3 Catalysed new collaborations between different food initiatives post-workshop.	C.3 Catalysed new business ideas to further qualities.	D.3 Helped to reflect how previously unused strategies could lead to new business opportunities.
	4. Increased Engagement	A.4 Value of "a platform for discussion" between initiatives part of the same community of practice. Also platform for discussion with wider public.	B.4 Extended conversation to a wider public unfamiliar with food initiatives.	C.4 Workshop public transitioned from a position of 'consumer' to 'collaborator' by taking part in the co-creation of communication design.	D.4 In the workshops participants from initiatives took the lead as "experts" of their own qualities and participants of the public were equally important as vested interested in the communications being designed.

5.8. Towards evaluation of the design impact

Within the timeframe of this research it would not be possible to evaluate the impact of the communication design practice (the workshop series) further than 14 months in retrospect. However, to substantiate the impact of design, as described by Frascara earlier, and in light of the outcomes of retrospective analysis, an existing framework was used. This framework is from a recent AHRC study titled 'Identifying and Mapping Design Value Design' (Yee et al, 2015) and focuses on the value that design-led service projects bring to stakeholders. Through this theoretical lens, the 'design impact' in context of the workshop series can be analysed; what value the collaborative practice using the communication design tool brought to stakeholders involved (here, sustainable food initiatives and members of public).

The literature review had confirmed a lack of frameworks in the discipline of communication design to assess impact of collaborative or participatory processes (section 2.5.4, p.47). The framework "Valuing Design" (Yee et al, 2015) was appropriate to use here because it:
I) considers the involvement of stakeholders in a design process as did the iterative practice of this research (by bringing together sustainable food initiative with members of public).
ii) considers the impact on diverse communities, as did this research by bridging academia, practicing designers, sustainable food initiatives, and other stakeholders including the hosting organisations of spaces where the workshops were held.
iii) it is relevant to evaluate the value of communication design practice in the 'expanded field' moving towards visualising, prototyping, experiencing (Yee, 2013; Resnick, 2016).
The qualitative measure of success was whether the practice enabled the sustainable food initiatives to develop and apply more collaborative ways of communicating and to cultivate the *qualities of sustainability* through the processes and products of communication design. In terms of evaluating impact, the focus is how communication design can be a new point for interactions that previously did not exist. It is on this premise that this reflection on impact, value and change is based.

> *"The production of the (visual) communications should be seen as a means only, as the creation of a point of interaction between current situations, desired changes and the dynamic participation of those involved." (Frascara, 1997, P.5)*

5.9. Valuing design framework

Yee's framework suggests that for design to generate impact certain conditions need to be met. Reflecting on the workshop series through these points, it can be asserted the workshop series met these conditions, delivering the following;

- Created trust and built relationships; between designer-research and participants but also between food initiatives and attendees of the public.
- Built capacity and skills as a key aim: participants developed new knowledge focused on *qualities of sustainability* and *communication strategies* to apply in practice.

- Aligned social and economic drivers: seen as participants are social businesses.
- Engaged and communicated successfully to a wider public to aggregate diverse participants.
- Fostered a culture of openness: participants were welcoming of heterogeneity in the workshop series.
- Acknowledge and recognise expertise in the project team: as the reflection on agency in the workshops shared earlier, this point was mediated between all participants.
- Adopted a multi-disciplinary approach: as evidenced by the understanding of an expanded practice of communication design.

A cross-comparison between the outcomes of the retrospective analysis (section 5.2, p.136) and Valuing Design Framework (Yee et al, 2015) delivers the following results (Figure 5-4, p.143). The main findings on impact through this comparison are explained below.

1. Build capacity and skills

In the workshops, the representatives of food initiatives were exposed to a new tool that helped to articulate their communications in relation to their *qualities of sustainability*. It provided new vocabulary to describe existing values, as stated by one participant (post-workshop interview 6.1). The research outcomes also showed the tool supported the initiatives to maximise the potential of their relationships and communities as an asset for communication.

2. Culture change

This point can be analysed on two perspectives. First, the value of involving public in the co-creation of new communication design solutions that reflect their *qualities of sustainability* (for example enabling pluralism). This impacted culture change through the way it enabled the public "consumers" to become participants by inviting them to contribute to the decision-making of the food initiatives. Second, the workshop series supported change in the design culture to become more diffused (Manzini, 2015) by empowering "non-design experts" to reflect, articulate, and create new communication solutions through a process that is designed for the purpose.

3. New business models

Community building between sustainable food initiatives themselves was an unforeseen impact of the workshops and emerged out of the need for a "space for dialogue" (insight from end of workshop interview 2.4). Most initiatives did not know each other before the workshops and the retrospective analysis evidenced that new collaborations were formed as consequence of participation. New business ideas and collaborations which are result of the workshops can be described as soft outcomes.

4. Increased engagement

This point builds on the earlier reflection on 'agency' in this collaborative practice (workshop #5 section 4.7.7, p.115) between designer-researcher, participating food initiatives and attendees from the wider public. The culture of openness fostered through the workshops can be described as one approach to foster *qualities of sustainability* in local communities.

5.10. Research outputs

This section presents two outputs of the practice-led research (workshop series described in chapter 4). The first output is a framework titled *design for communication* that applies a more collaborative approach to practice. The second is *communications assembly*, a tool and a process as outcome of the workshop series. These two outputs provide a novel contribution to knowledge in the discipline of communication design with a new approach to collaborative practice that draws on the relational aspects of social innovation initiatives.

5.10.1 Framework design for communication

Design for communication – different to communication design – proposes a new approach that supports and fosters the *qualities of sustainability* through applying the following principles in practice:

- **Focus on the service model and the relations between people involved.**
- **Emphasize a collaborative approach to communication design, and an approach that builds on the relational nature of these types of initiatives.**
- **Focus on the process rather than the products of communication designs.**
- **Focus on collaborators rather than the recipients of the communications.**

Applying this framework in practice requires for the designer to embrace the process more than the end products of design. This can be described as a realization of Helen Armstrong's (2011) commentary on a type of design "in the future" that celebrates the "unpredictability of responses";

> *"In the future, we believe, design will be scalable, unfixed, unfinished. In a world as vast, complex, and quickly changing as our own, designers can't respond fast enough by creating from inside silos. We must look to the user for contribution, celebrating the unpredictability of responses and enjoying the serendipity of process-oriented work." (Armstrong, 2011, P.15)*

In this approach in practice, the expert designer enables participants to identify new opportunities for design through a 'relational approach'. Looking at the service-model and interactions within communicative initiatives, the framework design for communication considers: *the people involved and relations between them, the design artefacts or prompts, and the context-specific qualities of sustainability.* The definition of expanded practice of communication design is here applied to describe the service model and relationships within it including:

- The value of pluralism in this practice was a finding of research so the framework design for communication highlights this aspect. In the post-workshop interviews sustainable food initiatives were asked how they felt about collaborating with participants from a wider public unfamiliar with their activities. The positive responses highlight openness to collaboration beneficial to new perspectives.

Figure 5-5 Final canvas used in *communications assembly.*

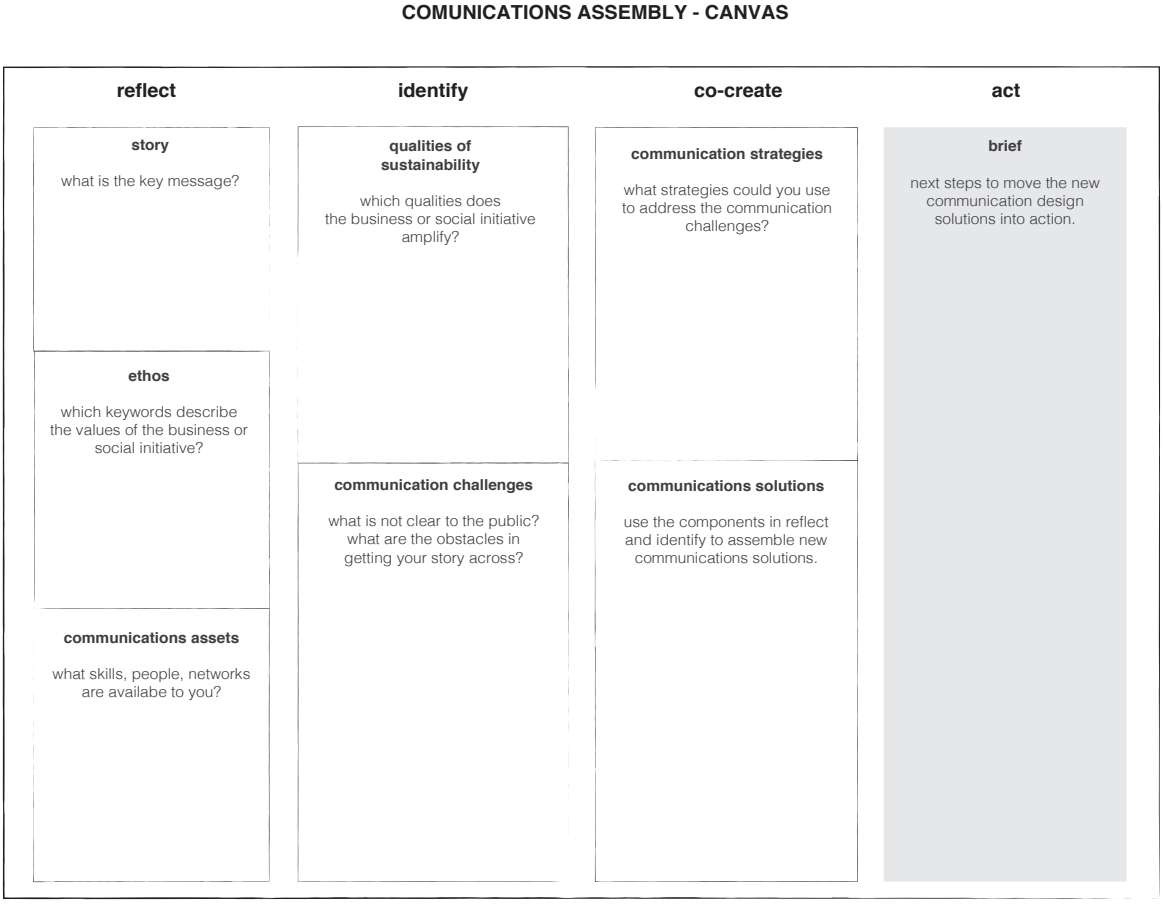


Figure 5-6 Final prompt cards used in *communications assembly.*

Story: context setting	Blank cards
Ethos	Blank cards
Communication assets	Blank cards
Qualities of sustainability	Time - Good things take time to make. Complexity - Intricate and rich properties of product / service. Scale - Enhancing the local and small-scale. Place - Importance of provenance. Personal meaning - Have personal vested interest. Relationships - Invest in lasting relationships. Work - Highlight the process of making. Collaboration - Highlight the importance of stakeholders contributions.
Communication strategies	Experience - Create physical interactions. Simplicity - Avoid obvious vocabulary like 'sustainability'. Storytelling - Narratives that explain the activities. Transparency - Share information openly. Authenticity - Showcase the authorship. See & Believe - Give tasters and samples. Freedom - Allow public to contribute.
Brief (output)	Blank cards

> *"its good actually to have a group of strangers, they don't know anything about my business and they bring different aspects" (evaluation interview 2.10)*

- Research findings showed the value of being part of a community of interest between initiatives with similar values. The drive to contribute towards a common goal results in designing new communication design solutions *as one*.

  > *"meeting the other growers. I don't meet enough of them, and there's not nearly enough of them" (evaluation interview 3.2)*

- Involving the public in its diversity as contributors of different skills showed that all participants were experts of their own experience and had valuable insights to add.

  > *"everyone was very focused on my business and my problems which was really nice, didn't feel like anyone had agendas they were trying to push, it was like therapy for me!" (evaluation interview 2.4)*

5.10.2 Communications assembly (a tool and process)

The *communications assembly* is a practical outcome of the workshop series. The term *assembly* emerged from Binder's definition of "design things" as a socio-material assembly, or as a collective of humans and non-humans that deals with matters of concern (Binder et al., 2011,p.1). The term is here used to describe the combination of a new tool for collaborative communication design practice,the context and environment in which it is used. The *communications assembly* brings together a group of people to co-create communication design solutions around an issue of concern. This section provides the recommendations for how to setup a *communications assembly* informed by what was effective during the workshops. These are considered as a prototype form with scope for further development. During the workshop series, the representatives of sustainable food initiatives indicated that *communications assembly* was beneficial to use in an early stage of business development, at a stage where new initiatives are needed, or to get feedback from the public on a new communication, product or service. It was also suggested that beneficiaries would be any types of small-scale entrepreneurs, charities or small businesses beyond the area of sustainable food in which the research was developed.

5.10.3 Recommendations for setup of a communications assembly

The *communications assembly* is setup in a workshop format and facilitated by a designer, in the same way as the iterative workshop series (described in chapter 4). In the timeframe of this research it was not possible to test if it would be possible for participants to setup and run a *communications assembly* themselves. However, the presence of a designer as facilitator was shown to be effective. These recommendations are not a prescriptive set of guidelines as the tool and process of use was seen to be effective both in small groups and larger groups of participants, as well as various workshop environments. The prompt cards content also remains open enough for new context-based *qualities of sustainability* and *communication strategies* to be introduced by the users. The following points should be considered:

Participants

C*ommunications assembly* is an interactive process and requires that small groups of participants collaborate using the canvas and prompt cards provided. Groups are made up of one social innovation initiative and 3 to 6 attendees of the wider public. In order to gather a diverse group of participants the *communications assembly* is open to the wider public through an online register. The sourcing of a sample of the public is advised to be voluntary as the 'assembly' looks to organically gather a community of shared interest around the topic of concern (the social innovation initiatives and their sustainability objectives).

