



Participatory utopian sketching: A methodological framework for collaborative citizen (re)imagination of urban spatial futures

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ABSTRACT

Explorations of emerging urban spatial futures increasingly depend on the empathetic interweaving of broad political ideals with grounded democratic involvement. The collaborative planning paradigm (CP) and participatory action research (PAR) have thus gained traction globally, since they centralise meaningful involvement of those with lived experiences of the local environment. Building upon this, we argue that ‘utopia’ can offer an alternative paradigm that enhances citizen engagement, by refocusing urban design and planning explorations away from a problem-based orientation to a values-based one. Through a four-stage collaborative framework: 1. Experiencing the Space, 2. Sketching of Utopias, 3. Sharing of Utopias, and 4. Collaborative Analysis, *participatory utopian sketching* offers the possibility for richer and wider citizen engagement in urban development processes. The novelty of the framework is its tenets of collaboration, citizen inclusivity, playful experimentation, and iterative reflective activity. Its flexibility also allows for multiple real-world applications in the making of urban spatial futures. We demonstrate the methodological framework of participatory utopian sketching using an empirical pilot study examining the spatial imagination of solar panel futures within a neighbourhood located in Luleå, the provincial capital of Northern Sweden. Thereafter, we provide elucidations on the framework’s opportunities and challenges in wider urban design and planning discourse.

1. Introduction

Designing and planning for urban spatial futures is a complex and multifaceted process that requires the utmost care and sensitivity towards its situated contexts. The collaborative planning paradigm champions an urban planning process that centralises citizen engagement in order to produce inclusive urban spaces. Many have argued, however, that collaborative planning has not been effectively put into practice and does not necessarily embody the ideals that it sets out to achieve (e.g., [Bobbio, 2019](#); [Kahila-Tani,](#)

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Broberg, Kyttä, & Tyger, 2016). Within this paper, we learn from past collaborative planning (CP) efforts and the field of participatory action research (PAR) to present an alternative approach to inclusive citizen engagement. Both of these fields centralise the learning from citizens and the community; an epistemological endeavour that supports bottom-up learning of values that are considered important to the situated context. Thus, building upon such empathetic learning and social engagement from the local context, we argue for a novel process that targets richer and wider citizen engagement in the making of urban futures.

The novel methodological framework, called *participatory utopian sketching*, is conceptually rooted in a utopian framework that champions an imaginative and speculative way of forming futures that challenges citizens to question, “the kinds of people [they] want to become and [the] different forms of society [they] will promote or inhibit,” (Levitas, 2013, p. xviii). The interdependent stages of participatory utopian sketching consist of: 1. Experiencing the Space, 2. Sketching of Utopias, 3. Sharing of Utopias, and 4. Collaborative Analysis. We argue that the main strengths of the framework are collaboration, inclusiveness, playful experimentation, and iterative reflective activity. The framework is based on the opportunities presented by meaningful collaborative practices of experience-based learning, experimentation, interpersonal sharing, and reflective thinking, which are all further expanded upon in the subsequent sections. The methodological framework is tested and explained using a pilot study that explores solar panel futures in the neighbourhood of Porsön, in the city of Luleå, which is the provincial capital in Northern Sweden. The pilot study, framed as a citizen engagement workshop, exemplifies a methodical application of utopia, situated within a wider framework of inclusive urban planning.

Drawing upon fields of ethnography studies, design research and urban planning theory, the paper offers supporting arguments for the participatory utopian sketching framework. The paper also contends that the framework’s core tenets of collaboration, inclusiveness, iterative reflective activity, and playful experimentation could motivate an important shift in urban planning mindsets today; moving from a problem-based exploration of solutions to one based on collective values. The paper culminates in a discussion of potential opportunities and challenges with the methodological framework, emphasises its practical implementation and implications, and offers avenues for re-conceptualising how collaborative planning is conducted today.

2. Lessons learnt from collaborative planning (CP) and participatory action research (PAR)

Collaborative planning (CP) is a paradigm utilised by cities globally to build public participation and consensus in the complex decision-making processes of shared urban spaces (Purbani, 2017). The paradigm focuses on local public engagement and empowerment through the co-creation of innovative outcomes, together with building institutional capacity (Healey, 2006; Innes & Booher, 2004). Historically, urban approaches have shifted from, “planning *for* the people, towards the planning *with* and *by* the people,” (Ashtari & de Lange, 2019, p. 70). Arnstein’s ladder of participation (1969) inspired a fruitful debate about collaborative engagement in urban planning, which remains relevant to this day (Booher & Innes, 2002; Healey, 2006).

