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**SHAWN
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UNIVERSITY OF GLASGOW

**JENNY
E L L I O T T**

EDINBURGH FUTURES
INSTITUTE,
UNIVERSITY OF EDINBURGH

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## Abstract

Reflecting on the challenges and experiences of delivering a public co-design project during the Covid-19 pandemic, we use this paper to make an argument for greater experimentation with and attention to the evaluation methods used to assess and justify co-design projects. Evaluation is often treated as a final, retrospective, and—too often—last-minute step in delivering a design project. In reality, practices of evaluation characterise every step of participatory design. Formal evaluation processes often dismiss the practical techniques and criteria that participants use to decide whether a design is good for them or their community, however, relying instead on narrowly-defined methods and criteria established a priori by professional 'experts'. The tensions that arise between participants' lived practices of evaluation and formal accounts of evaluation can lead to differences of opinion and diverging decisions—and concerns about 'inauthentic' or 'shallow' co-design. Finding techniques to carry forward participants' everyday evaluations into the formal methods and evaluations of project reports should therefore be treated as a crucial concern for participatory design. In this vein, we reflect on both the methodological experiments and challenges involved in our effort to find better possible, agreeable and shareable futures in our co-design project "Future of the High Street" by examining the *spaces of evaluation* created within co-design projects in order to spark further debate about the possibilities of co-evaluating the projects and spaces we share with others. Drawing on ethnomethodology, a sociological school of thought focused on the study of the everyday and mundane methods used by people to organise, make sense of and act in their social world, we argue that such spaces of evaluation are sites where designers and participants create and negotiate shared grammars of accountability and justification of their work together. Recording and sharing these exchanges is one way to better align the formal evaluation of co-design with the situated and shared evaluations through which participants decide whether and how participation in a project is worthwhile or empowering. This, however, requires a shift from treating 'methods' as means-to-an-end and toward an understanding of methods as experimental practices that designers and participants alike might use to occasion reflection on how to think, act and design together.

## Introduction

A head nod, a sticky note, a confused look, a pointed email, a compromise—over the course of a project, designers and participants employ a diverse range of methods to evaluate ideas, possibilities and risks together. Some are technical—a workshop, a survey—but many are thoroughly mundane. An exaggerated eye-roll, for instance, can be a sharp and succinct method for calling a suggestion into question and contesting its viability for a project's community. Through a messy, interactive and contingent process, project participants make and manage evaluations time and again as they work to decide what to do next *together*.

Such a meandering and uncertain process keenly contrasts the clear and definitive assessments offered within formal project evaluation to justify and qualify project outcomes. By invoking well-defined metrics, indicators and deliverables, formal project evaluation can make claims of project rigour, impact and success, but in doing so may conceal uncertainties, debates, mistakes and adjustments that make up the collaborative work done to get there. Used in such a way, formal project evaluation becomes a form of 'method talk', a claim to "the best and technically robust account of reality"— treating certain procedures and criteria as definitive 'facts' about reality and masking the more tentative work done to *produce* them (Law 2004, 9). It enacts what sociologist John Law (2002, 7-8) calls 'projectness', a tendency to represent the social world as 'linear, chronologically chained, and more or less centrally and teleologically ordered' by reducing complexity and dismissing multiplicity.

When methods and metrics are used to shore up a 'conclusive' evaluation of project success, they pre-empt other perspectives. By aiming to settle a project's success once and for all, they obscure the contexts and interactions in which their own methods and metrics become provisionally and practically good enough—and consequently the reasons they might be productively challenged, adjusted or learned from later on. For participatory and co-design projects in particular, such approaches to formal project evaluation risk excluding not only the plurality of perspectives and interests in projects, but also the techniques and interactions participants used to work together despite and thanks to their differences.

In light of these tensions, discussion is necessary about how to carry forward participants' everyday methods and criteria for participation into formal project evaluation to keep formal assessment accountable to participant and community interests: how we can co-evaluate our project with others. In this paper, we reflect on our own attempts at creating space for participants' evaluations within the design process and formal evaluation of our recent project, "Future of the High Street". We draw on ethnomethodological studies of design (Button et al. 2015, 135), which examine the ways people "go about analysing and displaying their understandings of the social in their everyday affairs", to analyse how designers and participants publicly evaluate a shared

project in and as their work together. By viewing evaluation as an ongoing, contingent and situated process, we identify and discuss three spaces of co-evaluation from our project to reconsider how we might use formal project evaluation as an active part of ongoing project decision making to create better and shared possible futures.