Environment

The environment for hosting the *communications assembly* is important to consider as it sets the stage for the activity. This refers to the space in which it is hosted and the format of the interaction. Hosting a *communications assembly* outside of the everyday environment of the initiatives in focus showed to be productive because it encourages participants to be outside of their comfort zone.

Setup of tool

Communications assembly is setup around the use of a tool designed for the purpose. During the workshop series it was seen to be important that all participants are able to contribute equally. Therefore the tool (canvas and card set) should be placed so that participants can gather around and interact with the materials. There is not an appointed leader in each group but this role can naturally occur during the process.

5.10.4 Communications assembly tool (canvas and cards set)

The tool used in *communications assembly* is made up of two components: a set of prompt cards and a canvas. The canvas leads participants through the following stages (final canvas in Figure 5-6, p.147):

Reflect

This stage sets the landscape. It asks participants to reflect on the story being told about the participant initiative, how it aligns with the values in their business or service model, and what communication assets are available (in terms of people, places, and skills).

Identify

This stage delves deeper into the specifics of *qualities of sustainability* and communication challenges. Participants reflect on the *qualities of sustainability* of their participating initiative supported by a series of prompt cards. These prompt cards work as suggested points for discussion. This section prompts participants to think about what communication challenges their participating initiative has in getting their story out to the public.

Co-create

As a group, participants generate new ideas for communication design solutions that address the challenges in light of the *qualities of sustainability* identified and useful *communication strategies*.

Act

This section sets out the steps to develop and put into practice the communication design solutions generated. The set of prompt cards to be used with this canvas should be colour coded for each section. The different colours support participants to visualise all the various components and create

combinations of qualities, strategies and existing assets for new communications design solutions. The content for the prompt cards has been draw out of the workshop iterations (content is described in Figure 5-6, p.147).

5.11. Final discussion and contribution to knowledge

This section reminds the reader of the research aims and methodology. It summarises the findings and how these respond to the questions of this research. It presents the value in terms of contribution to knowledge to the discipline of communication design and also the practical value to a wider community. It follows with an overview of the research limitations and potential for future developments.

5.11.1 Review of research aim and methodology used

This research was set in an under-explored area of communication design practice. The role of communication design as an expanded practice in the field of social innovation for sustainability had not been clearly articulated. Furthermore, the potential of communication design practice to amplify *qualities of sustainability*, or to empower social innovation initiatives through more collaborative ways of communicating, had not yet been discussed. Through practice-led research in collaboration with initiatives displaying *qualities of sustainability*, this thesis looked to develop and evaluate a framework for practice in this area and to co-create a tool that can support this. The practice-led research progressed through five stages of development based on the double-diamond model with a focus on iteration of the tool. The methodology applied to this iterative practice-led research reflected a few theoretical discourses. It applied a collaborative approach as seen in the workshop series through (communication) design "things" (Binder et al., 2011) which resulted in the tool *communications assembly*. The research was positioned from a *responsive* design approach (Thorpe and Gamman, 2011) where the participants, rather than the researcher, were experts on *qualities of sustainability*. To explore the expanded practice of communication design, the designer-researcher was positioned as a facilitator, rather than the producer of the final design outcome. The research process model had the following stages:

Discover stage contextualized the research in the area of communication design practice and social innovation for sustainability which informed exploratory field research in collaboration with a selection of sustainable food initiatives.
Define stage re-iterated the research questions in relation to the emerging framework articulating *qualities of sustainability*. The fieldwork method "discovery tool" was developed as a way to extract from initiatives their approach to *communication strategies* and *qualities of sustainability*.
Develop stage the workshop series, an iterative and collaborative process with sustainable food initiatives and open to the public. These workshops served to co-create and iterate practical tools designed to support the sustainable food initiatives to articulate new communication solutions in relation to their *qualities of sustainability* and *communication strategies*.

Deliver stage was the retrospective analysis to understand the impact of the workshops over a period of time. It looked at the implementation of workshop output and the *qualities of sustainability* fostered and *communication strategies* used. This informed the research outcomes which are: the framework design for communication and the recommendations for configuration of a *communications assembly.*

5.11.2 Synthesis of methods and outcomes

The relationship between the methods used and outcomes produced through practice-led communication design research is important to reflect on. The designerly way of knowing (Cross, 1999) in this research positioned the participants (here, the sustainable food initiatives) at the centre of research as experts in *qualities of sustainability* – the qualities fostered through their social and relational activities. In order to understand how communication design practice could amplify these types of qualities a collaborative tool was designed to facilitate the initiatives themselves to produce (design) communications. The designer-researcher drew learnings from the process of how non-experts produce these communication designs and what value the tool added as an intervention in socially innovative initiatives. This happened in the workshops through the iterative development and use of the communication design tool. The tool guided participants through prompts (the canvas and cards) to create new communication design solutions for their own communication challenges. Results of this practice are two outputs; the framework *design for communication* and the recommendations for setting up a *communications assembly*.

The element of conversation and dialogue in the methods applied is important to note. This was a key aspect because the context of study - social innovation initiatives - are by nature social in their *means* and in their *ends* - in their activities and in their social objectives. By using this collaborative method, the research revealed how communication design can support social innovation initiatives to become more participatory in their communications and maximise use of their relational qualities.

5.11.3 Research outputs and engagement of a wider community

An important aspect about the impact of research was how it engaged different types of communities[3]. It engaged 17 sustainable food initiatives across different cities that participated directly in the workshop series, and another 6 which participated in earlier scoping stages of research. It engaged the design community at academic level through conferences, design students through a workshop, and also practicing designers and design studios at various public talks and more directly those who joined the workshops. It also engaged several organisations in the start-up ecosystem, co-working spaces and social networks that hosted the workshops free of charge because of their interest in the theme. It engaged a wider community of public through social media and in total over 70 individuals joined the workshop series.

3 A listing of publication of works in section Appendix 25: Published work, p.201

5.11.4 Contribution of the research

The research outputs offer novel contributions to the discipline of communication design, the area of design for social innovation & sustainability and also to a wider community of 'social innovators'.
Design for communication is the overarching framework that covers the different contributions. It describes a new approach to communication design that is communicative, and collaborative, in the *process* and in the *products* of design. This means it supports initiatives that already are socially driven, as relational services, to maximise the use of their relational qualities through and for communication design. It also empowers these initiatives to co-create new communications based on the values shared with their publics.
The practice initially began informed by a body of existing theory in communication design and the framework *qualities of sustainability* (section 2.4, p.38). The empirical findings were gathered through practice (the workshop series) and assessed against the existing theory, either in support, or critique. The iteration loop of six workshops served to identify where the research contributes new knowledge.

To address the literature gap identified for communication design tools and methods, there are two key contributions. Both supported by the notion that communication design as a discipline is crucial to mediate the relations between publics, as described by Sanders.

> *"(…) Communication design will soon undergo radical transformation as we learn more about creating such materials and tools to support and provoke creativity." (Sanders, 2015)*

The research contributes with a methodology for communication design that is communicative in its *means* as well as its *ends* because it engages those people previously seen as "recipients" of communication design as "participants" in communication design. This contribution builds on the instance that social innovation initiatives are characteristically social activities and relational, as described by the research on relational services (Cipolla, 2012). Considering that service design (tools and methods) are also participative, the new framework *design for communication* enables these types of initiatives to collaborate with the public and maximise their relational qualities, ultimately amplifying *qualities of sustainability*.

The research makes a case for the value of communication designers engaging earlier in the design process within the area of social innovation for sustainability. The research demonstrated value in the practice of communication design as enabler of 'sense-making', visualisation, and facilitating collaborative processes which makes communication design practice a social activity. This is supported by increasing interest in communication design practice to make use of service design tools.
Recent writings in the discipline of communication design establish a link between the design of interactions and enabling social change, namely, Janzer and Weinster (2016) that write about the empowerment of beneficiaries of communication design. This latest paradigm has been applied in practice through the workshop series where non-designers (sustainable food initiatives together with the public) were led to respond to their own communication design challenges.

> *"If design-based social change is going to be effective and lasting, it must not depend on the designer, but rather, be rooted in the empowerment of the beneficiaries." (C. Janzer and L. Weinstein, 2016)*

The research also contributed with a practical tool for collaborative communication design practice, the *communications assembly* designed specifically for initiatives promoting *qualities of sustainability*, to be used by 'non-design experts' It differs from existing methods which are targeted at communication design-experts. It also opens up a conversation of aspects the participants cannot see in their everyday, through a detailed design lens, such as *qualities of sustainability* and appropriate *communication strategies*. It facilitates an agile approach to communication design through a process to find new possibilities that can be implemented using existing assets.

5.11.5 Research limitations

This research was located at the intersection of the discipline of communication design and the field of design for social innovation and sustainability. This framework addresses communication design as an expanded field of practice (introduced in section 5.10.1, p.146). This framework addresses communication design as an expanded field of practice (as defined in section 2.2.1, p.33) and therefore does not specifically address aspects of graphic communication design. Whilst it is anticipated that the *communications assembly* has a wider application beyond the discipline of communication design, given that it can benefit 'non-design experts' looking to articulate and develop Communications, the extent to which the *communications assembly* can be used without the facilitation of a designer has not been tested and is a limitation of the research. Another limitation of the research is the scope of application and effectiveness of the *communications assembly*. In this research the *communications assembly* was used with small-scale social innovation initiatives, therefore, the extent to which it can be applied effectively to larger-scale organisations has not been tested.

5.11.6 Potential future development

In terms of possibilities for future development the research shows potential to be continued further both on practice-led and theoretical perspectives. In terms of practice, one possibility is to develop the *communications assembly* further to identify new *qualities of sustainability* and communication strategies through the input of users. A second possibility is, to explore the extent to which communications assembly can be applied to larger scale social innovation iniatives or whether it can be used without the facilitation of a designer. From the perspective of communication design theory, the *communications assembly* as a new approach evidenced the opportunity to develop collaborative methods for initiatives that are relational, for example, tools for the communication designer to engage earlier in the design process. The research also opened an important discussion on evaluation methods in communication

design practice (defined as an expanded field of practice). After identifying a lack of appropriate methods to evaluate communication design practice in the area of social innovation and sustainability, the research generated and applied its own retrospective analysis framework focused on communication strategies and *qualities of sustainability* (covered in chapter 5). This qualitative evaluation framework is transferable to other research contexts which means it can be used in future communication design research. Another possibility for further work focuses on the development of practical methods and tools for non-experts to design. The review of methods and tools for communication design practice (covered in chapter 3) provided a comprehensive map of the contemporary landscape which can be used to inform future research. Finally, another opportunity for future development is to build upon the theoretical analysis done on the *qualities of sustainability* (described in chapter 2). This analysis provided new ground in which to develop and identify new *qualities of sustainability* that can support a wider design research context. These frameworks can also benefit a wider design research context by, for example, exploring the *qualities of sustainability* in other design disciplines beyond communication design.

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Appendix 1: Comparison of existing methods & tools in relation to research approach

Name of tool / method / framework	**Tool usability**	**How it relates to tool in this research**	**How it differs from tool in this research**
1975 – Oblique strategy cards, Brian Eno & Peter Schmidt	[Card deck]	-Modifying over time -Blank cards included -Trigger for dialogues	- Cards are triggers for dialogues. - Blank cards to add own qualities of sustainability and communication strategies. - Iteration built on previous cards added by participants.
2008 – SILK Innovation Cards, Social Innovation Lab for Kent	[Card deck]	-Community mapping -Conversation cards -Word of mouth -Social circles -Communications mapping	- No card method specific to developing communication approach - No prompts for what kinds of communication and how to develop them accordingly to the values of the initiative.
2009 – design revolution toolkit, Emily Piloton	[Pdf book] Blueprint field guide for designers 13 Values framework	Go beyond do no harm Listen learn and understand Measure, share teach Empower, heal, catalyse	The framework i developed from the use of the tool is also an open set of principles but they have evidence of how they become tangible in practice.
2010 – Design with Intent, Dan Lockton	[Cards] Brainstorm and ideation to understand behaviour	Provocations Cards and worksheets	-More geared towards designers and researchers. -Provide guidance in designing towards certain behaviours - This tool looks at exploring how to communicate to different publics, not understanding how to respond to their behaviours, although that seems implicit in designing any kind of communications.
2010 – Business Model Canvas, Alexander Ostenwalder	[Book and template canvas]	Co-creation within team Visualisation	- It uses a background canvas which participants can write on if they choose to. -This canvas has inspired others namely: social business model canvas (kimbell and thomas 2012) for the young foundation. - The idea of canvas is interesting although not the unique object of this tool. Sanders describes that a background to the tools is important to serve as guidance or to have a thinking space.

