

Design Listening: what designers hear and how they respond.

Carrion-Weiss, Justine^{*a}; Bailey, Mark^a; Spencer, Nicholas^a

^a Northumbria University School of Design, Newcastle-upon-Tyne, United Kingdom

* j.c.carrion-weiss@northumbria.ac.uk

This paper develops understanding about the practices of design facilitators during rapid design-led interventions and proposes Design Listening as a new phenomenon in design-led innovation practice. Analysis of evidence from an on-going doctoral study exploring value creation in rapid design-led interventions leads to a contribution to knowledge about Design Listening as a facilitatory and collaborative action. This study draws on data generated over a one-year period and uses constructivist grounded theory. The findings suggest that design facilitators simultaneously absorb and construct knowledge. The paper presents the Design Listening phenomenon and discusses this in the context of reflective practice. Data suggests that Design Listening allows design facilitators to respond to what they hear in three different ways; they challenge; they probe; they shape. The action of listening and the response it generates form the basis of the phenomenon presented in this paper. The paper concludes that a distinctive characteristic of this practice is that, in discursive workshop settings, reflective practices between participants are interconnected and that skillful practice is demonstrated by the depth of this connection evidenced by a mutual grasp of the design situation and its future possibilities.

Keywords: design listening; design-led innovation; rapid design-led interventions; design facilitation

1 Introduction

Over the past decade, design facilitation has emerged as a practice to drive organisational change (Lai, 2016) and multidisciplinary innovation projects (Minder and Lassen, 2019) as well as to facilitate the collaboration of stakeholders during large design events (Aguirre, Agudelo and Romm, 2017) or rapid design-led interventions (Gribbin, Bailey and Spencer, 2018). These events are intended to allow designers to support organisations in tackling the wicked problems & complex challenges they face (Lai, 2016) in a very limited amount of time (Bessant, 2005). However, the practices of expert design facilitation in these contexts are still under-examined (Aguirre, Agudelo and Romm, 2017; Minder and Lassen, 2019).

This paper develops understanding about the practices of design facilitators (DFs) during rapid design-led interventions (RDLIs) and proposes Design Listening as a new phenomenon in design-led innovation practice. Analysis of evidence from an on-going doctoral study exploring value creation in RDLI, leads to a contribution to knowledge about Design Listening as a facilitated and collaborative action.

This study draws on data generated over a one-year period through activities including, but not limited to, design interventions consisting of four 3-hour workshops with 5 enterprises; 6 one-hour semi-structured interviews with 3 former design intervention participants; 16 one-hour meetings between the three researchers. Utilising constructivist grounded theory (Charmaz, 2000, 2008, 2017a, 2017b; Mills, Bonner and Francis, 2006b) the findings suggest that design facilitators simultaneously absorb knowledge and construct knowledge. Knowledge is absorbed, in the form of new information presented by those with whom they are working, and generated in the form of ideas, created through internally synthesising that new, in-session, knowledge with their pre-existing knowledge.

The paper presents the Design Listening phenomenon and discusses this in the context of reflective practice theory (Schön, 1983, 1987). It raises questions regarding the reflective conversation conducted by designers with 'the materials of a design situation' (Schön, 1992) where the materials of design are dynamic; the participants and their situations rather than inanimate materials. It suggests that Design Listening enables designers to align with the animate 'materials' within their design situation which results in a reflective conversation between individuals building preferred futures together (Simon, 1996; Lawson, 2005; Michlewski, 2016). The data suggests that Design Listening allows design facilitators to respond to what they hear in three different ways; they challenge; they probe; and they shape. The action of listening and the response it generates form the basis of the phenomenon presented in this paper.

The paper concludes that a distinctive characteristic of this practice is that, in discursive workshop settings, reflective practices between participants entwine and that skillful practice is demonstrated by the depth of this twining evidenced by a mutual grasp of the design situation and its future possibilities. This highlights that this form of practice is not about 'design facilitators' and RDLI 'participants' but rather about a skillful application of Design Listening in an unfolding participatory reflective practice event.