## Doing design together

Although design projects tend to begin with a detailed plan and timeline, over the course of the actual project work, all manner of surprises—even global pandemics—carry the designers and participants in unexpected directions. These emergent challenges and opportunities are even more pronounced within participatory design, where designers hope to learn from stakeholders' practical and tacit knowledges as future product-users (Bjögvinsson et al. 2012), but also to empower stakeholders by giving them a voice in decisions about their own lives (Kensing and Blomberg 1998; Sanders and Stappers 2008; McKercher 2020). The democratic aspirations of co-design make the design team accountable to the interests and agendas that participants bring to the table (Manzini 2019), even though this can subject the project to appropriation by outside interests or give rise to conflicts between participants (Del Gaudio and de Oliveira 2020). Participatory designers aspire to facilitate exchange between participants, enable connections and spark new ideas (Trischler et al. 2018, 91), but as designer Jens Pedersen (2016, 181-182) argues, tensions, conflict and changed plans are also important elements of co-design if "the ideals of participation and democracy in design could be regarded not as a priori principles, but rather as sketches to be prototyped, revised, re-designed, re-imagined": troubles and uncertainties are part of "codesign practices in-the-making", and reflection on how ideals like participation and plurality are realised in practice enables us "to evaluate and discuss the pragmatics and the politics of codesign more fully".

Thus, while co-design calls for development and experimentation with formal evaluation methods (Taffe 2018; Drain et al. 2021), its attention to the interactive and dynamic process of designing together calls for their *situated* appraisal in relation to specific values, needs and relationships. Moreover, this entails recognition of the ways participants themselves enact and communicate project evaluations, design decisions and modes of working. In their work together, participants and designers alike use material objects and mobilise situated knowledges in 'heterogeneous design-games'. These involve the aligning and contesting of interests, criteria, plans and understandings of success in order to shape project possibilities—and find whether and how participants and designers can share and value those possibilities together (Ehn 2008).

Rather than proceeding along a straightforward and clear path, participatory design interactions call for an 'expanded'

understanding of design projects as complex, dynamic, non-linear and contradictory *environments* in which shared practices, values and cultures are ongoingly (re)created (Manzini and Rizzo 2011, 199-215; see also Escobar 2018, Ch. 6). Although project plans, deliverables, ideals and methods may be specified in advance, they are evaluated and used in different ways in particular contexts— and these contexts are identified by participants through their interactions. Following feminist STS scholar Lucy Suchman (2002, 96), participants collectively develop 'located accountabilities' of the project and their participation in it. Participants' responses to one another, to events, to the formal methods introduced by designers create the 'locale' within which certain possibilities and processes are assessed for practical and provisional purposes: they negotiate the terms of their collaboration along the way, determining whether a project is good, useful or democratic for them in situated *spaces* of evaluation.

Formal project evaluation should therefore attend to project members' mundane methods for working together to understand a project's community—and their actions—in their own terms. Within the sociological approach of ethnomethodology (Garfinkel 2002; 1967), everyday interaction is understood in terms of 'members' methods' for organising, making sense of and working to change their lived environment. Ethnomethodologists' study of 'the practical "composition" of sequences of action' and everyday problem solving resonates with designers' interest in *how* a social situation works—and might be changed for the better (Sharrock and Randall 2004, 191; Drish and Button 1998). Rather than appealing to theoretical concepts or a priori analytical frameworks to understand the meaning and nature of social interaction, ethnomethodologists pay attention to the embodied, interactional and in situ ways that community members create and contest their social worlds in practice (Button 2012, 679; Smith et al. 2021). Viewed thus, the activities of designers and participants in a co-design project can be seen as negotiating the terms and values of their contingent community. They offer situated and pluralistic evaluations of how diverse people might co-design together.