2011 – Participate, Helen Armstrong	[Book] Aspects of participatory methods in communication design	Community Flexibility	-Does not talk about evaluation methods or who to assess if the design works given as examples are effective in what they set out to do. -The elements of community and flexibility seem to be most relevant to support the tool and framework i have developed.
2011 – This is Service Design Thinking, Marc and Jacob	[Book] Tools and principles	Co-creative Holistic	-My framework and tool operates in an expanded field of communication design practice which can also be claimed to be interdisciplinary as interaction and experience design are also considered. - This tool generally applies all the principles of service design proposed by the authors. Specifically, two principles are more evident:
2011, 2015 – Designkit, IDEO.org	[Online toolkit] Methods	-Inspiration / ideation / implementation - Card sorting – similar to value mapping of diy toolkit, it is about mapping the most important things to the participants.	-The sections of inspiration and ideation relate to this tool as it does not cover 'implementation' of the ideas generated, it does cover the 'brief' the food initiatives set themselves.
2012 – the social design methods menu, Julier & Kimble	[Pdf book] Methods to tackle social issues	-Making sense -People, things, organizations [ingredients that make up a social world]	-It is not a menu to select from, although this tool is flexible enough to be used. -It also follows a double diamond path of exploration. The phase of exploring – making sense – proposing relate to this tool, although this tool does not follow the iterating stage, it leaves the participants to do that on their own.
2012 – Designing for social change, Andrew Shea	[Book - strategies] 10 Strategies for community engagement for graphic designers	-Identify community strengths & use local resources -Design with the community voice & give the community ownership	- This tool is more structured in terms of "how" do these strategies which are communication designer's strategies for practice. -It helps non-experts apply these strategies in practice without making it too theoretical.
2012 – 2016 – Collective Action Toolkit, Frog	[Online pdf] Toolkit Design thinking tools for communities	Non-linear process Co-creation	-It is also about communities finding their own solutions. -There is no 'wrong' place to start but it is advised to start from one particular section. It is dynamic and flexible allows for a non-linear path.

2012 – Convivial Design Toolkit, Sanders	[Book, research]	- What people say / do / make: make is the most important to focus on - Difference between technique and tool: difference between the terms 'tool' and 'technique': tool is "a physical thing that is used as a means to an end". Technique is "the way in which this tool is employed". - Importance of instructions	- Navigates through generative research [deep knowledge] about what people know / feel / dream, the knowledge is tacit and latent. - "What people make" is most relevant section to this tool and framework, as "generative techniques are toolkits for expression" - Varied in content [of prompts] - in this tool the different section cards had a variety of prompts written -Varied in levels of ambiguity and openness – prompts written content could be interpreted in various ways depending on context and story of the participants. -Varied in aesthetics [participants feel free to express themselves] – the blank cards let the participants express their thoughts, also the cards with prompts allow space for writing their interpretations. -Varied in form [words, colours, shapes] – this is the least applicable, the colour scheme was iterated a few times and refers to how easily participants can navigate the tool process.
2012 – method kit cards, Ola Moller	[Card deck] Concept cards Keywords and categories	-Breaks down complex language for non-experts -Pattern language Specific to key area [i.E. Sustainability]	-It gives user the overview of key areas to consider in communication design for sustainability: qualities of sustainability, strategies, assets to work with etc. -Uses specific language extracted from the food initiatives themselves [discovery tool phase of research] like pattern language -Purpose of use is clearer targeted.

2015 – toolbox Hyper Island	[Online toolkit] Creative collaboration methods and tools	-World café [re-iteration of original] -Mash up innovation -Letter to myself	- Framework and tool aspires to be somewhat open-source in the sense that non-designers can access the tools online and use themselves. -The toolbox is a good example of a resource that has been successful. Mash up innovation: it is a mapping of assets similar to the one in this tool. World café the element of conversation is important in the tool and the process of how it's used. Letter to myself: the tool asks participants to write themselves a brief at the end of workshop with the things they would like to achieve going forward.
2015 – DIY toolkit, NESTA	[Online toolkit] Toolkit for social innovation with templates	-Value mapping tool	- The tool is not a toolkit that is made up of different templates to use. It is a creative thinking process designed specifically with the intent of developing communications focused on sustainability with the existing assets. - Mapping the values is similar to the process of mapping the qualities of sustainability the food initiatives identify with and the ones they want to enhance or communicate better about. - The tool also aims to be accessible to people in different contexts.
2014 – Game changer game, Leyla Aragolu	[Card deck] Game for designers and other professionals	-Sustainability focus - Co-creation	- The tool is open to non-experts and uses a language that is more accessible. - It is focused on communication design in an expanded practice, not just campaigns like this game. - Is not defined as a "game" it is a social interaction of co-creation between participants with shared values.

Appendix 2: Consent form for conversations with designers

COMMUNICATION DESIGN FOR SUSTAINABILITY

RESEARCHER \ JOANA CASACA LEMOS
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Research Management and Administration
University of the Arts London
5th Floor, Granary Building
1 Granary Square, King's Cross
London N1C 4AA

Research Interview
designers

Dear Participant,

I am a PhD Research student at University of the Arts London, Central Saint Martins College of Art & Design, my project is funded by FCT Portugal (Advanced Training subsidized by the European Social Fund and national MCTES funds).

The research that I am inviting you to participate in explores how communication design creates engagement and participation of the public in alternative food initiatives. These food initiatives are defined by their core sustainability principles. They are run by local farmers and traders, farm shops, co-operatives, box delivery schemes, specialist retailers and community supported agriculture.

I am approaching you for your expertise as a communication designer engaged in the subject of sustainability. You are invited to contribute to this research through answering interview questions conducted by myself. This conversation will focus on your own approach and practice of communication design.

The interview will be voice recorded and either photographed or filmed [in person or via Skype].
It will have **a maximum duration of 60 minutes.**

I am seeking consent from you as a participant in this research project in accordance with the policy on ethics of the University of the Arts London.

I would like to credit you in the eventual publication of this interview and for this I need your prior consent.
The data collected will only be used for the purpose of the PhD research, therefor only stored for the duration of the research plan.

On the back of this letter you will find a *Consent Form* which I am kindly asking you to thoroughly read and sign.
Bear in mind that should you wish to withdraw from this research you may do so at any point.
If you have any questions concerning the research project or your participation please feel free to ask.

Thank you for being part of this PhD journey.

Joanales

ual: university of the arts london central saint martins

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Appendix 3: Extracts from conversational interviews with designers

Question context	Approach to practice of communication design	The future of communication design	Perspective on engagement & publics
Eric benson american designer co-founder of www.Renourish.Com, green graphic design researcher, university of illinois.	"… The idea that nature itself works in a system of seasons, life and death… there's this idea of returning to the earth as part of that system, that's always in the front of my mind. Other things i've looked at the idea of closed loop systems, something goes in and something goes out. That's something i'm interested in terms of my paper making."	"In the current system [of capitalism] it is really difficult to do the things we are doing now going forward."	"…To get the service designer thinking about all the different parts that a sustainable designer might be using or a humanitarian designer might be thinking about, the designer needs to think about all those things, not them in isolation from one another."
John bielenberg German graphic designer founder www.Projectmlab.Com recognized for innovative research and practice to understand design and leadership in the "design for good" movement.	"The thinking "wrong piece" is that, if you think of the status quo as thinking 'right' there are all these orthodoxies and ways of working, ways of doing design and architecture, all of that, that is the status quo and it seems fixed. If you think that all that stuff was invented at some point, all those humans structures and systems and that means that new things can be created, there's a possibility, and there's where designers play, envisioning a different future and then figuring out the plan and execution on how to get there. To do that you sort of have to disrupt the normal pathways of working otherwise you're just following the same things and maybe not connecting things in new ways."	"I had been teaching design in one way or another for 25 years. At the beginning students were very focused on their careers, on their portfolios … i think there's been a shift in motivation… young people are more anxious about the future then they used to be …want to actually engage in something that has an impact that feels its important."	"If we start with something interesting and fun that the group cares about then we can always figure out how to make it connect to the problem to be solved. But if we start with the problem things never become fun and interesting. Its easy to go one direction but hard to go the other. You can have pie and solve deep social issues."
Arlene britt dutch designer, visual storyteller, information designer, public art on sustainability www.Backgroundstories.Com	"A lot of my work is more creating icons or infographics in trying to simplify and stylise the process in a way that everyday people can understand what's going on"	"Within my own courses that i teach it's more about visual communication and what i'm doing right now is on information design so also incorporates data visualisation which is definitely a hot topic now"	"I think just getting more with communications as a whole i'd say getting more visual and incorporating things that are not just, not necessarily photographs but that help people understand what is meant by sustainability. I think we're already heading in that direction"

Thomas kolster Danish expert in sustainable communication and founder of the goodvertising agency, author of the book "goodvertising", founder where good grows the world's first best-practice sharing platform for sustainable initiatives.	"Should be a part of any communication exercise even if you do communications in developing world but trying to involve the people that who's life you're affecting as much as possible really"	"I think we're moving towards a point in history where it's more about delivering real value rather than just marketed value."	"We're bombarded with messaging asking us to buy stuff instead of asking us to love more, smile more, be more happy, things are building up a community we want. I don't want to be a consumer, i want to be a citizen."
Tracy sutton British designer, packaging design and sustainability consultant working with brands and designers to reveal purposeful, profitable brands. Www.Root-innovation.Com	"The big areas of design that i cover are brand identity, packaging, product design and those things also spread out to exhibitions and store fronts shopping environment…. To me communication design encompasses graphic design product design packaging design those are the key areas i work in."	"Some of the work id like to do more of, is to help business embed sustainability into their actual business strategy, the product portfolio they offer using sustainability as a driver in the design stage or in the product development stages."	"When i think about communication design does that include marketing in terms of social media? Is a form of communication but not necessarily visual… i suppose packaging is one of the main tools people use to try communicate…. I don't think it should be the vehicle to communicate the good things they are doing there are more effective ways like videos and social media, there's more potential for change and change of a bigger scale or influence."

Appendix 4: Participating sustainable food initiatives

Name	Farm / Producer	Food Distribution	Food Waste	Food social project	stage of research
Infarm, Berlin	x			x	Discover stage
The Food Assembly, London		X		X	Discover stage
The Perennial Plate, USA				X	Discover stage
Damn Food Waste, Amsterdam			X		Discover stage
Contemporary Food Lab, Berlin				X	Discover stage
House of Svere, London	X				Define stage
Juicebox, London			x		Define stage
Under the Mango Tree, Mumbai	x			x	Define stage
I Say Organic, Delhi	x	x			Define stage
The People's Kitchen, London				x	Define stage
Vidacycle, London / Chile	x				Develop stage
Ubuntu Chocolate, London	x				Develop stage
Soleshare, London					Develop stage
Urban Orchard, London	x			x	Develop stage
Snact, London			x		Develop stage
Bloombox Salads, London		x			Develop stage
Rubies in the Rubble, London			x		Develop stage
Jack's Veg, London	x				Develop stage
Growing Communities, London	x			x	Develop stage
Disco Soup, London			x	x	Develop stage
The Golden Company, London	x			x	Develop stage
Saves The Date cafe, London			x	x	Develop stage
Casal Hortelao, Lisbon	x				Develop stage
Pede Salsa, Lisbon	x	x			Develop stage
Lucid Selections, San Francisco		x			Develop stage
Fine and Rare, San Francisco		x			Develop stage
Loomgrown, San Francisco	x	x			Develop stage

Appendix 5: Consent form for workshop participants

COMMUNICATION DESIGN FOR SUSTAINABILITY

RESEARCHER \ JOANA CASACA LEMOS
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Research Management and Administration
University of the Arts London
5th Floor, Granary Building
1 Granary Square, King's Cross
London N1C 4AA

Research Interview
Alternative Food Initiatives

Dear Participant,

I am a PhD Research student at University of the Arts London, Central Saint Martins College of Art & Design, my project is funded by FCT Portugal (Advanced Training subsidized by the European Social Fund and national MCTES funds).

The research that I am inviting you to participate in explores how communication design creates engagement and participation of the public in alternative food initiatives. These food initiatives are defined by their core sustainability principles. They are run by local farmers and traders, farm shops, co-operatives, box delivery schemes, specialist retailers and community supported agriculture.

You are invited to contribute to this research through answering an interview conducted by myself.

I am approaching you because I identify you as someone who takes part, or leads, such food initiatives.
I wish to discuss with you how you communicate with your customers and suppliers - whether through visual communication, on site interaction and experiences, or online communication.

The interview will be voice recorded and either photographed or filmed.
It will have a **maximum duration of 60 minutes**.

I am seeking consent from you as a participant in this research project in accordance with the policy on ethics of the University of the Arts London.

I would like to credit you in the eventual publication of this interview and for this I need your prior consent.
The data collected will only be used for the purpose of the PhD research, therefor only stored for the duration of the research plan.

On the back of this letter you will find a *Consent Form* which I am kindly asking you to thoroughly read and sign.
Bear in mind that should you wish to withdraw from this research you may do so at any point.
If you have any questions concerning the research project or your participation please feel free to ask.

Thank you for being part of this PhD journey.