Throughout the 1990s and 2000s, as ‘collaborative governance’ spread across Europe, the core components and processes of the paradigm have been critiqued and developed (Healey, 2003). How can inherently top-down operations result in approaches that are truly collaborative when put into practice in society? At what stage(s) in the urban planning process can activities be legitimately collaborative? Where does responsibility and power lie when determining a sufficiently collaborative process? Upon close examination, the practice of collaborative planning has often failed to reflect the inclusionary qualities of a theoretically participatory and inclusive process (Ashtari & de Lange, 2019; Healey, 2003, 2006).

To date, many cities around the world use a variety of conventional participatory planning methods, such as citizen dialogues, public information sessions, and open town hall meetings (Ashtari & de Lange, 2019). However, there is contention whether these methods provide an effective arena for, “meaningful dialogue, citizen-to-citizen connection, and interactive engagement,” (Ashtari & de Lange, 2019, p. 70). It is argued that these methods are used solely as, “endgame[s] that fulfil participation requirements,” (Kahila-Tani et al., 2016, p. 196). Thus, although participatory public involvement appears to be a sort of “mantra” within the urban planning practice (Hoppe, 2011, p. 163), evidence of true collaboration remains scarce (Bobbio, 2019).

In a similar field of knowledge, participatory action research (PAR) has been historically utilised to capture knowledge and experiences of a subject in a grounded manner, i.e., learning from those who have lived experiences of a context and space. Since the late 1970s and 1980s, models of PAR have followed a variety of principles, methodologies, epistemologies, and characteristics (McIntyre, 2008). However, there are two foundational tenets that inform a majority of PAR projects which, according to Kemmis, McTaggart, and Nixon (2014) can be characterised as follows:

- (a) Recognising the capacity for the people involved within the specific context to actively participate in all stages of the research process;
- (b) Orientating the research towards a bottom-up approach where the participants are not only involved in, but also navigate and lead, the improvements in their practices and environment. This shift in power and responsibility towards the participants is often regarded as a source of empowerment.

These two core values have much to contribute to re-energised versions of modern day applications in CP. Learning from PAR, CP has the opportunity to place knowledge and experience of those who live within the context and space in question – whom Meroni (2007) calls “professionals of the everyday” (p. 9) – front and centre. Situated knowledges (see Haraway, 1988) and experiences provide invaluable input into the urban planning process; these can be considered necessary foundations upon which latent forms of understanding (i.e. implicit values, meanings, biases and assumptions) are built. A context serves as a platform for the production of lived experiences and tacit knowledge – and when critically engaged in a dynamic and creative socio-material setting (e.g., a workshop), experts and non-experts alike can more tangibly reflect upon what future practice-based interventions could be.

Following the hermeneutic tradition, PAR attempts to build upon findings in an evolving and iterative fashion (Susman & Evered, 1978). Susman and Evered (1978) propose five key stages of PAR: “diagnosing, action planning, action taking, evaluating, and specifying learning,” (Susman & Evered, 1978, p. 588). PAR endeavours to improve the understanding of a phenomenon by both ‘iteratively reflecting’ upon the outcomes of the different stages of action, and also by deliberating over the meanings behind these outcomes within an environment of extraneous restrictions (Carr & Kemmis, 1986; Scholl, 2004). PAR and CP are alike in that both appeal to the subjective experiences of certain groups in question to gain deeper insight on matters. By drawing upon the combination of ethnography studies, design research, and urban planning processes, we argue that placing these subjective experiences in the forefront of discussions about future spatial development can provide a sense of meaning and ownership for, and over, citizen engagement.