This shift in perspective resonates with contemporary experiments in methods of co-evaluation within projects like CoLab Dudley[1] and Beyond The Castle (Cruickshank et al. 2013), where experiments in 'social infrastructure' and 'scaffolding' approaches aim to produce more flexible and dialogical co-design processes. Being *responsive* to evolving participatory insights as part of the co-design process is a common thread found in each project, as is the creation of key values and principles defined through exchanges between team members and community participants. The creative and experimental 'methods' used by these projects, like exploratory 'prototyping' and 'detectorism', do not promise straightforward means to an end, but rather direct attention reflexively to the *processes* of exchange and ideation, critique and disagreement that proceed from a 'leap of faith' at the start of a co-design project (Cruickshank et al. 2010, 50).

Rather than evaluating a co-design project solely in terms of its 'end' via pre-established metrics and indicators, this invites discussion of what project success comes to look like in practice, time and again, given the challenges, possibilities, concerns and other factors that participants find themselves 'up against'—their collective and situated sense of "how to bring it about from a here-and-now future[s]" (Garfinkel 1967, 97). As a "community of practice", designers and participants make their shared project "answerable to the distinctive interests" introduced by members in and as their work together (Goodwin 1994, 606). This results in a form of collective 'vision', in which members hold each other accountable to—and thereby create and contest—the 'proper perception' of their activities and surroundings (Goodwin 1994). This proper vision is not defined a priori, but is shaped and evaluated along the way as participants attune to one another's voiced interests in variously receptive, constructive or confrontational ways.

Within a co-design project, the diverse participants and designers, by virtue of their work together, must also develop some kind of shareable 'project vision'—practices and criteria for understanding and evaluating their activities together. This makes the question of 'good' design an ongoing and open-ended question to which *all* participants might offer evaluations: recognising the plurivocality of evaluation that shapes a co-design project commits evaluation to future-facing questions. In the following section, we reflect on some of the challenges and possibilities for reconceptualising formal project evaluation within a critical framework that connects ethnomethodological attention to the ongoing, local accomplishment of 'community', with theories of co-design that reconceptualise the 'projectness' of projects: rather than providing a conclusive evaluation of our own methods, we aim to recount the processes of mundane and practical evaluation that drive co-design. By framing methods as *spaces of evaluation*, we suggest a pivot away from understandings of methods and projects as means-to-an-end and toward their use as open-ended, situated occasions for learning how to work and think together with others.

## The Future of the High Street - A Case Study

The Future of the High Street was a six-month urban design project that combined citizen engagement and co-design with urban data and research to identify, discuss and respond to challenges facing high streets during and following the Covid-19 pandemic. Due to the short time-frame and uncertain pandemic conditions, the project focused on small-scale rapid prototyping of ideas and a flexible, dialogical approach to decision making. A project team within the Edinburgh Futures Institute at the University of Edinburgh led the research and data-driven insights, including two Public Life Studies to contribute spatial insights into project decision making and pilot assessment, regular public-facing blogs, monthly Advisory Board meetings, and project reporting. The research team adapted Jan Gehl's tools for surveying public life to