Joanales

ual: university of the arts london central saint martins

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Appendix 6: Reference list of informative evaluation interviews

Reference list of all workshop interviews with sustainable food initiatives

Workshop 1 interviews

1.1 Snact post-workshop interview

1.2 Vidacycle post-workshop interview

1.3 Vidacycle retrospective conversation

1.4 Urban Orchard retrospective conversation

Workshop 2 interviews

2.1 Ubuntu Chocolate end of workshop interview

2.2 Ubuntu Chocolate post-workshop interview

2.3 Ubuntu Chocolate retrospective conversation

2.4 Rubies in the Rubble end of workshop interview

2.5 Rubies in the Rubble post-workshop interview

2.6 Rubies in the Rubble retrospective conversation

2.7 Bloombox Salad end of workshop interview

2.8 Bloombox Salad post-workshop interview

2.9 Bloombox Salad retrospective conversation

2.10 Soleshare end of workshop interview

2.11 Soleshare post-workshop interview

2.12 Soleshare retrospective conversation

Workshop 3 Interviews

3.1 Jack's Veg end of workshop interview

3.2 Jack's Veg post-workshop interview

3.3 Jack's Veg retrospective conversation

3.4 Disco Soup end of workshop interview

3.5 Disco Soup post-workshop interview

3.6 Growing Communities end of workshop interview

3.7 Growing Communities post-workshop interview

3.8 Growing Communities retrospective conversation

Workshop 4 Interviews

4.1 Saves The Date end of workshop interview

4.2 Saves The Date post-workshop interview

4.3 Golden Company end of workshop interview

4.4 Golden Company post- workshop interview

4.5 Golden Company retrospective conversation

Workshop 5 Interviews

5.1 Pede Salsa end of workshop interview

5.2 Pede Salsa post-workshop interview

5.3 Pede Salsa retrospective conversation

5.4 Casal Hortelao end of workshop interview

5.5 Casal Hortelao post-workshop interview

5.6 Casal Hortelao retrospective conversation

Workshop 6 Interviews

6.1 Fine and Rare end of workshop interview

6.2 Fine and Rare retrospective conversation

6.3 Lucid Selections end of workshop interview

6.4 Lucid Selections retrospective conversation

6.5 Loomgrown end of workshop interview

6.6 Loomgrown retrospective conversation

Appendix 7: End of workshop interview questions

Questions asked in the moment of workshop, to understand if the tool itself and workshop format were effective in prompting conversation and co-creation focused in qualities of sustainability.

1. Was this process useful to you? – Understand effectiveness of tool and workshop format.
2. Did it change something or bring about new thoughts? – Understand if prompts were correct, if group interaction brought new conversations.
3. Would you take forward and make real any of the outcomes / ideas? – Understand the feasibility of the ideas shared at the end of workshop with the group.
4. How did the group dynamic impact the ideas created? – Understand the importance of group dynamic and the tool itself in generating new ideas for communication design.
5. How do you feel about the group of strangers? - Understand the importance of participants unrelated to the business, of community of interest, of their own expertise or experience.

Appendix 8: Post workshop interview questions

6-8 weeks follow up to check how they have developed the ideas generated and if any unexpected effect has happened.

1. What do you remember from the interaction? - Understand what was significant, memorable, unique.
2. What came out of that moment for your initiative? People, places, skills - direct question if any new assets developed from the workshop and interaction with participants.
3. Did you develop any of the ideas that your group produced? – Direct question understand if any variation of the outcome idea was produced.
4. Did any of the ideas influence things you have done afterwards? – Understand if the workshop generated new thoughts they have produced later, or if the idea was transformed into another.
5. What were your favourite aspects about the interaction? – The points of interest for participants to want to go through the workshop and tool, what is the motivation for them.
6. What aspects could be improved on? – The weak points for development in the interaction and tool.
7. What did you learn? - The important takeaway and relevance for workshop and tool as a communication design intervention.

Appendix 9: Sample - matrix used for analysis of practice

The analysis of workshops series, end of workshop interviews, and post-workshop interview guided the iteration process from one workshop to the next. This visual mapping was used to make sense of the data. Image represents a Screenshot of a large format matrix.

	DISCOVERY TOOL	WORKSHOP 1	WORKSHOP 2
ACTIVITY RESEARCH QUESTIONS	How do the sustainable food initiatives communicate about what they do? Are they aware of how they tell their story in relation to the qualities they want to portray? How can this interaction critique existing frameworks for communication design in the case of non-designers' practices?	The research question is; what kind of communication design facilitates and supports social innovations for sustainability? The hypothesis is; not the same approach as market-led communication design because it is about active participants instead of passive consumers: participating in a message rather than consuming a message. How to engage new participants in the conversations? How does the interaction/dialogue allow for discovering, enhancing, materialising the qualities of sustainability? How open can the interactions be designed so they do not become "just a chat"? A way to see how we can communicate in social innovation as to ignite the qualities of sustainability. their are already doing these things to promote qualities of sustainability and I identified that by doing something diferent they could hit a diferent qualitie.	Video statement of new ideas trying to develop a physical metaphor of 'weaving the pieces of narratives' together to visualize how all the elements come together [document if this works] responding to the outcome of previous workshop, I have removed the word brief from the last step in the tool. We have come to understand that the brief is actually generated throughout the process using the tool, and not right at the end as in workshop 1. Removed the prompt for 'resources' as this caused much confusion
OBJECTIVES	The objective was to extract from food initiatives a set of practices and aproaches to communication design that would complement the strategies and qualities found in literature review and conversations with designers. it was also a first interaction in practice in terms of design research. creating a framework bottom up - you start with the examples and then generate the framework from that. looking for the holes in the map to see if theres a strategy they are not exploring. find what they are not doing yet.	To test the tool created with several food initiatives and other participants from the general public to be co-creators in the process of testing the tool.	understanding the process of using the tool according to a simple design process [double diamond] to test a more comprehensive iteration of the tool with a focus on mapping on the table the qualities, assets, values. using food initiatives that do not know eachother.
SETUP OF ACTIVITY	Visits to food producers/makers, conversation happens in their own space. Semi-strucutred conversations using the cards and canvas. one to one convresation Participant arranges and picks the cards according to the story he is telling and what he identifies with. Canvas displayed in between designer and Participant and fill in the boxes through conversation	3 groups with 5-6 participants The food initiative has to tell their story as they follow the process prompted by the questions and the cards with keywords. Everyone gets a chance to be involved. Not many designers - participants from all different backgrounds which makes it a process anyone can do.	4 groups with 6-7 participants tables distributed along the room. not much interaction between tables, only at the end when workshop finished. at end of workshop each group feeedbacks the idea they came up with. Participants knew of the workshop via social media and the general assembly website. The space was given for free by general assembly who were interested in design research methods. The participants were then mostly people intrested in research methods, user experience, but also some who found the workshop on twitter through social impact and sustainability feeds.
DESIGN OF TOOL CHANGES / ITERATION	the discovery canvas and cards are designed in a portable format blank cards are for participants to add their qualities / values A3 sheet of canvas A6 cards	Blank Cards for participants to add their own qualities / values / assets Horisontal navigation to the canvas displayed on the wall Groups standing against a wall displaying the canvas Simple font for legibility from afar Colored cards defined each of the sections, these were in envelopes with a question infomring what the prompt cards were for. Markers were on a separate table from the canvas wall which was not so inviting for people to add their insights. Canvas design had numbers to follow, however some people did not understand the order clearly.	table setup instead of wall and participants sat around table the table had the process handrawn questions on a large paper for all participants to see clearly what the questions were. Attempt to move away from cards being too precious to draw, alter, edit on. the cards were displayed over the questions, with the titles facing up. there was abrief on the table but generally people did not read or follow it throughtly. font used in cards was legible and clear for all group around the table to be able to see clearly. markers were distributed to encourage people to add their own insights
SUSTAINABLE FOOD INITIATIVES PARTICIPATING	Juicebox, London Under The Mango Tree, Mumbai I Say Organic, Delhi House of Svere, London The People's Kitchen, London	SNACT - Ilana & Michael London Orchard Project - Amber Vida Cycle - Abby	Soleshare - Jack Ubunto Chocolate - Jeremy Bloombox Salads - Joy Rubies in The Rubble - Alicia
OTHER PARTICIPANTS	N/A	TOTAL 10 Recruited on Twitter CSM students Sing up via CSM	Supported by General Assembly Sign upvia GA website Recruited on Twitter
DOCUMENTATION	audio recorded and photographed the canvas with cards at end of interaction	photography	video

WORKSHOP 3	WORKSHOP 4	WORKSHOP 5	WORKSHOP 6
How to develop the process to focus on generating ideas? does it need to be quite specific and time controlled for this? how to document better the interaction between people from which the ideas result?	how does the process work in their own space? [Saves The Date] are they inspired by their space? provide examples? outdoors workshop vs indoors smaller group more intimate session	how does the tool work in a diferent language? barriers to translation of the terms how does it work in a studio with expert designers as participants helping the food initiative?	How can impact be measured more affectively? What changes for participants? How to encourage participants to add their own content? How to get participants to write their "brief" and follow up on that.
inspiration method from UAL Futures experience workshop i did last month where we asked for 10 ideas on cards in 20mins. it was a sucessful brainstorm i tried to apply in this interaction. using food initiatives that do not know eachother.	re-itereation of the tool with a new design and colour scheme	how does the tool work in a diferent language: can the qualities be explained how does the setup with in an agency context the colourless cards all white in comparison to organising by colour	what happens after the workshop takes place (following the comments received at Doctoral Degree Confirmation on the disperse influence of the workshop on the participants)
3 groups with 3-5 participants each tables distributed near eachother, in a center area where facilitator could speak from. More intimate than previous workshop. some interaction between partiicpants in diferent tables. at end of workshop each group feeedbacks the idea they came up with. Asked about a challenge on evaluation prior to interaction. Growing Communities I did not invite, they heard from someone else and asked to join - because they are not a startup or recent initiative as the others are. the space used this time did not contribute to gathering participants to sign up	2 groups with 3-4 participants outdoors at Save The Date Cafe tables next to eachother at end of workshop each group feeedbacks the idea they came up with. it was a small and intimate workshop.	2 groups with 6-8 participants at design agency BAR in Lisbon 3 tables across the room at end of workshop each group feeedbacks the idea they came up with. i was invited to give a talk about my research and suggested to run a workshop instead. around 15 designers and strategists joined and were curious to learn about the tool. asked to come back and give apresentation with findings of research.	3 groups with 6-8 participants hosted at Embassy Network 3 tables across the room at end of workshop each group feeedbacks the idea they came up with. collective discussion at end of workshop. the oportunity to host the workshop in a new location and learn about the local sustainable food initaitives communicate about what they do. participants from local design schools very interested to learn about the design methods applied.
simplifyed process into 4 stages: Reflect / Question / Plan / Create only open next envelope when prompted to removed word sustainability from qualities edited down the prompt cards: qualities / ethos edited asset cards to all blanks challenges cards 10 ideas cards 10 colours altered to a gradient, for participants to understand journey of lighter to darker there was no brief on the table - I marked the time and told people when to go onto the next part of the activity. added numbers to the sections of the canvas in each envelope. information in each evelope was handwritten, as to not make the materials very precious and inviting people to use them. Sketch like visuals.	diferent colours in sections changed the order sequence of cards smaller cards - testing if people write more or less contrast of colour cards in black backgrounds because outside it needed to be easier to read	cards and canvas all white - removed the colour intentionally to see if participants would raise that point. also to see if it makes a diference in the order people use the cards or how they combine them does it make a diference if they write more on them because it is white?	tools were re-designed into more of a 'final' polished look, these tools were presented as part of Doctoral Confirmation (February 2016). the story card was introduced in first section of canvas as a way for food initiatives to contextualise participants of their activities. a last section was introduced in canvas, asking participants to write a brief to themselves to take forward post-workshop. This was also informed by discussion at confirmation on how to evaluate the impact the tools and workshops have on participants. the card size was re-designed. Smaller cards for the prompts and larger cards for the blanks, to trigger participants into using these with their own content.
Jack's Veg - Jack Growing Communities - Rheona Disco Soup /Feeding5000 - Dominika	Saves The Date Cafe, Sarah The Golden Compan, Gustavo	Pede Salsa, Ana Casal Hortelao, Filipa	LoomGrown Fine & Rare, Ted Lucid Selections, Geno
Recruited on Twitter Eventbrite sign up	last minute setup because both initiatives wanted to discuver the process before the summer. eventbrite recruit for participants	design studio wanted me to give a talk and i suggested it would be intersting for them to test the tool. invited 2 food initatives to join.	
Video	video recorder on each table post workshop interview	video recorder on each table post workshop interview	
"peoples real understanding of what we do and agriculture and the environment in general," "we'd like them to understand the model and theory and principles	"I think in person is the best way currently. James, Ruth and co. do an amazing job talking to people about the cafe and promoting from word of mouth. Online we are OK but could probably do a little better"	"The understanding of the health benefits of eating organic is growing, the understanding of how they dont have pesticides."	

Appendix 10: Retrospective conversation questions

Set of questions to guide the retrospective conversation with representatives of food initiatives.

1. Did you develop any ideas generated in the workshop? Has it inspired any new ideas?
Objective: to see if participants developed the final outcome or a variation of the idea.)

2.How has the way you communicate with your public changed over last year?
Objective: to see how the workshop or tool which focused on qualities of sustainability and communication strategies influenced the way they communicate after having gone through the workshop.