2 Background

The emergence of design facilitation as a practice (Lai, 2016; Aguirre, Agudelo and Romm, 2017; Bird, 2019; Minder and Lassen, 2019) has roots in user-centred design (Minder and Lassen, *ibid.*), is prevalent in service and systems design (Aguirre, Agudelo and Romm, 2017) and can be delivered in various ways (Lai, 2016; Aguirre, Agudelo and Romm, 2017; Bird, 2019; Minder and Lassen, 2019), one of which being rapid design-led interventions (RDLIs) (Gribbin, Bailey and Spencer, 2018).

The study the authors are undertaking and on which this paper is based is exploring how these RDLIs impact organisations and how these organisations recognise that impact. Within the context of this study, the authors have used the following working definition;

Rapid design-led interventions are high-paced and intense workshops (or series of workshops) delivered according to design principles, tools and methods (Aguirre, Agudelo and Romm, 2017; Bird, 2019) by design facilitators taking a hands-on approach.

One such RDLIs is a programme entitled Get Ready to Innovate (GRTI), a series of workshops developed and delivered to support SMEs with innovation readiness by a team of design researchers and academics from Northumbria University. Initially established in 2017 as part of the AHRC, ERDF and ACE-funded, Creative Fuse North East collaborative research programme (CFNE, 2021), GRTI has subsequently been delivered in both Armenia (Get Ready to Innovate Armenia, 2021) and the USA. The programme comprises intense workshops facilitated by a team of design facilitators (DFs) using bespoke design tools and methods to challenge sole traders' and SMEs leaders' thinking and help them uncover new opportunities to generate new value within their organisations (Gribbin, Bailey and Spencer, 2018).

3 Methodology

The doctoral study from which this work is derived employs a Constructivist Grounded Theory (CGT) approach which embraces the idea that researchers are likely to have previous experience and knowledge in the area under investigation (Charmaz, 2008; Mills, Bonner and Francis, 2006). "Rather than being a tabula rasa, constructionists advocate recognizing prior knowledge and theoretical preconceptions and subjecting them to rigorous scrutiny" (Charmaz, 2008, p. 402).

To capture the researchers' breadth of prior knowledge and expertise with regards to RDLI and to develop new knowledge and insights this study builds upon data captured through:

- Planned data collection activities:
 - **Knowledge Download sessions:** 3 one-hour semi-structured interviews and their related memos to capture researchers' tacit knowledge,
 - **Semi-structured interviews:** 3 one-hour interviews with 3 former GRTI participants from 3 different organisations, and their related memos,
 - **Memos:** aimed at capturing the thought process of the doctoral researcher during data analysis, 15 memos were relevant,
 - **Data validation:** 1 two-hour workshop with the research team to look at the data.
- Opportunistic data collection activities:

- **GRTI Session:** data was collected from design interventions with 5 enterprises that consisted of four 3-hour workshops each, and their related memos,
- **Supervision:** all supervision meetings between the doctoral researcher and both senior researchers were recorded. Whenever something useful and related to the study emerged, it was integrated into the dataset. Data was extracted from 10 supervisions (out of 31),
- **Meetings:** 6 one-hour meetings with external designers touching upon the research topic and their related memos.

Table 1 The changing team roles over the different activities of this on-going study

	planned data collection activities				opportunistic data collection activities		
	knowledge download	interviews	memos	validation	GRTI session	supervision	meetings
doctoral researcher	researcher				facilitator	researcher	
senior researcher 1	participant			researcher	facilitator	participant	
senior researcher 2	participant			researcher	facilitator	participant	

The majority of data was gathered from:

- **Organisation A:** a sustainable fashion sole-trading company owned by **Grace**.
- **Organisation B:** a sole trading company, in which **Maggie**, the founder, is an independent consultant.
- **Organisation C:** a social media marketing company. **Layla**, the founder, closed her company after participating in GRTI to pursue a new career as a designer.
- **Organisation D:** a medium-sized financial services enterprise. **Claire**, now the CEO, joined the company 20 years ago.