Fig. 1 provides a simplified pedagogical diagram of the overlap between CP and PAR, where the light grey area and text indicate traits of practical implementation where the two paradigms are similar. Informed by a wealth of existing literature – ranging from frameworks such as the five-stage iterative cycle by Susman and Evered (1978) for PAR, and Sherry Arnstein’s *Eight Rungs on a Ladder for Citizen Participation* (1969) for CP – we identified four foundational tenets shared between the two: experience-based learning, experimentation, interpersonal sharing, and reflective thinking. Understanding the relationship between CP and PAR provides insights into the fundamental processes that drive empathetic learning and social engagement – which, as we will see, are carried forward as core tenets of the participatory utopian sketching framework. Thus, an assessment of existing literature between CP and PAR offers valuable insights: the opportunities and challenges of learning from local narratives and lived experiences (e.g., Klocker, 2015; van der Riet, 2008), experimentation through active hands-on intervention (e.g., Bosman, Hammoud, & Arumugam, 2019), tensions between liberation, power and identity in group contexts (e.g. Datta et al., 2015; Hawkins, 2015), and network identity and interconnectedness (e.g., Booher & Innes, 2002; Innes & Booher, 2004). Understanding this, we believe, will reveal central tenets that could contribute to the creation of a nuanced methodological framework that encourages wider and richer citizen participation – in other words, the creation of the participatory utopian sketching framework.

Previous studies have discussed the volatility of CP and PAR knowledge when operationalised in practice, which relies on site- or topic-specific knowledge, and discrete and isolated engagement events (e.g., town hall meetings, public feedback and dialogues) to allow this exchange of knowledge to occur (e.g., Chilvers, Pallett, & Hargreaves, 2018). Such isolated events tend to attempt to capture deep and meaningful information within a short period of time, thus, their forms and structures are critical. In order to configure a truly open, deliberative and democratic citizen engagement process, it is necessary to explore different forms of material experimentation, embodiment of values, emotion and affect, as well as the nature of participants’ interactions (Davies, Selin, Gano, & Pereira, 2012).

3. Utopia as an approach to citizen engagement

Borrowing from the field of design research, the concept of utopia has long been utilised as a paradigm for imagining future or alternative states of artefacts and environments by both expert designers and non-experts. In their book *Speculative Everything*, Dunne and Raby (2013) indicate how utopia, speculation, social dreaming, imagination, and risk-taking through experimentation provide a platform on which people can coalesce, challenge and co-create around different ideas. Dunne and Raby (2013) present the idea of the ‘preferable’, whereby amid exploring the possible, the plausible, and the probable, socially constructed imaginary futures could garner the involvement of citizens in societal journeys towards visioning preferable futures.

In sociology, Levitas (2013) similarly expands on utopia in her book *Utopia as a Method*, where she offers a holistic variety of

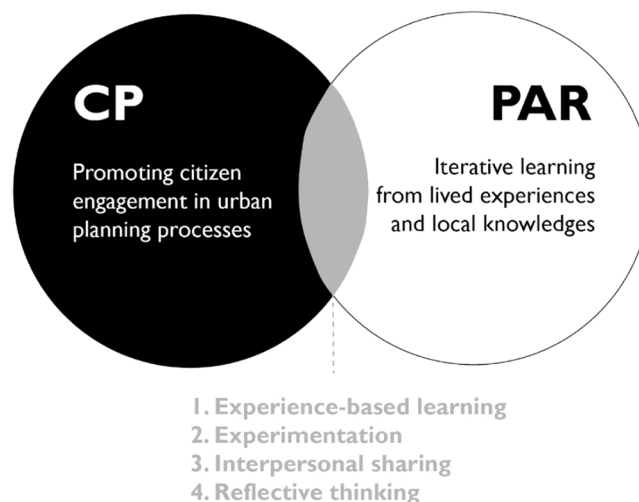


Fig. 1. A proposed relationship between CP and PAR to ascertain tenets for an improved approach towards wider and richer citizen participation in urban planning.

Source: Authors’ own visualisation.

expansions on different forms and functions of utopia as a concept in the social world. Significantly, she moves past binary and superficial utopian/non-utopian labelling, and instead legitimises utopian thinking as “powerful mode of critique” (Levitas, 2013, p. 155) and intrinsically relational in its application:

“Utopia does not require the imaginative construction of whole other worlds. It occurs as an embedded element in a wide range of human practice and culture – in the individual and collective creative practices of art as well as in its reproduction and consumption. Utopian method here is primarily hermeneutic. We can explore culture (in its broadest sense) for its utopian aspects, its expression of longing and fulfilment,” (Levitas, 2013, p. 5).