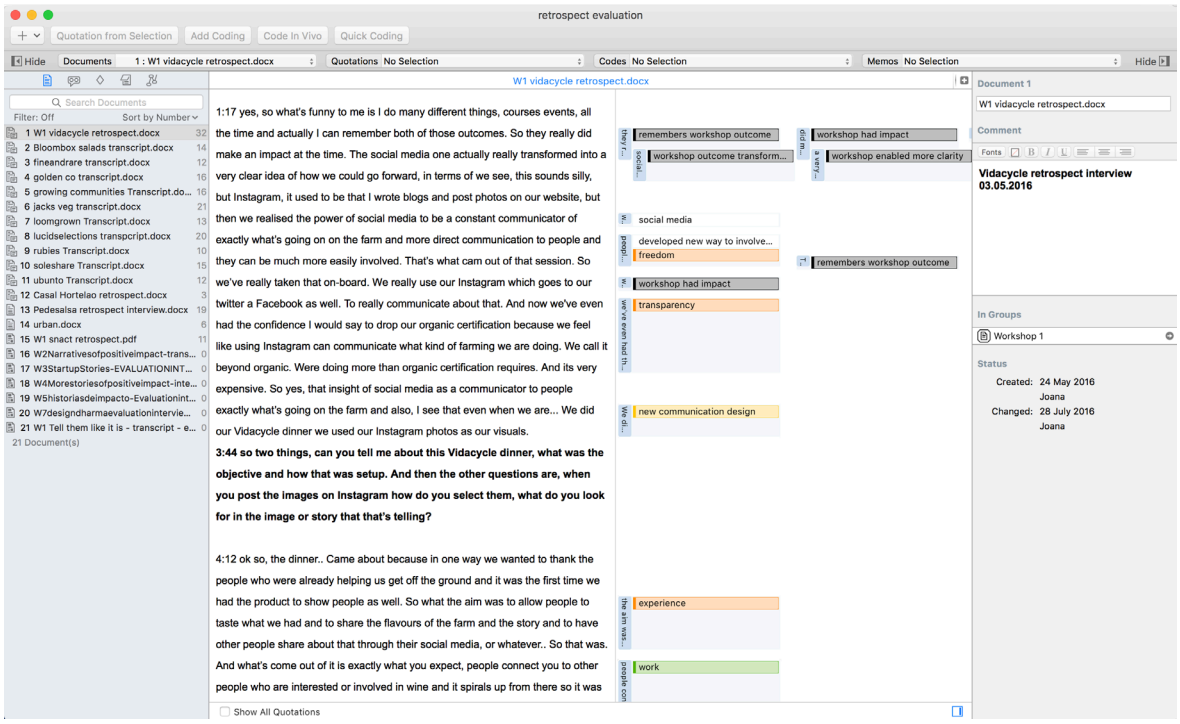
3. Any new collaborations / relationships since the workshop? With participants of the workshop? Or others?
Objective: the theme collaboration seem to have come up in previous interviews and seems poignant to understand if the workshops provided a new lens on qualities of sustainability such as community and collaboration.

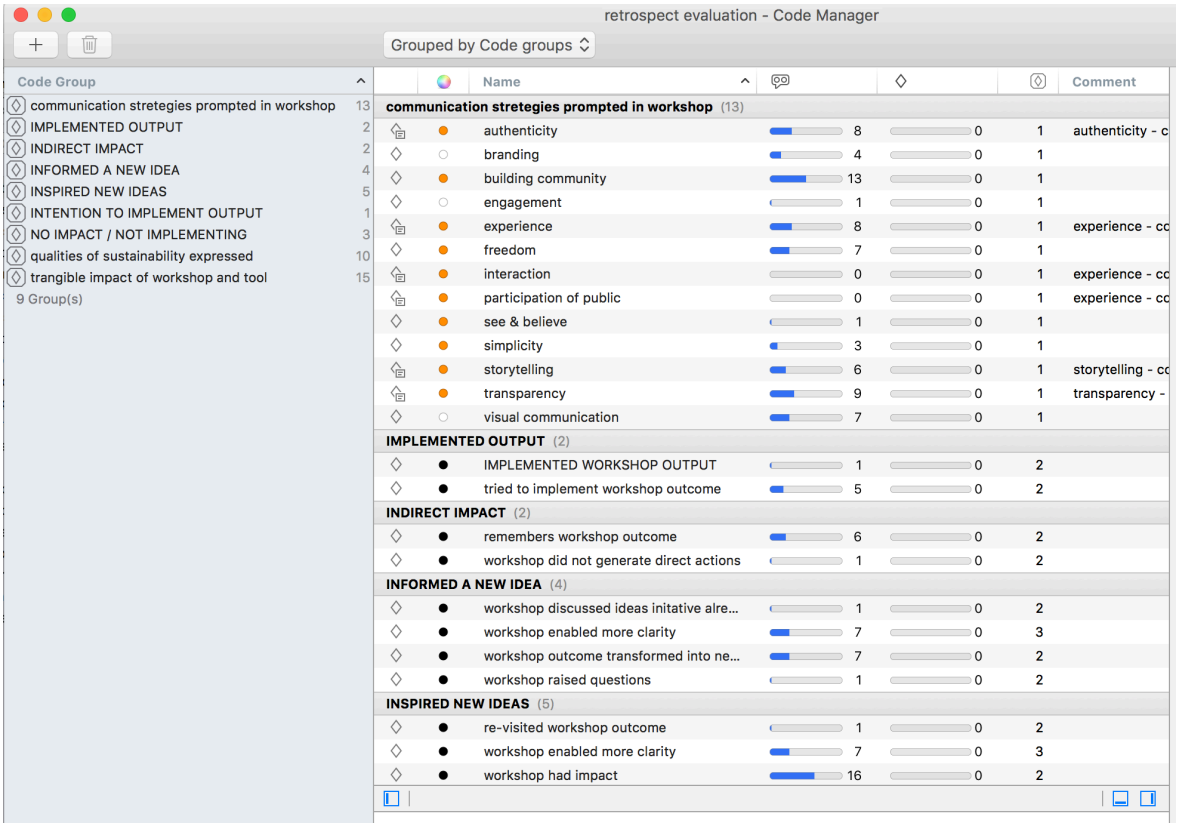
4.How has the community of your initiative changed?
Objective: community or 'space for discussion' and sharing best practices was a theme that came up in previous workshops so it seemed poignant to ask about the importance of this in terms of strengthening or delivering their message on sustainability.

5.What has been the most successful communication action you have done? Why? [Send this example]
objective: understand what they considered to be a successful piece of communication after having done the workshop and gaining a new perspective on what communication design is.

Appendix 11: Sample - analysis of retrospective conversations using software Atlas.ti

Screenshot images of retrospective conversation transcript analysis finding themes in qualities of sustainability and communications strategies.




retrospect evaluation - Code Manager
Grouped by Code groups
Code Group
communication stretegies prompted in workshop 13
IMPLEMENTED OUTPUT 2
INDIRECT IMPACT 2
INFORMED A NEW IDEA 4
INSPIRED NEW IDEAS 5
INTENTION TO IMPLEMENT OUTPUT 1
NO IMPACT / NOT IMPLEMENTING 3
qualities of sustainability expressed 10
trangible impact of workshop and tool 15
9 Group(s)
Name
Comment
communication stretegies prompted in workshop (13)
authenticity 8 0 1 authenticity - c
branding 4 0 1
building community 13 0 1
engagement 1 0 1
experience 8 0 1 experience - cc
freedom 7 0 1
interaction 0 0 1 experience - cc
participation of public 0 0 1 experience - cc
see & believe 1 0 1
simplicity 3 0 1
storytelling 6 0 1 storytelling - cc
transparency 9 0 1 transparency -
visual communication 7 0 1
IMPLEMENTED OUTPUT (2)
IMPLEMENTED WORKSHOP OUTPUT 1 0 2
tried to implement workshop outcome 5 0 2
INDIRECT IMPACT (2)
remembers workshop outcome 6 0 2
workshop did not generate direct actions 1 0 2
INFORMED A NEW IDEA (4)
workshop discussed ideas initative alre... 1 0 2
workshop enabled more clarity 7 0 3
workshop outcome transformed into ne... 7 0 2
workshop raised questions 1 0 2
INSPIRED NEW IDEAS (5)
re-visited workshop outcome 1 0 2
workshop enabled more clarity 7 0 3
workshop had impact 16 0 2

Appendix 12: Workshop 1 prompt cards

Content of prompt cards tool and content added by participants.

Qualities of Sustainability	Ethos & Values	Communication Strategies	Assets & Resources
TIME good things take time to make. COMPLEXITY your food product / activity is not as simple as it seems. RELATIONSHIPS to invest in long lasting relationships. COLLABORATION - Acknowledging everyone involved in your activity. SCALE greater scale does not necessarily mean better. PLACE the importance of local provenance. WORK what you do is meaningful to you. PERSONAL MEANING - important to you as an individual. NATURAL CAPITAL- deep concern for the natural world THE SPIRITUAL DOMAIN -contemplative and reflective on Life GRATITUDE - acts of "giving back" expressing thankfulness PERSONAL MEANING - satisfaction to you as an individual	SOCIAL INCLUSIVE i.e. hiring people with a criminal background. A PHILOSOPHY OF THE CHANGE WE WANT TO SEE IN THE WORLD a strong philosophical stand. TO BE PART OF PEOPLE'S LIVES communicating in a language everyone understands for long-term relationships. BE ACCOUNTABLE beyond sustainability certifications, it cannot speak on your behalf. FRIENDLINESS being welcoming is most important. PURPOSE to contribute with meaningful and purposeful products to the community. HONESTY it is about personal relationships. ACCESSIBLE to be available, make time, to speak and meet with people.	BE TRANSPARENT Information and how to openly share things are done. STORYTELLING Narratives to explain your product / activity. EXPERIENCE creating experiences that your public will remember. BE AUTHENTIC the original authorship of your food product / activity. "SUGAR COATING" looking "normal" and "pleasant". Avoiding big words like "sustainability". INCLUSIVE communicating in a manner that is inclusive of all educational, social, ethnic backgrounds. CURIOSITY arranging visits for the general public to see how things are made. BUILDING A COMMUNITY speaking at events and meet-ups where there is already a community of interest building up. FREEDOM stepping back and allowing the public to co-create and build, the product / service. SEEING IS BELIEVING tasters, samples of product - it speaks for itself.	A designer to work with a large energetic team Human capital i.e. great speakers A space to access the public A market stall Good social media following

Appendix 13: Workshop 2 prompt cards

Content of prompt cards tool and content added by participants.

Qualities of Sustainability	Ethos & Values	Communication Strategies	Assets: skills, people, places
TIME – good things take time to make. COMPLEXITY - your food product / activity is not as simple as it seems. RELATIONSHIPS - to invest in long lasting relationships. COLLABORATION - acknowledging everyone involved in your activity. SCALE - greater scale does not necessarily mean better. PLACE - the importance of local provenance. WORK - what you do is meaningful to you. PERSONAL MEANING - important to you as an individual. NATURAL CAPITAL- deep concern for the natural world THE SPIRITUAL DOMAIN -contemplative and reflective on Life GRATITUDE - acts of "giving back" expressing thankfulness PERSONAL MEANING - satisfaction to you as an individual HEALTH the product / activity considers health and wellbeing.	SOCIAL INCLUSIVE i.e. hiring people with a criminal background. TO BE PART OF PEOPLE'S LIVES communicating in a language everyone understands for long-term relationships. BE ACCOUNTABLE beyond sustainability certifications, it cannot speak on your behalf. FRIENDLINESS - being welcoming is most important. PURPOSE - to contribute with meaningful and purposeful products to the community. HONESTY - it is about personal relationships. ACCESSIBLE - to be available, make time, to speak and meet with people.	BE TRANSPARENT information and how to openly share things are done. STORYTELLING narratives to explain your product / activity. EXPERIENCE creating experiences that your public will remember. BE AUTHENTIC - the original authorship of your food product / activity. SIMPLICITY making it look "normal" - avoiding big words like "sustainability". INCLUSIVE -communicating in a manner that is inclusive of all educational, social, ethnic backgrounds. CURIOSITY - arranging visits for the general public to see how things are made. BUILDING A COMMUNITY- speaking at events and meet-ups where there is already a community of interest building up. FREEDOM- stepping back and allowing the public to co-create and build, the product / service. SEEING IS BELIEVING tasters, samples of product - it speaks for itself. "add a new strategy"	Key People: A designer to work with a large energetic team Key Places: A market stall Key Skills: Good social media following "add your assets"
New Qualities added by participants Care Fun Boutique [scale] The [mindful] domain Interconnected - letting things flow Packaging	New Values added by participants People planet profit To be educational: promote and raise awareness, change attitudes Environmentally friendly all around Accessible - conversational Online "Salads cycled to you" Sharing "bunt" Heritage	New Strategies added by participants Visualisations /infographics Educate consumers about fruit / veg seasons	[each added their own]

Appendix 14: Workshop 3 prompt cards

Content of prompt cards tool and content added by participants.

Qualities of Sustainability	**Ethos**	**Communication Approach**	**Assets: skills, people, places**
TIME – good things take time to make. COMPLEXITY - not as simple as it seems. RELATIONSHIPS - to invest in long lasting relationships. COLLABORATION - acknowledging everyone involved SCALE - greater scale does not necessarily mean better. PLACE - the importance of provenance. WORK – the process of making PERSONAL MEANING - important to you as an individual. NATURAL CAPITAL- concern for the natural world THE SPIRITUAL DOMAIN -contemplative on Life GRATITUDE - "giving back" to community PERSONAL MEANING - satisfaction to you as an individual HEALTH considers wellbeing.	SOCIAL INCLUSIVE fair employment BE ACCOUNTABLE beyond sustainability certifications PURPOSE – create useful products ACCESSIBLE – make time for people Blank cards added	TRANSPARENCY openly share how things are done. STORYTELLING Create narratives to explain what you do EXPERIENCE allowing sensorial interactions BE AUTHENTIC – showcasing the original authorship SIMPLICITY making it look "normal" - avoiding big words like "sustainability". INCLUSIVE –accessible, easy language CURIOSITY – allowing public to see how things are made. COMMUNITY- talks and meet ups FREEDOM- stepping back and allowing the public to co-create and build, the product / service. SEEING IS BELIEVING tasters, samples blank cards added	A designer to work with a large team A market stall Blank cards added
New Qualities added by participants GMO Free Nutrition Focused Location and transportation Supporting Community relationship	New Values added by participants Accessible good food Meet people involved within process Agriculture instinct field knowledge Community-Driven Local Principle-led	New Strategies added by participants Social Media Storytelling Videos	[each added their own]

Appendix 15: Workshop 4 prompt cards

Content of prompt cards tool and content added by participants.