The Design Listening phenomenon emerged from the data collected by these activities and the data analysis process. As noted by Charmaz (2006), Creswell (2013), and Kalpokaite and Radivojevic (2018), it is crucial for a qualitative researcher to get involved simultaneously with data collection and data analysis. Consequently, the doctoral researcher transcribed the interviews and the notes from other activities, which she also coded manually (Easton, Fry McComish and Greenberg, 2000; McLellan, MacQueen and Neidig, 2003; Halcomb and Davidson, 2006).

Additionally, and as per CGT, memos were used to keep track of how data was being constructed (Boychuk Duchscher & Morgan, 2004; Charmaz, 2006), especially the write-up of the researcher's ideation process, the emergence of relationships between codes as they become obvious (Glaser, 1978; Charmaz, 2006; Kalpokaite & Radivojevic, 2019) as well as how the researcher constructed the data to reach a conceptual level (Boychuk Duchscher & Morgan, 2004).

Again per CGT, the researchers had to carry out a constant comparative analysis of data for the findings to be rigorous and critical (Charmaz, 2006; Mills, Bonner and Francis, 2006b). Data was taken through several iterative stages (discussion, review, refinement and validation) and iteratively triangulated between the three researchers, the participants and other DFs (Koro-Ljungberg, 2008; Guion, Diehl and McDonald, 2011). Along the way, interview questions were adapted to gather the participants' insights on emerging findings, which were then discussed amongst the researchers and with other DFs.

4 Design Listening: emergence of a phenomenon

During the delivery and reflection on GRTI, recurring behaviours were observed amongst DFs and participants. One of which is how DFs listen, what they hear and how they respond to it. We have dubbed this Design Listening. The first mention of Design Listening in this study can be traced back to the Knowledge Download sessions. It was at the time defined by one of the researchers as 'active listening' with an added layer of 'what if?' questioning.

4.1 Active Listening

Active Listening is based on the state of empathy of the *listener*, which enables them to perceive another's 'sensations, perceptions, meanings, and memories, which are available to the consciousness' 'with accuracy [...] as if one were the other person but without ever losing the "as if" condition'. (Rogers, 1959, p.210). Listening, and Active Listening especially, are not just about processing information in an appropriate manner. They are also about the *listener* demonstrating their interest to the *listened-to* (King, 2008).

Active Listening promotes trust between the *listener* and *listened-to* and is extensively used in counselling and health and wellbeing related fields where establishing trust between clinician and patient is essential to positive outcomes. It is a fundamental concept within the practice of Health Coaching (Huffman, 2010) which sprang out of studies in 'motivational interviewing' (Miller and Rollnick, 1990). Health Coaching relies on patient self-efficacy - an individual's belief in their own capabilities 'to mobilise the motivation, cognitive resources and course of action', required to reach self-determined goals (Bandura and Jourden, 1991, p. 952). Bandura, in particular, inspired Kelley and Kelley (2012) as they developed their work around Creative Confidence.

4.2 Listening in Design

Listening is one of the skills designers practice the most (Le, 2018); they gather data in order to capture thoughts and insights from stakeholders, understand those, before being able to solve anything (Le, 2018; Zumbrunnen, 2018). It is especially important to practice empathy-driven listening (Le, 2018), or Active Listening in design as having 'the ability to be sincerely and genuinely receptive is an empowering agent for new ideas' (Levitt, 2018). Going further, Google Design (Google Design, 2018) define listening as design strategy, which can be interpreted as a 'feedback loop where systems listen to users, and users listen to systems, using all of [their] respective senses.'

IDEO (IDEO, 2021) describe Creative Listening as, 'a process of tuning in, listening, and reflecting that helps you get more out of what you hear' (IDEO, 2021). If Creative Listening helps the *listener* to hear themselves out and gain confidence in their own instincts (IDEO, 2021), this paper will demonstrate how the *listener*, by tuning-in, can help the *listened-to* to build their creative confidence.

4.3 Design Listening

In Active Listening, listeners are trained to listen and play-back what they believe they have heard in order to sense-check it and build trust with the *listened-to* by reinforcing the fact that they are paying attention. It appears that in Design Listening, such Active Listening is coupled with a thought process that allows designers to build creative responses which lead them to present visions of possible and preferred futures (Simon, 1996; Voros, 2017) in the form of 'what if?' questions.