Utopia as an analysis of culture encourages a disruption of the “taken-for-granted nature of the present,” (Levitas, 2013, p. 4). It therefore offers the opportunity to explore alternative configurations of needs, wants and satisfactions, as well as the agents of change that can mobilise them. In relation to urban planning, utopia as an approach offers the opportunity for a bottom-up learning of so-called “shop-floor experiences” (Ehn, 1993, p. 46) in an open and empathetic way. A collaborative creation of utopias through community visions and desires can be deeply analytical and hermeneutic. This is because the collaborative designing of utopias entails a process of uncovering and learning values and goals that feed into local visions (Smithers, 2002). Experimenting with utopias can be considered intrinsically anticipatory, as it involves the capacity to generate place-based design solutions, in anticipation of a congruence between the design solution and the motivating factors of individual and group needs and desires (Zamenopoulos & Alexiou, 2020). The framework of participatory utopian sketching encapsulates the essence of utopia as a method; we can move from sociological abstraction to methodological practice of utopias to discover ways to achieve spatially-informed human flourishing (Levitas, 2013).

In practice, however, utopias can be difficult to operationalise because the “viewer already has to be open to imagining other ways life could be,” (Dunne and Raby, 2013, p. 91). Dunne and Raby (2013) thus provide us with apt methodological advice on how to successfully practise speculative futures, “... rather than trying to convince the viewer that [the] ideas are “real”, learn to enjoy the unreality of speculation and the aesthetic opportunities it creates,” (p. 134). Many applications of a utopia-oriented approach require such embedded reflexivity, and the implications of this is problematised later, in Section 6.

Fig. 2 expands upon Fig. 1 and offers utopia (in grey) as a framework boundary in which the aforementioned learnings between CP and PAR can be positioned. Utopia offers an alternative approach that has been heretofore explored less frequently, yet is widely relevant for the evolving nature of collaborative citizen engagement in urban planning. It builds upon and mobilises the existing opportunities presented by CP and PAR, while also shifting urban planning approaches away from a focus on problems and towards value creation instead, through an iterative process of collective experience, joint experimentation, mutual sharing, and reflective collaborative analysis. Given the above, the concept of utopia provides a suitable foundation to the emergence of the methodological framework of participatory utopian sketching.

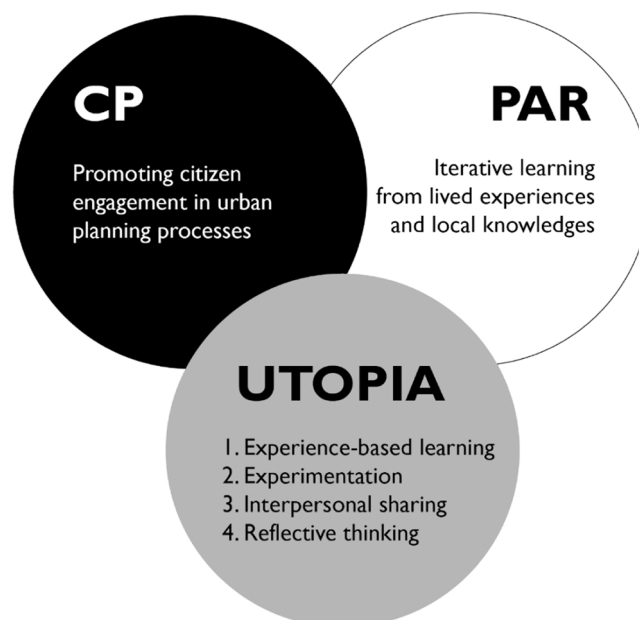


Fig. 2. The foregrounding of utopia in participatory utopian sketching as an alternative approach to citizen engagement, building upon tenets of CP and PAR.

Source: Authors' own visualisation.

4. Why sketching?

Sketching is integral to the framework of participatory utopian sketching for several reasons that will be covered in this section: namely, for its accessibility in comparison to digital tools, for its ability to enable playfulness, and for its proven capacity to support dialogue, ideation, and the verbalisation of ideas.

The use of digital technology has been frequently proposed to improve collaboration and enhance citizen involvement in urban design and planning processes (e.g., [Ashtari & de Lange, 2019](#)). Some examples of digital tools include participatory GIS mapping for citizens ([Kahila-Tani et al., 2016](#)), Mixed Reality (MR) tools that can digitally envision possible futures according to public feedback ([Sareika & Schmalstieg, 2007](#)), and even digital sketching programmes that aid in the visualisation of ideas ([Hsiao et al., 2013](#)). These programs are intended to explore and facilitate a more inclusive public participation process, in an attempt to democratise otherwise predominantly top-down traditions of urban design and planning ([Theobald & Shaw, 2014](#)).