Qualities of Sustainability	**Ethos**	**Communication Approach**	**Assets: skills, people, places**
TIME – good things take time to make. COMPLEXITY - not as simple as it seems. RELATIONSHIPS - to invest in long lasting relationships. COLLABORATION - acknowledging everyone involved SCALE - greater scale does not necessarily mean better. PLACE - the importance of provenance. WORK – the process of making PERSONAL MEANING - important to you as an individual. NATURAL CAPITAL- concern for the natural world THE SPIRITUAL DOMAIN -contemplative on Life GRATITUDE - "giving back" to community PERSONAL MEANING - satisfaction to you as an individual HEALTH considers wellbeing.	SOCIAL INCLUSIVE fair employment BE ACCOUNTABLE beyond sustainability certifications PURPOSE – create useful products ACCESSIBLE – make time for people Blank cards	TRANSPARENCY openly share how things are done. STORYTELLING Create narratives to explain what you do EXPERIENCE allowing sensorial interactions BE AUTHENTIC – showcasing the original authorship SIMPLICITY making it look "normal" - avoiding big words like "sustainability". INCLUSIVE –accessible, easy language CURIOSITY – allowing public to see how things are made. COMMUNITY- talks and meet ups FREEDOM- stepping back and allowing the public to co-create and build, the product / service. SEEING IS BELIEVING tasters, samples blank cards	A designer to work with a large team A market stall Blank cards
New Qualities added by participants Approachable and simple Reducing food waste Built by volunteers Built by community Educating about food waste Part of interdependent network	New Values added by participants Like a hive make world around better Intergenerational Community based Grassroots Common foods Youth Re-purpose material Pay as you feel	New Strategies added by participants	[each added their own]

Appendix 16: Workshop 5 prompt cards

Content of prompt cards tool and content added by participants.

Qualities of Sustainability **[translation of below in Portuguese]**	**Ethos** **[translation of below in Portuguese]**	**Communication Approach** **[translation of below in Portuguese]**	**Assets: skills, people, places**
TIME – good things take time to make. COMPLEXITY - not as simple as it seems. RELATIONSHIPS - to invest in long lasting relationships. COLLABORATION - acknowledging everyone involved SCALE - greater scale does not necessarily mean better. PLACE - the importance of provenance. WORK – the process of making PERSONAL MEANING - important to you as an individual. NATURAL CAPITAL- concern for the natural world THE SPIRITUAL DOMAIN -contemplative on Life GRATITUDE - "giving back" to community PERSONAL MEANING - satisfaction to you as an individual HEALTH considers wellbeing.	SOCIAL INCLUSIVE fair employment BE ACCOUNTABLE beyond sustainability certifications PURPOSE – create useful products ACCESSIBLE – make time for people Blank cards	TRANSPARENCY openly share how things are done. STORYTELLING Create narratives to explain what you do EXPERIENCE allowing sensorial interactions BE AUTHENTIC – showcasing the original authorship SIMPLICITY making it look "normal" - avoiding big words like "sustainability". INCLUSIVE –accessible, easy language CURIOSITY – allowing public to see how things are made. COMMUNITY- talks and meet ups FREEDOM- stepping back and allowing the public to co-create and build, the product / service. SEEING IS BELIEVING tasters, samples blank cards	A designer to work with a large team A market stall Blank cards
New Qualities added by participants Authenticity Diversity Proximity to customers Exclusivity Quality	New Values added by participants Freshness Tradition Natural Portugal made Family Sustainability	New Strategies added by participants Social Approach	[each added their own]

Appendix 17: Workshop 6 prompt cards

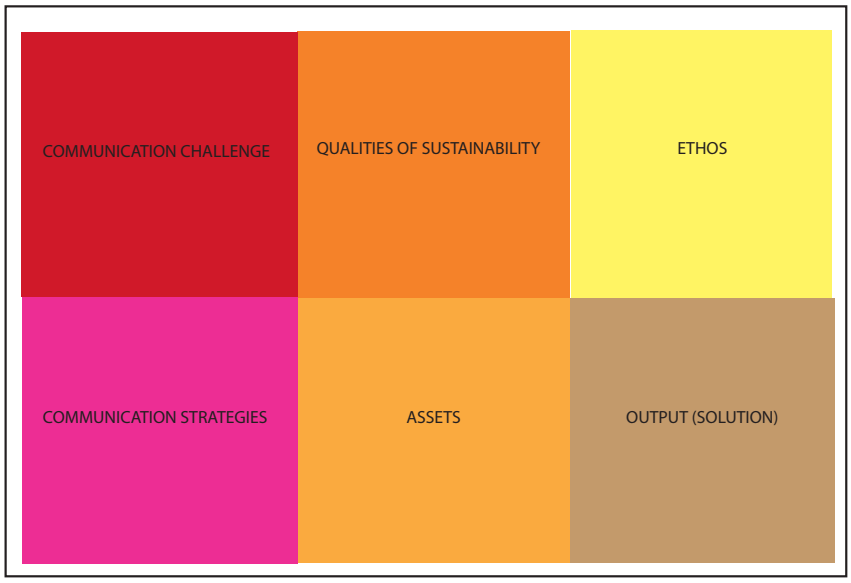
Content of prompt cards tool and content added by participants.

Qualities of Sustainability	**Ethos**	**Communication Approach**	**Assets: skills, people, places**
TIME Good things take time to make COLLABORATION Importance of others contribution RELATIONSHIPS Invest in lasting relationships COMPLEXITY Intricate and rich PLACE Importance of origin PERSONAL MEANING A personal project SCALE Greater does not mean better WORK The process of making NATURAL CAPITAL Concern for the natural world SPIRITUAL DOMAIN The mindful domain INTERDEPENDENT Part of a larger network / system HEALTH Considers well being	SOCIALLY INCLUSIVE social & cultural ACCOUNTABLE beyond sustainability certifications PURPOSE create useful products ACCESSIBLE make time for people HERITAGE tradition COMMUNITY DRIVEN INTERGENERATIONAL LOCAL 10x Blank cards	FREEDOM public contributes content SEE & BELIEVE Give tasters and samples AUTHENCITY Showcase provenance and authorship SIMPLICITY Avoid big words like sustainability COMMUNITY Engagement, talks, meetups TRANSPARENCY Share information openly CURIOSITY Allow public to see how things are made STORYTELLING Narratives that explain the activity EXPERIENCE Provide interactions and blank cards	Blank cards
New qualities Added by participants Value Resourcefulness Optimizing supply Distributing economies Connection & care	New ethos Added by participants Mission statement Transparency Honest- human Organic local Sustainability No buzzwords Not just lingo / trendy words Be knowledgeable Care Awareness of complexity Personal history	New strategies added by participants Authenticity	[each added their own]

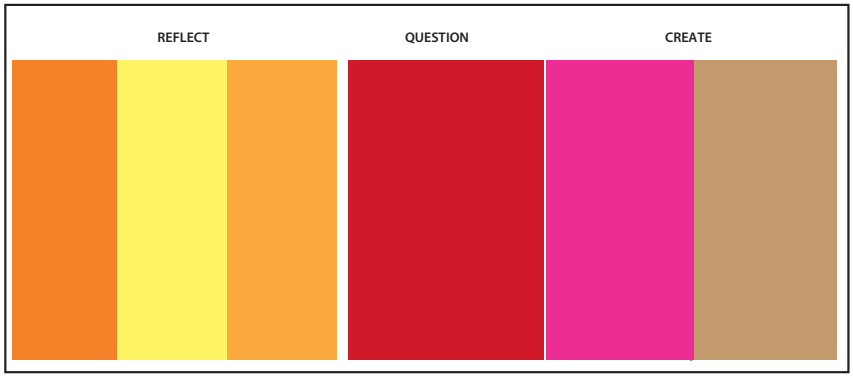
Appendix 18: Illustration of canvas iterations

Figures illustrate the development in iteration of the canvas and sections within it.