Although uncommon, the term Design Listening is not entirely new. In design practice, Boltgroup (2016) use it to describe a facet of their work that, in effect, helps them 'read' and 'write' in 'object languages' (Cross, 1982) in support of better understanding consumer needs. The use of the term in this commercial context is a way of describing the essential act of establishing empathy (Merriam-Webster, n.c.), with the concerns of users as part of a design process.

Whilst establishing empathy certainly plays an important part in our conceptualisation of Design Listening, this is only part of a bigger picture where design facilitators are seeking to establish trust with a diverse range of design situation stakeholders including founders, company leaders, funders, consumers, etc.

The main distinction between Design Listening as a facet of commercial design practice and Design Listening in a context of facilitating RDLI is in the purpose. In the former, it is deployed in pursuit of insights and ideas that will enable the designer to deliver better designs. In the latter, it is employed to aid the participants achieve greater understanding of the situations and opportunities (Bailey *et al.*, 2019) within their enterprise setting and shape a preferred future for their organisations (Simon, 1996).

5 What designers hear

Design Listening is about listening and having heard, inputting something constructive into the conversation. Analysis of our data showed that whilst the DFs are actively listening, they are simultaneously having a creative conversation internally, uncovering new insights and understanding that they will then share with the participants. This means that they are both active listening and listening-out-for certain cues, or triggers that stimulate new creative lines of enquiry or reinforce ideas that they are having. In verbalising and building on these, new knowledge of, and for, the situation is created.

5.1 Designers hear through the noise

When discussing the Design Listening phenomenon with the research team, it became apparent that designers are really good at 'hearing through the noise'. Data showed that Design Listening is something that DFs do quite naturally and is an inherent aspect of their practice:

As a facilitator, you are listening and you are hearing possibilities, shutting out the background noise and responding to that question with "you told us X, what if Y?".

The researchers' experience as DFs allowed them to dissect what goes on in the DFs' mind when they '*design listen*'; they are listening out for connections, possibilities and opportunities whilst removing noise and barriers. They are 'listening for a formed or unformed idea that holds promise' (Levitt, 2018). They also simultaneously listening to the bits of knowledge that make the bigger picture.

Each of the researchers has been in the situation where two DFs look at each other and say, 'I know exactly what you're thinking at this moment'. One possible explanation for this is that their minds are trained to go through similar cycles at the same time. Building towards this, one of the researchers explained;

[It] starts with the insights that you're able to draw from the participant [...]. And what you're doing is translating. [...] There will [also] be other [DFs] along [...] who are design listening as well and they're design listening to the participant [and] to my interpretation and they're simultaneously interpreting in their way.

To be able to hear through the noise and holistically understand the participants and their organisation, DFs have to approach the topic by asking numerous questions coming from many different angles (Lampitt Adey *et al.*, 2019). This approach, which can be tiring for the participants, requires them to disclose and explain all the facets of their organisation and where they stand within it. Participant Claire commented on GRTI sessions' intensity;

I was absolutely shattered. So it's really intense, [...] [the DFs] ask lots and lots of questions. It really made you search your mind. [...] I was exhausted.

At this stage, the role of the DFs is to gain access to as much information as possible so that they create a holistic understanding of the design material in the situation. To successfully process the content overload during RDLIs, DFs condense the information to its core, keep its substance and remove the 'noise', which might consist of 'abstractions, buzzwords, and jargon' (IDEO, 2021). Skillful DFs will not only be successful at this, they will also enable participants to remove the noise over the course of RDLIs. This mechanism enables the DFs (and participants at times) to listen out for the cues to potential ideas and opportunities.

5.2 Attitudes influencing Design Listening

In addressing the attitudes influencing Design Listening, we must consider the predominant attitudes of both *listener* and *listened-to* and how these co-evolve as RDLIs progress.