produce base-line reports for local organisations and government, and which enabled comparable results when the prototypes were in place (Gehl and Svarre 2013). Community engagement and design work conducted by New Practice architects included workshops and youth activities via a co-design process to refine a toolkit of six 'high street tweak' ideas responding to common high street challenges and opportunities identified in collaboration with stakeholders (see Figure 1). Two low-cost, short-term pilots tested two of these ideas on two different high streets, leading to plans for long-term interventions in each area, including public seating and a 'tactical urbanism kit' resource library.
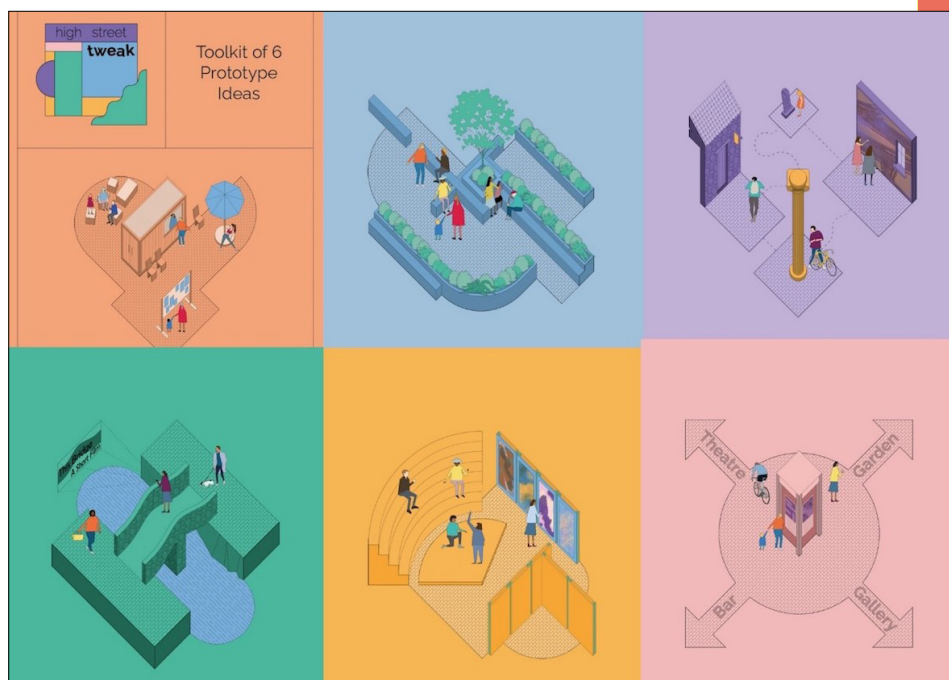


Figure 1. Toolkit of 6 ideas for small scale interventions to tackle common high street challenges, developed through digital co-design workshops, surveys and conversations with local businesses and other stakeholders.

Evaluation was a key interest from project inception, as a way to reflect on and course-correct decisions while the project developed — with the aim of improving outcomes and impact. To do this, we developed an evaluation framework built around five continually evolving indicators and an adjustable list of possible metrics derived from comments, suggestions, concerns and values that participants offered throughout the project, a process that we referred to as Collaborative Evaluation. In the following sections, we examine three of our methods for co-design as *spaces of evaluation*. Looking closely at the processes involved in these methods, while reflecting on Manzini's conceptualisation of projects as 'environments' and Suchman's attention to 'located accountabilities', can help show how participants' mundane evaluations of projects contribute to and productively challenge formal evaluation practices, opening up space for more flexible, dialogical and ongoing methods of evaluation in future co-design projects.

### The Prototypes: Evaluating objects of co-design

At the project's heart was the design of six prototype ideas, and the construction and temporary installation of two of these as pilots for possible long-term project legacy. Through a public survey, youth engagement and online workshops, the design team facilitated a process of co-design with local stakeholders and business owners to understand their perceptions and inform the realisation of pilot prototypes. In this sense, the prototypes were what Ehn (2008, 94) calls "design devices", which enabled various shared "design-games" between designers and participants. Workshop conversations and discussion involved a great deal of evaluation of both prototype ideas and the co-design process, with participants expressing opinions about whether the engagement process was open, participatory or democratic enough and why.



Figure 2a. Prototypes: Tactical Urbanism Kit pilot in Dalkeith

Figure 2b. Seating pilot in Gorgie-Dalry (image credit: Jenny Elliott)

Figure 2c. Window Illustration pilot in Gorgie-Dalry (image credit: Julia Brookfield)

The prototypes enabled spaces of co-evaluation as the participants came to terms with each other and with the expressions of identity, relation, affiliation, experience and opinion that they brought to bear on the project. The prototypes also provided context for shared evaluations when trialled in the street, serving as attention-grabbing street-side engagement opportunities, allowing the design team to share project information with passers-by and solicit their opinion (see Figures 2a, 2b, 2c). By conducting one of the PLS research days concurrently with the pilots' installation, the research team also observed a far wider range of reactions – serving as practical evaluations of the prototypes' presence within the high street's public space. When a family sat down on one prototype bench, researchers recorded the positive assessment of the bench based on its use—the decision that it was a desirable and usable place to sit. Conversely, when interviewing another passer-by, her response that the prototypes "were a nice start" introduced a degree of scepticism, followed by criteria that would persuade her of the project's value: if the benches were more stable, if placed in a nicer location further from traffic, if more of the street were pedestrianised so that it wasn't so loud.