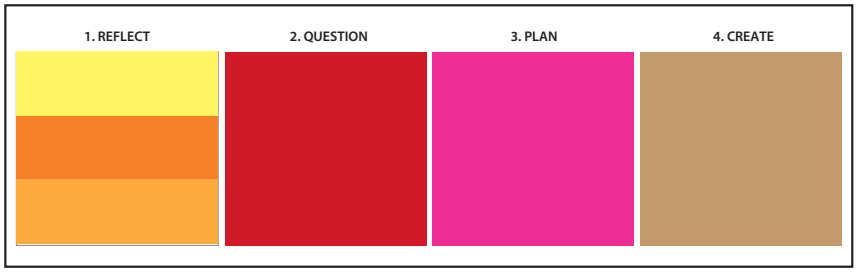
Canvas iteration 1



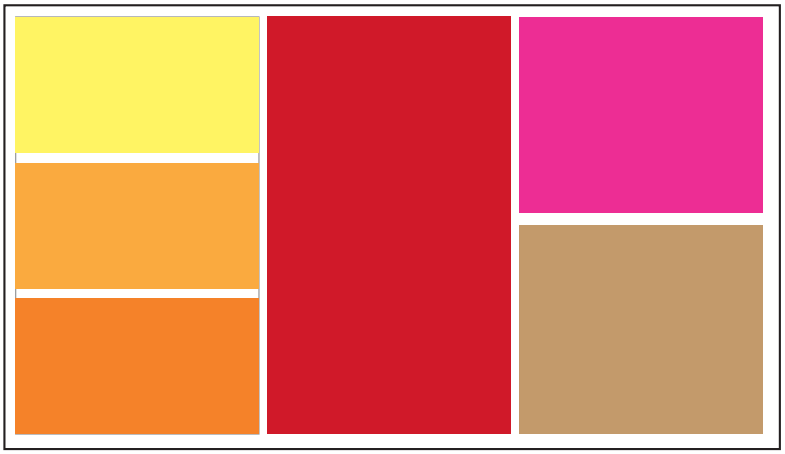
Canvas iteration 2



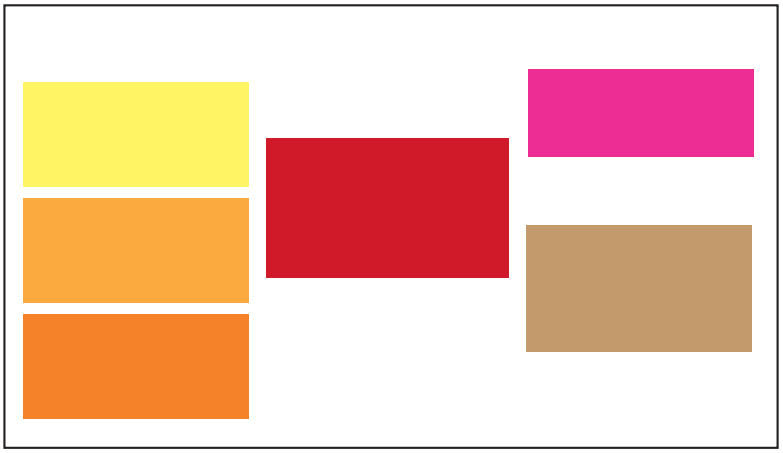
Canvas iteration 3



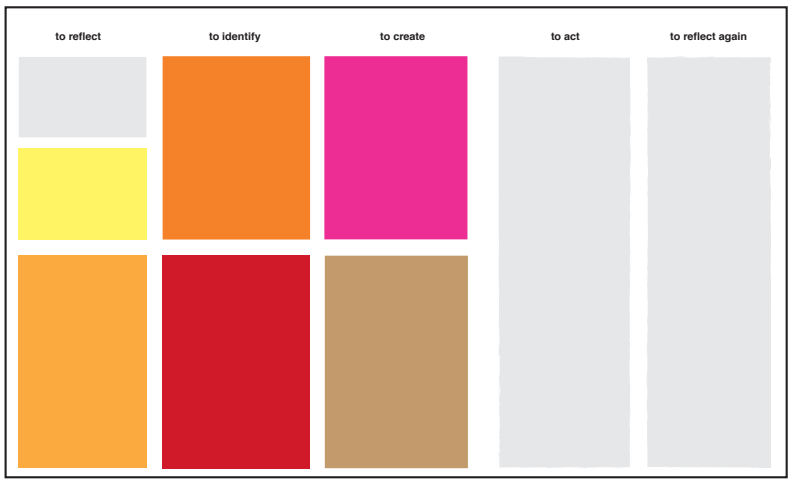
Canvas iteration 4



Canvas iteration 5

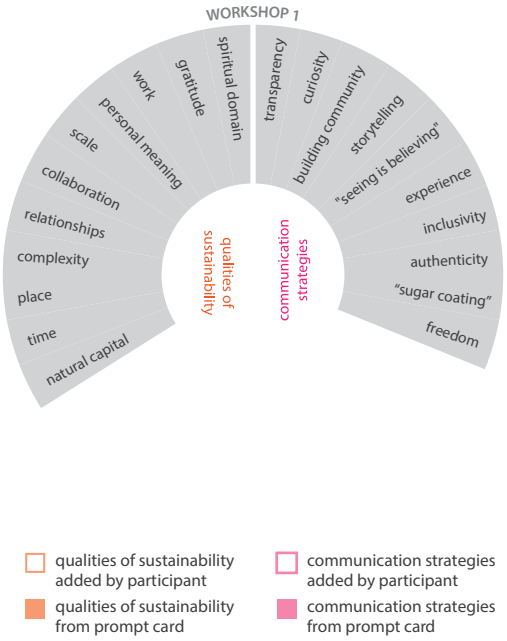


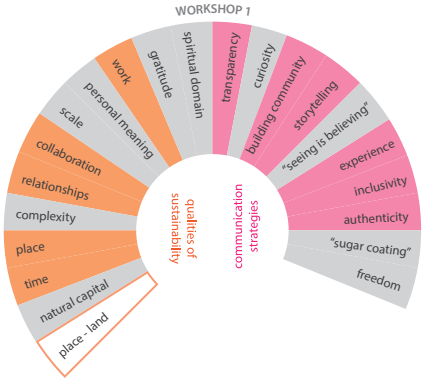
Canvas iteration 6

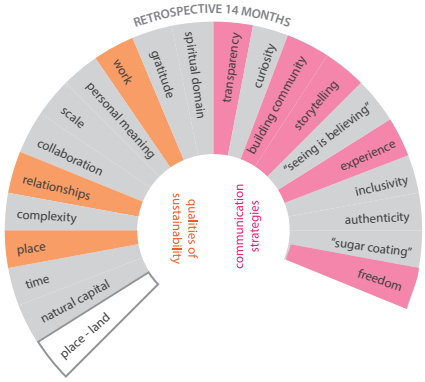


Appendix 19: Workshop 1 retrospective analysis visualisations

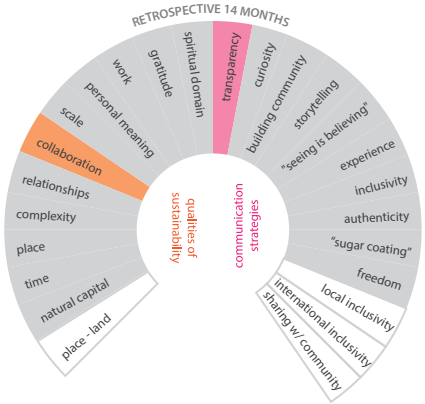
Qualities of sustainability & communication strategies



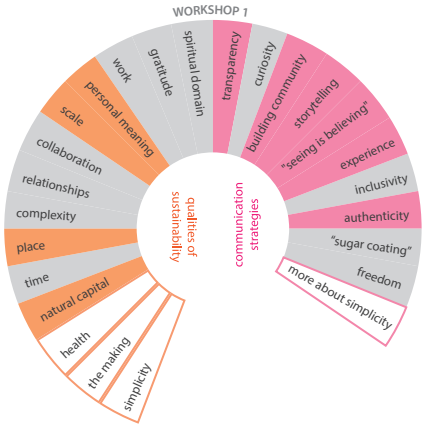




VIDACYCLE



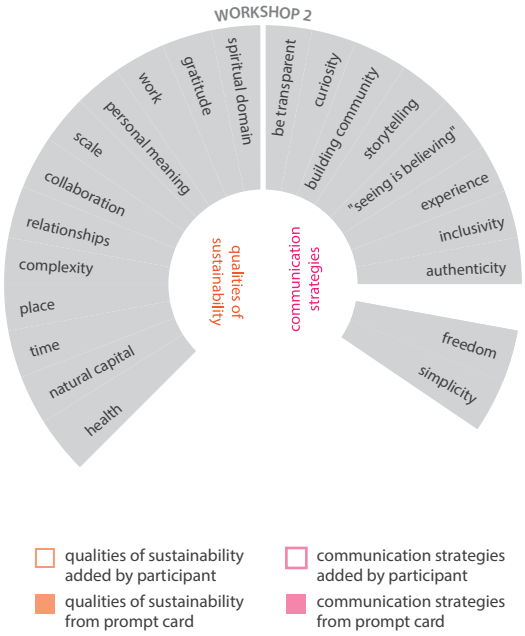
URBAN ORCHARD

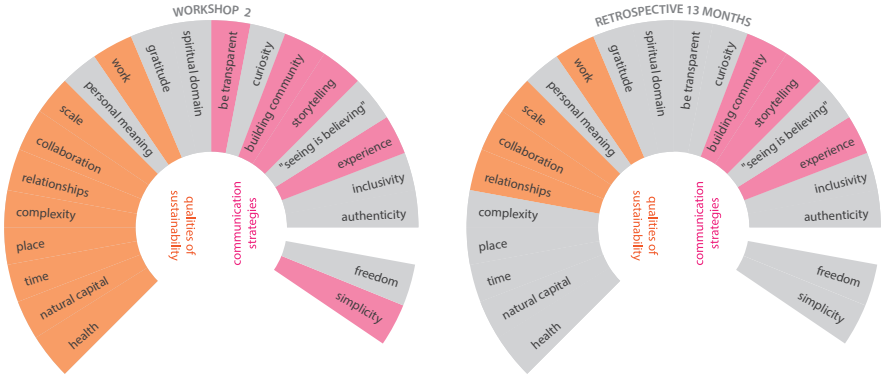


SNACT

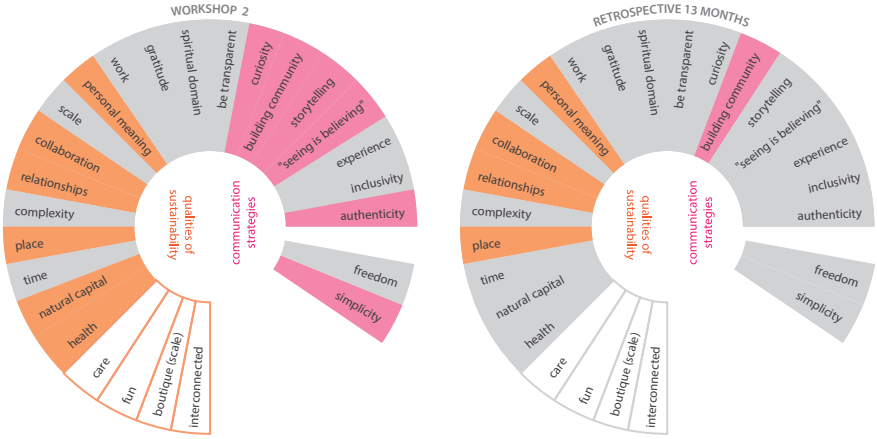
Appendix 20: Workshop 2 retrospective analysis visualisations

Qualities of sustainability & communication strategies

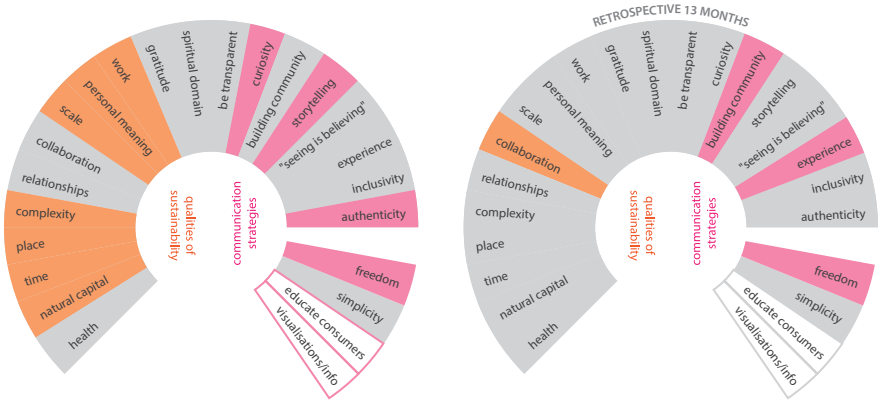




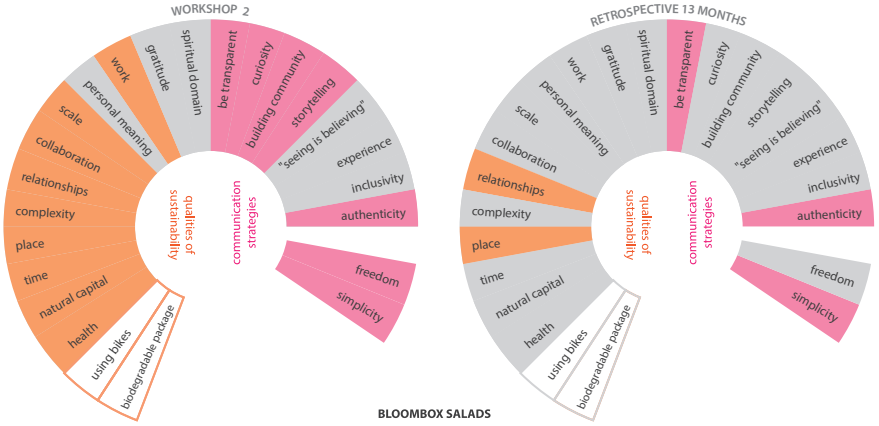
SOLESHARE



UBUNTU CHOCOLATE



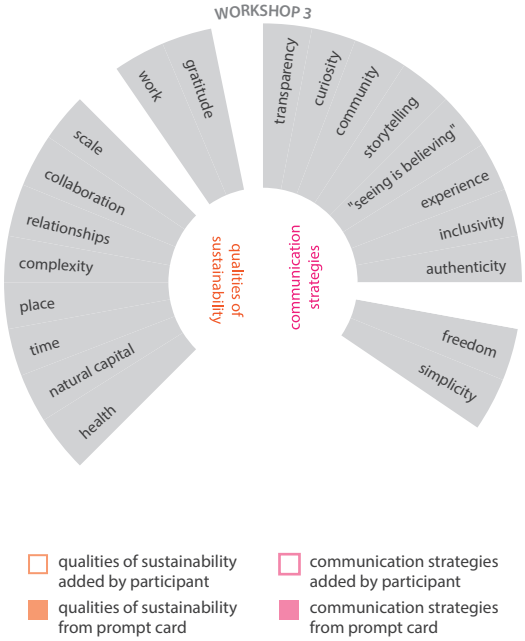
RUBIES IN THE RUBBLE

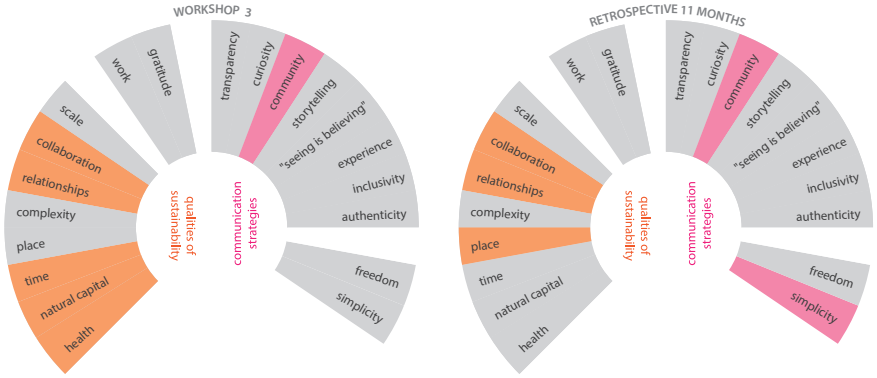


BLOOMBOX SALADS

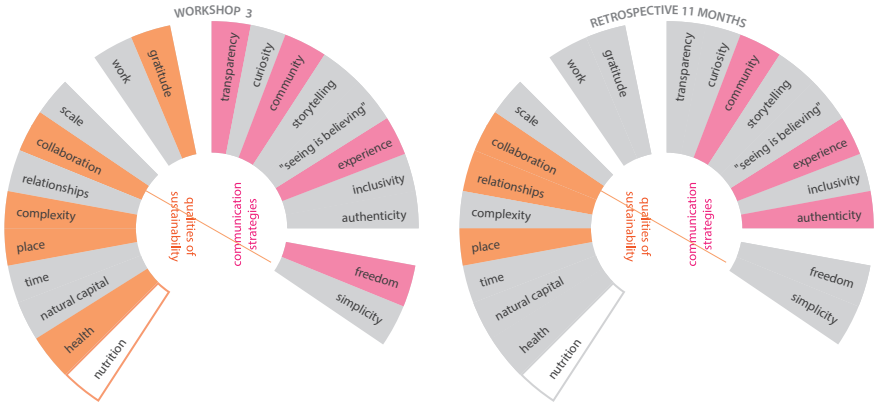
Appendix 21: Workshop 3 retrospective analysis visualisations