Our data shows that participants in RDLIs have no preconception of what RDLIs are going to be like. Their curiosity is enough for them to sign up, even if they are uncertain of how it might benefit them and their organisations. As a result, most participants approach the sessions with an open mind, but also with apprehension and uncertainty. On the other hand, designers, who typically adopt a constructivist epistemology, are comfortable with uncertainty allowing them to readily build and rebuild alternative versions of reality and continually interpret the world around them whilst learning from their endeavours to make sense of it.

For successful Design Listening to occur the gap between this opportunity-focused facilitator mindset and the potentially sceptical participant must be bridged; trust must be established. The attitude and the mindset of both the DFs and participants contribute towards it.

5.2.1 Design facilitators' attitude & mindset for successful Design Listening

DFs listen to empathise, not to judge. Their only objective is to gain an understanding of the participants' situation and help them. Grace for example felt that she was on an equal footing with the DFs during GRTI, and she genuinely thought facilitators were trying to help her. Because the way in which DFs listen is open-minded, it contributes to developing trust and establishing rapport

further with the participants. Specifically, Grace addressed the positivity of the sessions and the fact that there were no right or wrong answers.

The motivation and the degree of involvement from the DFs, as well as their flexibility and adaptability, contributed to building the relationship. Layla vividly remembers being very impressed by the DFs dedication.

[They] were just absolutely fantastic. I remember being blown away because [...] I walked into this room [...] and they were just able to go 'right, let's get started', and they were just able to adapt to my situation.

What Layla described here, is similar to other comments made by Claire and Grace. It appears that the participants felt the DFs were being flexible and generous with their ideas, easily offering those to the participants. However, discussing this with the research team, one of the researchers observed;

Maybe that is interpreted as generosity. Whereas for facilitators, it is for our own understanding to get to the right question to respond to.

From a DF's point of view, the value is in the moment and the impact they can have in limited time. Their role during RDLIs is to help participants to hear the value of their own ideas (Bird, 2019). Layla and Grace remember being pushed by DFs to seek feedback from objective potential clients (e.g. not friends or family). Grace, who described herself as lacking confidence and being 'her own worst enemy' realised the potential of some of her ideas after receiving feedback. Her creative confidence was enhanced by the RDLIs, and by the feedback she sought. As a consequence, she has launched one successful new product.

The attitude of DFs, perceived at times as generosity by the participants but being something DFs do naturally as part of their investigation, has certainly contributed to creating a safe environment for the participants (Bailey and Smith, 2010), establishing trust (Lampitt Adey *et al.*, 2019), building creative confidence (Kelley and Kelley, 2015) and welcoming Design Listening during RDLIs.

5.2.2 Attitudes & mindsets for successful Design Listening

Design Listening is about the mindset and attitude of DFs, but also those of the participants. By participating in those RDLI, the participants step out of their comfort zone and make themselves vulnerable. Therefore building trust and developing rapport between DFs and participants becomes a prerequisite to creating meaningful engagement (Lampitt Adey *et al.*, 2019). Recently delivering further GRTI sessions online, the doctoral researcher wrote in her memos;

[The participant] describes themselves as risk-averse and we didn't manage to break down that wall. They aren't open to other plans or ideas. This might be the reason why they cannot see the benefits [in GRTI].

From there, it became obvious that the participants would only start opening up and have open heart conversations with the DFs once trust and rapport are established. Reflecting on the attitude of the participants, the researchers realised that the greatest value in RDLI is delivered when participants are engaged and open-minded. Again, the doctoral researcher captured her thoughts after a GRTI session:

I feel inspired by [participant] and [their] energy is just amazing. [...] I love the fact that [they] said that GRTI was a revolution for [them]. [...] The impact is probably linked to [their] high level of involvement and openness to new ideas during the sessions.

In this case, building rapport and trust between the participant and the DFs enabled the DFs to create a bubble of trust around their group. So doing, they completely shut out the background noise so that they could, together, focus on the important challenges and opportunities of the organisation. This was emphasised in one of the Knowledge Download sessions;

What happens over time, not always, when co-creation goes on and the participant is as engaged as the [DFs], they get on the same wavelength. And then they're not only transmitting "*this is my story or my life, my business tadadada, but what if I did it like this?*" So they start to design listen to themselves.