Installed publicly, the pilots provided bases for spaces of evaluation to develop between the project team and local residents—common criteria and experiences with which to reason through the final development and delivery of the prototypes. Even though these final stages were necessarily managed by the design team without direct engagement with residents, the criteria proffered during the trial enabled a process of co-evaluation to continue. The design team aimed to maintain accountability to the *collaborative* nature of this evaluation work by providing brief 'idea histories' alongside each prototype in their online toolkit: to communicate how that idea came about and to be selected as a 'good' one dialogically with local residents. The interviews, participant observation and other

research activities did not gather a range of 'objective' facts about the high streets and their communities, but rather facilitated situated and collective reflections that supplied a workable grammar for subsequent study and development of project prototypes.

### *The Advisory Board: Evaluating projects of co-design*

The Advisory Board was a series of monthly meetings between project team members and a group of practitioners and public space professionals engaged in related work from over 20 other organisations. Participants were provided with regular updates on project progress and invited to offer feedback, raise questions or express concerns, as well as deliver presentations about their own work connecting with various monthly themes, such as evaluation and digital engagement (see Figure 3). The Advisory Board was thus a space for discussion about the project, but also provided opportunities for the exchange of ideas, tools and resources relevant to the members' other work: enabling the formation of a broader community of interested individuals who could respond to and evaluate project progress.
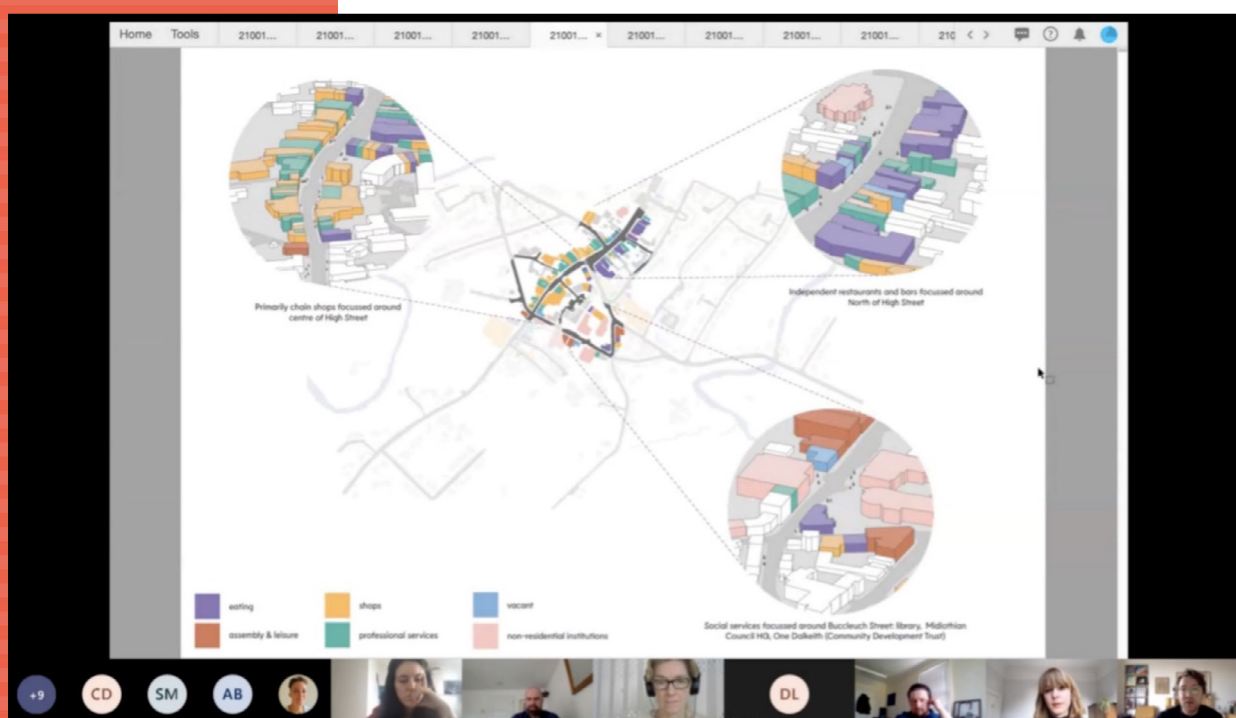