Qualities of sustainability & communication strategies

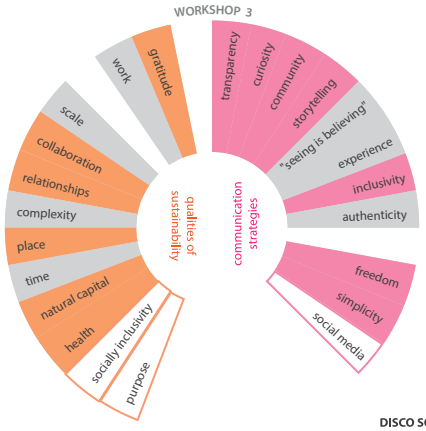




GROWING COMMUNITIES



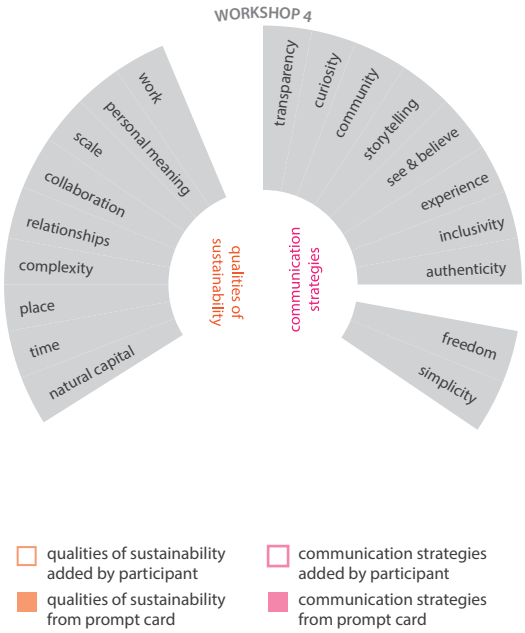
JACKS VEG

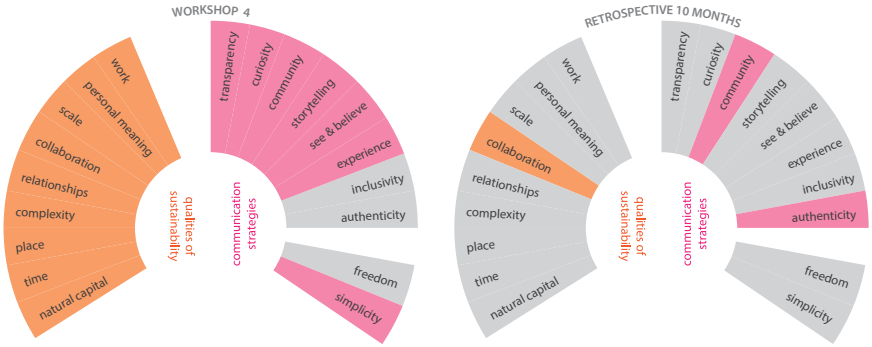


DISCO SOUP

Appendix 22: Workshop 4 retrospective analysis visualisations

Qualities of sustainability & communication strategies



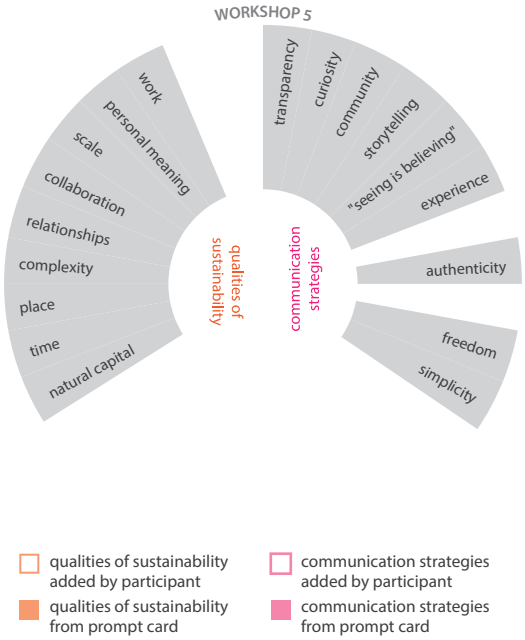


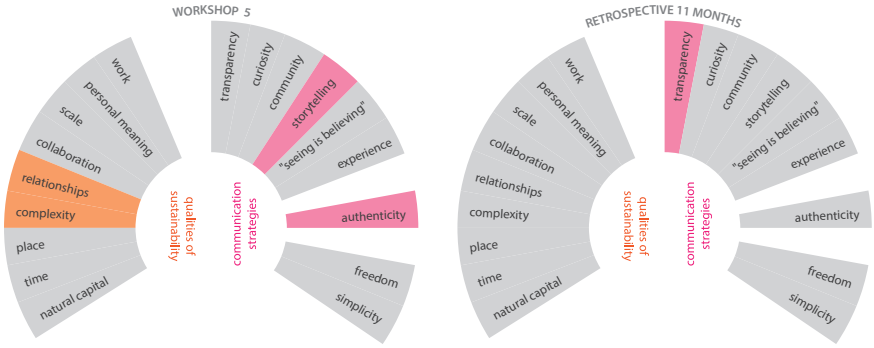
GOLDEN COMPANY

SAVES THE DATE CAFE

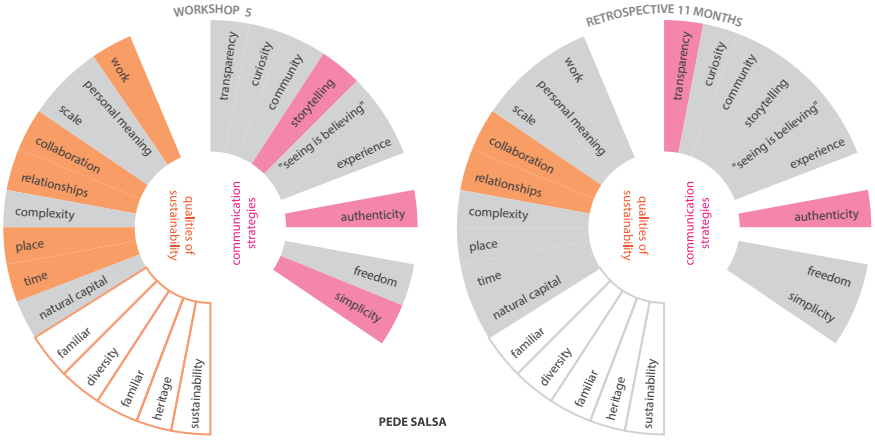
Appendix 23: Workshop 5 retrospective analysis visualisations

Qualities of sustainability & communication strategies





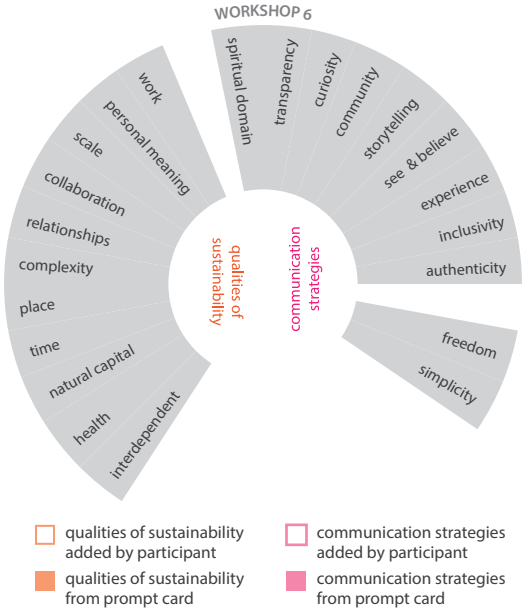
CASAL HORTELAO

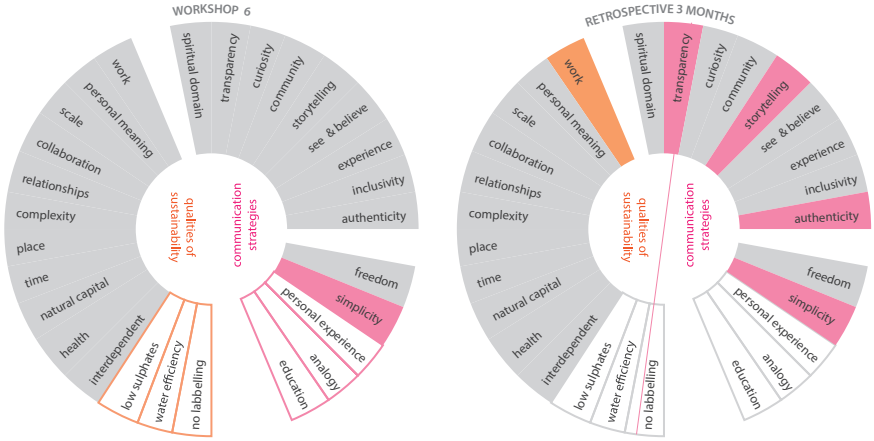


PEDE SALSA

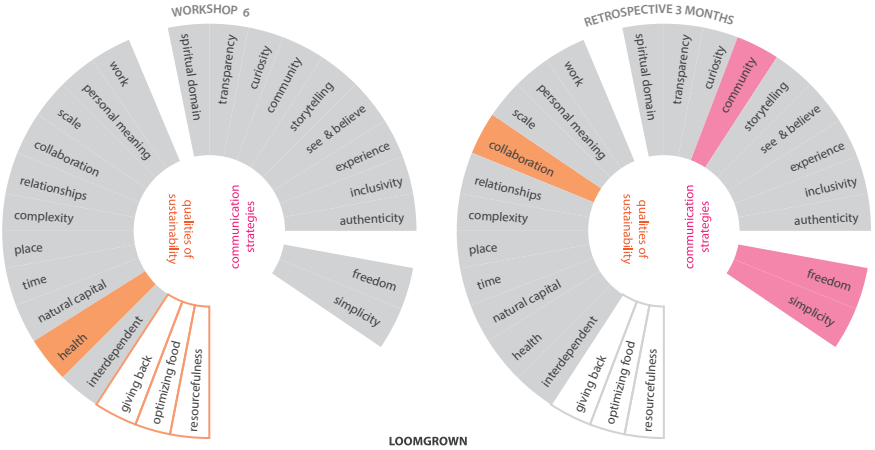
Appendix 24: Workshop 6 retrospective analysis visualisations

Qualities of sustainability & communication strategies

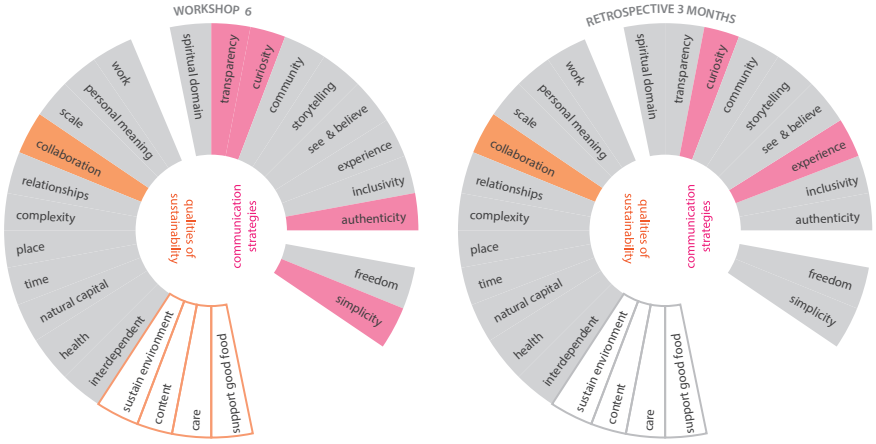




LUCID SELECTIONS



LOOMGROWN



FINE AND RARE

Appendix 25: Published work

Papers in conference proceedings

Lemos, J. (2015) 'Developing approaches to communication design within social innovation and sustainability'. INSIGHT 2015 - Scholastic Papers from the International Design Research Symposium, Bangalore, India, January 2015.

Presentations at seminars

Lemos, J. (2014) Communication Design for Sustainability, PhD by Design. Goldsmiths University. London, 7-8 November, 2014.

Lemos, J. (2014) Design for Communication, PhD by Design. Goldsmiths University. London, 5-6 November, 2015.

Books

Lemos, J. (2016) 'The Designer as a Lens', in Elisa Bertolotti et al. (eds.) The Pearl Diver: the designer as storyteller. DESIS philosophy talks: storytelling & design for social innovation. 2016. Milano: DESIS Network Association - Dipartimento di Design, Politecnico di Milano. p. [online]. Available from: https://lirias.kuleuven.be/handle/123456789/571109 (Accessed 10 February 2017).

Exhibitions

Lemos, J. (2015) Mapping Meaning Visual installation. Research fortnight Spotlight, Central Saint Martins College of Art & Design, University of the Arts London, London, 23 February – 11 March, 2015.

Lemos, J. (2015) Crafting Sustainability Showcase of fieldwork through audio and photography. Surprise and Serendipity, Apiary Studios, London, 23 April, 2015.

Lectures and workshops

Lemos, J. (2016) Design for Communication [lecture to Service Design Course] London College of Communication.

Lemos, J. (2016) Central Saint Martins, MA Communication Design, 2015

Lemos, J. (2015) Design for Communication [Workshop for Designmatters] Art Center, California College of Arts, Pasadena. October.

Lemos, J. (2015) What does sustainability look like? [Lecture] Ansel University, Delhi. January.

Public talks

Lemos, J. (2016) Design for Communication [presentation] Thinking through design. Royal Society of the Arts, London. October.

Lemos, J. (2015) Design & the good life [presentation] Shoreditch Digital, London. May.

Other Publications

Lemos, J. (2015) Design and real social impact [Onward Radio] Available at http://www.onward.re-nourish.com/post/113955697909/s1e3-design-and-real-social-impact-an-interview (Accessed: 15 January 2017).