Here, if the participant's and DFs' mindsets are in harmony, it creates a symbiosis, which then enables Design Listening to occur on both sides. For both parties, there are attitudes and mindsets that will hinder and others that will support Design Listening.

5.3 Facets of Design Listening

We have seen that establishing trust and rapport is foundational to a positive experience of Design Listening. It is this that establishes the safe environment (Author and Smith, 2010) within which design facilitators can then dig deep into a participants' situation.

Kimbell (2015, p. 287) describes designers as cultural interpreters who 'ask 'what if?' questions to imagine future scenarios rather than accepting the way things are done now.' In the context of RDLI, this is a primary technique of DFs and it is through responding to the cues and prompts that they hear through Design Listening that they are able to do this; '*you said this, what if that?*'

Our data suggests that in Design Listening, the designer's response to their action of listening has three facets; *challenge*; *probe*; and *shape*. Each involves the Design Facilitator using 'what if?' questions in their internal interpretation of what they hear. The following section provides details of these.

5.3.1 Challenge: designers offer an alternative version of the truth

In line with their predominant constructivist mindset DFs seek to uncover the most valuable version of the 'truth' within the given situation. To do this they must construct and offer alternative versions of the reality that is presented to them. Indeed, Lampitt Adey *et al.* (2019) discussed how important it is for DFs during GRTI to work closely with the organisations to understand their context and what is really happening within it. In some scenarios, they saw the DFs reframing the information they had been given by the participants to let the underlying and unconscious motivations surface.

Layla mentioned that GRTI had two parts; (1) the DFs questioning the participants' intent and the reasons behind their decisions and (2) the DFs responding to the participants by bringing different lenses and perspectives to the answers they were given previously. Similarly, Maggie commented;

What was different [from what I do] is that you were coming from a different perspective, a different lens, and the freshness that really helped me reframe what I do.

Here, Maggie recognised the helpfulness and the value of asking challenging questions whilst offering another viewpoint on the discussed matter, which builds upon the researchers' observations.

The *challenge* facet of the response is about creating new meanings. The DFs will first mirror what they think they heard by paraphrasing the participants' discourse (sense-making) to then translate it according to their own perception (sense-checking) (Lampitt Adey *et al.*, 2019). This response allowed the DFs to warm the participants up to the proposition they were about to make and *probe*. *Challenge* is a crucial building block on which safely to offer a new idea, proving to the participants that DFs had listened and heard what was being said thus deepening trust and rapport between both parties (Lampitt Adey *et al.*, 2019).

5.3.2 Probe: designers verify the stickiness of an idea

In general design practice, positing half-formed or partially developed ideas is a critical means by which designers can probe a given design situation and identify preferable routes forward. It is a means of testing the synthesised knowledge manifest in the idea. Expert designers learn when and how to surface ideas such that they will 'land well' with their clients and yield meaningful responses.

However, during RDLIs, DFs do not have the luxury of time and therefore, need to test out their emerging ideas as soon as possible in the process, to ensure that they and the participants are going in a helpful direction. During the data validation activity, one senior researcher directly commented on this;

When we, [DFs], say 'what if?' [...] to the client before we've done the research or before we've done the project, we venture a possible direction. And it's just a probe. And that probe allows us to *design listen* [...] in order to pick up where there's stickiness or potential.

We have seen that in GRTI, the DFs once more relied on 'what if?' questions. By doing so, they showed the participant that their suggestions were conditional rather than definitive. From there, they were able to safely deliver and venture new ideas.

The *probing* facet of the response is a platform for propositions. It allowed DFs to interrogate ideas whilst really listening out for, and hearing, how the participants respond in order to pick up where there is 'stickiness' - adhesion of an idea. The role of the 'what if?' at this stage is absolutely crucial as it leaves space for the participants to respond and input their vision and opinion (Minder and Lassen, 2019, p. 15). It is very likely that new ideas would not have landed as well if DFs had not taken the precaution they did (showing that ideas are conditional) in the *challenge* facet of their response.