Figure 3. Presentations and discussion at the monthly Advisory Board meetings

The Advisory Board was a key site for experimenting with the generation of working indicators and metrics to use in our final Evaluation. By documenting and recording points raised and decisions queried, we assembled factors that we could use to examine and appraise the successful design of prototypes, workshop results and other findings. Rather than taking these indicators as final and definitive proof of the success (or not) of

the project, they served as useful ways of seeing aspects of the project and raising questions about whether anything should or could be done to address a particular concern. For example, when one Advisory Member posted that a successful project would involve acknowledging "those who weren't in the room", this became a useful point for shifting the frame of understanding about how engagement should take place when online workshops wound up with fewer participants than hoped. The project team studied previous consultations and surveys to connect the project's findings and reasoning with opinions and observations offered by community-members beyond the project, often collected via alternative in-person methods not possible for our project at the time given pandemic restrictions. As a working indicator of success, the project team used this criterion as something by which to recognise successful project traits and 'good co-design' in their own decision making, in this case by making their own co-evaluations accountably located in a wider ecology of consultation and evaluation in the local communities.

Likewise, the Advisory Board played an important role in putting our own criteria of evaluation in conversation with those developed by other contemporary co-design projects. Rather than focus solely on the Future of the High Street project, members were also invited to present their own work, allowing us to learn from and alongside their own experiments in developing co-evaluation methods. For example, a presentation from members of CoLab Dudley proved a fruitful occasion to share not just evaluation criteria, but also the processes and experiences that fed into their co-creation with local communities. CoLab Dudley use a 'principles-focused evaluation' approach to respond to the changing, dynamic needs and interests of local communities instead of pre-defining rigid evaluation criteria; their 'GUIDEing principles' are intended as adaptable and negotiable points of reference for team members and community to respond to (Prescott 2020). Discussions about commonalities and differences between the projects, such as a shared interest in mixed-methods approaches or significant differences in project duration, were crucial, situated negotiations of how lessons could be learned between communities in dialogue with other members and stakeholders. Thus, as a 'live' conversation throughout the project, such conversations allowed the team to critically review other contemporary projects in response to particular local questions and challenges—to put the values and principles of different communities in conversation with one another rather than 'parachuting in' prescriptive criteria 'out of nowhere'.

In this vein, the Advisory Board also served an unexpected role as a space of evaluation when it became a meeting that other potentially interested parties could be invited to attend. This included members of local organisations and government bodies, as well as other designers working on similar projects. Not every individual invited ultimately attended Advisory Board meetings, but the *invitation* to attend became a useful technique for managing the project's relationship with others beyond the traditional group of designers and workshop participants. Thus, having the Advisory Board as a

resource for organising and sharing the project also enabled spaces of evaluation to develop when interested parties gave their reasons for attending (or not). The Advisory Board facilitated co-evaluation of specific questions and possibilities within the project, but also about the project's relationship to external organisations and other projects. It became a way for practitioners to assess to what extent their interests, priorities and work aligned—whether they could work together within this project or on future ones.

### *Backwards Flow-Diagram: Evaluating experiences of co-design*



Figure 4a. Initial sketch by Project Lead (Jenny Elliott) of the Backward Flow Diagram



Figure 4b. Final illustrated version of the Backward Flow Diagram (illustration by Victoria Rose Ball)