5.3.3 Shape: designers and participants hand-in-hand build new narratives

Moving forward from the *challenge* and *probe* facet of the response, DFs and participants start to 'co-reflect' upon their ideas, allowing a collaborative thinking process to happen (Yukawa, 2006). 'Through co-reflection, [DFs and participants together] weigh reasons, arguments, and supporting evidence and examine alternative perspectives to achieve a clearer understanding by drawing on collective experience' (Yukawa, 2006, p. 206) and become 'co-creation activists' (Bailey *et al.*, 2019).

At this point, DFs and participants are allowing and welcoming silence and time to think, whilst encouraging the sketching out of a story, carefully listening out for the emerging new narratives for

the organisation. Here, DFs have a tangible conversation with one of the materials of their design situation (Schön, 1992), the participants.

During Claire's interview, it became obvious that she has now taken ownership of Design Listening and has become herself a DF. Indeed, it seems that now, she is taking her team, clients and stakeholders through the same journey DFs took her during GRTI. Discussing the exchange with her 'participants', she built upon the generosity of DFs discussed earlier in this paper to then draw out on the co-creation of ideas;

'Even if all that gets produced is [...] an idea, [...] you're trying to help them. And I think that really makes a difference. [...] You're in a joint enterprise and you're trying to do something together.'

The *shape* facet of the response is an exploration. It is about DFs and participants listening out for what they can build on to arrive at the best possible future for the organisation (Simon, 1996). Here, DFs are using a 'what if?' proposition for frame-creation as a model of innovation and design more broadly and are working hand-in-hand with the participants.

6 Discussion & further research

This paper aimed to investigate the practices of expert design facilitation in the context of RDLIs. It has uncovered a new phenomenon in design-led innovation practice; Design Listening. The suggestion that Design Listening enables DFs to respond to what they hear in three different ways causes the authors to reflect upon the relationship between Design Listening and reflective practice, what Design Listening might look like and why it actually matters.

6.1 Design Listening & Reflective Practice

Schön (1987) presented a model of reflective practice through which designers continually develop and refine their practice knowledge and skills. Novice designers learn to reflect on their practice and as they become more experienced they learn to reflect in practice through 'a reflective conversation with the materials of their design situation' (Schön, 1992, pp. 138–139). Simply put, this means that they consider and adapt what they are doing and how they are doing it in real-time. Eventually, some designers learn to reflect on reflection in practice. Per se, Design Listening shares certain characteristics with Reflective Practice, one of which being that both practices have the potential to take the designer's thought process forwards and backwards (Spencer and Hilton, 2010).

However, it appears that Design Listening goes further than Reflective Practice. In the context of this study, the authors suggest that the materials of the design situation with which designers have this reflective conversation are the participant individuals and their enterprises, their knowledge, practices, ideas and ambitions. As such, unlike the physical materials to which Schön (1992, pp. 138–139) was referring, they are dynamic, responsive and adaptable.

Additionally, this observation raises questions regarding the creative process of designers as contemporary design fields have moved away from solely physical and tangible outputs 'to include more elusive creations such as interactions, strategies and systems' (Leerberg, 2009, p. 1). This paper allows us to argue that within all those design fields interacting with responsive, sentient beings as opposed to inanimate materials, designers *design listen* to living design 'materials' (Schön,

1992) - the participants within their design situation - so that together, they can build preferred futures (Simon, 1996; Lawson, 2005; Michlewski, 2016).

Building upon this, the further discussion points will assume the generalisation of Design Listening to other contemporary design fields being valid and therefore, will refer to 'designers' and 'participants and their situation' as opposed to 'design facilitators' and 'participants'.

6.2 What might Design Listening look like?

The quest to understand what Design Listening might look like was initiated by a memo written by the doctoral researcher after a data validation activity with the research team, where she raised the following question: 'If Design Thinking is: empathise, define, ideate, prototype, test, [then] what is Design Listening?' This question was the beginning of an investigation to map out and sketch a potential answer using the insights and data gathered thus far in this ongoing study. However, this was a misleading question as Design Thinking happens over an extended period of time and may be characterised in a number of different ways such as the aforementioned, d.School (d.school, n.d.) approach amongst others, whereas Design Listening may be thought of as a perpetual state of designers (albeit explored here in the context of RDLIs).