The 'Backwards Flow-Diagram' (see Figures 4a and 4b) was an effort to trace back the processes, key decisions, challenges and other factors that shaped project outcomes. As one team-member put it, the diagram was a way to show and share "the story of how we got to where we are". The project team decided such a diagram would be useful for explaining how different project activities, insights, threads of stakeholder conversations and other events fed into the project process and decision making. As a reflexive document, the diagram is a way of 'locating' the project's accountability (Suchman 2002) by sharing and situating decision

processes with other interested parties: it shows what the project's process and success 'looks like' to the project team in the context of emergent problems and surprising opportunities (Garfinkel 2002, 202). Thus, in the diagram, challenges like the unexpected introduction of a second UK lockdown provide *accountable* commentary on subsequent adjustments to prototype design and a shift toward investing in long-term project legacy—like pilot-testing locations for new public benches—over short-term project deliverables. Likewise, the diagram demonstrates how the idea for more public seating is linked to the stakeholder-engagement workshops where the idea was first suggested: public seating is presented accountably as a shared and collaborative 'good idea'. In this way, the diagram also demonstrates how the project as a whole was assembled as ongoingly evaluated, *situatedly* good co-design. Nonetheless, while some factors like the lockdown were easily represented, the team had to discuss others more carefully to find a summary that they were content with.

"I don't know how you capture pessimism," one designer quipped as the team discussed the reasons for deciding against one prototype idea proposed during workshops. "My first thought on hearing it was 'Aw, not really a good idea'." As the conversation continued, the designers shared several reasons why the particular idea was not feasible despite popularity with some participants: poor value-for-money; little potential for longer-term legacy; bad experience on previous projects; incompatibility with Scottish weather. "I can attach all these rationalisations to it," he shrugged, going on to explain that they nevertheless only offered a rough sketch of his initial *sense* that the idea wouldn't work well. However, *by* attaching these rationalisations in the diagram, the designer provides a rough sketch of his reasoning in terms of the kinds of criteria that both he *and other project participants and stakeholders* shared for evaluating project decisions. The document thus becomes a practical tool not because it 'proves' that the project is a successful instance of 'good co-design', but because it circulates publicly a grammar of criteria—a common language that can be used to corroborate, contest or critique the team's rationale behind decision making, and claims about the project's success.

As a practical tool—and challenge—for sharing their own understandings of their project's good co-design with a wider public, the Backwards Flow Diagram creates a space of evaluation in which the project team work out together how to evaluate their project for public scrutiny. The benefit of thinking about the Backwards Flow-Diagram as a space of evaluation does not, however, come from treating it as a static representation of the design process: rather, in doing the work to make an accurate and sufficiently detailed "local history" of the project as a *practical* concern, the project team undertake the reflexive task of making explicit their own senses of "good enough" justification, "sufficient" detail and "workable" summaries. Additionally, subsequent circulation and discussion of the document can enable further practical evaluations if used by others to work out how to do co-design well in other contexts. It

is the practical utilisation of the document to think about this and other projects that makes it a notable space for evaluation, and which shows how the terms of 'good co-design' come to be defined and shared by communities that extend beyond participation in a given project.

## Conclusions

Each of these examples illustrates one type of situated *space of evaluation* in our project and the practical work our community of designers and participants did to find ways of working together. While prototypes, the Advisory Board and the Backwards Flow-Diagram are themselves formal methods that, we hope, other designers may borrow and adapt in their own work, sharing stories about their situated use throughout the project highlights ways in which we have tried to root our own formal project evaluation in the mundane evaluation practices that participants used to coordinate their own shared 'vision' of project success. This learns from Law's critique of linear and monological 'projectness' by reconceptualising formal project evaluation itself as an interactive and *forward-facing exercise* through which a project's community may work and communicate with others. Rather than treating methods as 'short-cuts' (Law 2004, 10) to a good design project, we consider the ways in which participants *use* methods to create spaces of decision making and co-evaluation: how they identify and work on better possible futures together.

The concept of *spaces of evaluation* aims to show how designers and participants can and do form shared grammars of accountability and justification in and as their shared work of making and thinking together. Rather than advocating our specific techniques or collaborative evaluation framework, we hope this serves to spur discussion among designers about the practical work of making formal project evaluations accountable to the mundane evaluations we conduct with communities along the way—and critical reflection on the ways that we account for the reasoning behind our decisions. These examples illustrate something we may know intuitively, but often gloss over: participants, passers-by, acquaintances and strangers make their own evaluations of our projects, forming their own conclusions about what makes participation "meaningful" or impact "successful". There is need for further discussion in co-design about how to transform formal project evaluation—too often seen as the end of a project—into a useful space of co-evaluation for ongoing and future collaborations.

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