This possible representation of Design Listening was developed as the findings of our study emerged and is not so much aimed at representing a process, but rather painting a picture. Although all DFs might go through similar steps, it seems probable that; (1) designers navigate those steps at a pace dictated by the design situation and the responses they receive from the *participants*, and (2) that the *participants'* capability to learn to *design listen* is dependent on both their own and the designers' attitude as well as the skillful engagement from the designers.

6.3 Why does Design Listening matter?

This paper presents the role Design Listening plays in safely inputting ideas for co-creation with *participants and their situation* to shape preferred futures (Simon, 1996). Creative Listening (IDEO, 2021) helps the listener to gain confidence in their own instincts whereas Design Listening will give the listener - whether they are listening to someone else or themselves - the openness to be inspired by what they hear, have the confidence to offer an alternative truth they heard and start ideating around it. The creative confidence Design Listening helps the *participants and their situation* build can then be used by them to act upon their intuitions, develop their ideas (Kelley and Kelley, 2015) and contribute equally to solving the challenges present within the design situation.

These reflections lead to further questions. It is possible to argue that the reason why designers are perceived as being generous with their ideas is because of their high level of creative confidence. This is the designers' normal way of functioning enabled by the knowledge that without the verification and the conscious development of ideas (Lawson, 2005, pp. 149) that happens within Design Listening with the *participants and their situation*, ideas are less valuable.

Additionally, and because it appears that Design Listening might be contagious in a sense that the *participants and their situation* surrounded by designers start unconsciously mimicking some of the designers' behaviours - such as Design Listening - there is a probability that they too could reach a point of endless ideas and possibilities to respond to a design situation.

6.4 Conclusion & Further Research

Boltgroup (2016) defined Design Listening as ‘a combination of listening, seeing, doing, learning, and interpreting messages being sent from the consumer. The deep understanding that results from Design Listening can lead to the insights necessary for big innovative opportunities.’ Although the authors agree with the general idea, they believe that this paper demonstrates that Design Listening is not just about empathising to hear the consumers and develop better ideas from better insights. Furthermore, it is not either just about receiving and translating accurate verbal and non-verbal communications (Boltgroup, 2016), even if this is part of it. The authors certainly do not contest the value in design practice of what Boltgroup and others say about the importance of establishing empathy and hearing consumers’ views.

Design Listening is a combined reflective practice that happens between the designer and the *participants and their situation*. It is a context-specific and opportunity-focused practice that is about empowerment. Ultimately, Design Listening is about hearing yourself and the people you are interacting with, listening out for verbal and non-verbal communication as well as conscious and unconscious cues, with the aim of bringing about new meanings, ideas and narratives. The value in Design Listening does not reside in uncovering a particular business idea but rather in leaving a legacy that has to do with how the *listened-to* will respond the next time they have an idea they want to pursue (Bird, 2019). It is an unfolding participatory phenomenon that challenges, probes and shapes new narratives while teasing out the participants’ knowledge and embracing their vision.

This research, contributes to and responds to Light and Akama’s (2012) call for researchers to orientate towards the subtleties of participatory practices as opposed to reporting methods alone. Design Listening has been revealed as an emerging design practice phenomenon, but it has also raised a number of questions that need to be considered for further research; Is Design Listening innate or by dint of training? How can novice design facilitators and participants be trained for *design listening*?

In the short term, there is a need for further research to investigate these questions and gain a better understanding of Design Listening as an emerging design phenomenon. There is also a need to understand and capture the impact of the Design Listening capability on a larger organisational scale. Finally, as the on-going study is looking at the RDLI value creation, there is a need to understand how Design Listening relates to impact for participants’ organisations.

Acknowledgements. The Rapid Design-led Interventions upon which much of this research is based were developed as the Get Ready to Innovate (Gribbin, Bailey and Spencer, 2018) programme which formed part of Creative Fuse North East (CFNE, 2021), a collaborative research programme funded by the Arts and Humanities Research Council of UK, Arts Council England and the European Regional Development Fund. The doctoral study is supported through the Research Development Fund.

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