Counter to their emancipatory promise, however, digital participatory tools can limit inclusivity if users are not familiar with, or cannot access, the technology interface ([Dijk, 2005](#)). Known as a digital divide, this can manifest in multiple levels of society, and often occurs at the confluence of intersectional inequalities surrounding class, gender, disability, race and more ([Dijk, 2005](#)). Unfortunately, this often results in certain groups having fewer opportunities to participate in an increasingly technologically mediated society ([Servon & Nelson, 2001](#)). Furthermore, these digital tools are often rigid in their use and lack the capacity for creative flexibility – in that the user is often unable to transcend their prescribed “role” within the tool. Lastly, the technology that these digital tools operate through can be costly, further hindering their potential for widespread use and accessibility.

For these reasons, we propose the refinement of a simple yet powerful – perhaps somewhat forgotten – non-digital approach in the urban design and planning process. To overcome issues of digital inaccessibility, we propose sketching as an alternative tool which can be more creative and inclusive than using digital approaches. Historically, sketching in a group has been found to act as a conduit to facilitate meaningful dialogues and communication within design processes ([Öhrling, Holmqvist, & Håkansson, 2012](#)), akin to those that occur in urban planning (i.e. co-designing with citizens in municipal planning, and intra- and inter- organisational planning for new urban developments). Earlier studies have shown how the process of sketching aids in the visualisation of problems, where externalised representations of ideas support subsequent feedback, dialogue and concept generation phases ([Schütze, Sachse, & Römer, 2003](#); [Van Der Lugt, 2005](#)). Furthermore, the process of sketching has also been shown to be intrinsically linked to creativity, where sketching entails a subjective interpretation of an artefact or environment through the mental processes of ‘combining’ and ‘restructuring’ ([Verstijnen, Hennessey, Van Leeuwen, Hamel, & Goldschmidt, 1998](#)). Intimate links between cognition, perceptual processes, sketching, and the sketch output itself have been identified ([Kavakli, Scrivener, & Ball, 1998](#)).

Concerning the application of sketching to the wider urban realm, sketching facilitates communication and expression of an individual’s cognitive understanding of urban spaces ([Carr & Schissler, 1969](#); [Lynch, 1960](#); [Wong, 1979](#)). Individuals tend to identify elements or features in the urban landscape and join these features together to form a holistic ‘picture’ of reality ([Huynh, Hall, Doherty, & Smith, 2008](#)). These interpretations of the urban space indicate features that are most familiar or meaningful to individuals, which can help urban planners understand how locals navigate and understand their own city ([Heath & Chapman, 2018](#)). Sketching, in these cases, acts as a tool for understanding a shared social landscape, which is complementary to the more frequently used ways of generating talk and text ([Heath & Chapman, 2018](#)). Furthermore, previous research in participatory sketching, such as within a ‘sketchcrawl’ ([Heath & Chapman, 2018](#)), has shown that sketching in a group can lead to interesting discussions of perspective, interpretation, and gaze ([Heath & Chapman, 2018](#)), which can promote an informal and relaxed atmosphere where democratic dialogue can occur in a playful way.

Relatedly, studies on playful participation (e.g., [Glas, Lammens, de Lange, Raessens, & de Vries, 2019](#)) or playful citizenship (e.g., [Poplin, 2012](#)) champion *playfulness* as an aspect to support ‘imaginative worldbuilding’, through actively considering how “it could be otherwise” ([Ashtari & de Lange, 2019](#), p. 77). Thus, sketching playfully is to sketch freely, imaginatively, and bravely – not necessarily to be good at it ([Öhrling et al., 2012](#)). When done collectively, the explicit claims and insinuated framings of these sketches may reveal matters that are relevant and pressing, possible or inevitable ([Konrad & Böhle, 2019](#)). Context is important, however, as sketchers themselves must be open-minded, curious, and empathetic, when sketching collaboratively and learning from others. Thus, experimentation through sketching often leads to dialogue, and the realisation that urban issues are tangible challenges that citizens have the capacity to “take real actions on” ([Ashtari & de Lange, 2019](#), p. 77).

Playfulness in sketching has also been claimed to open the urban planning process to children, a group often considered marginalised in several sectors of society ([Clark, 2010](#)). Children’s variable communication abilities may be understood as a barrier to inclusion by some, and research practices must be reframed to actively include children in the research process – rather than ‘do research on them’ – in order to build holistic knowledge-building and meaning-making ([Clark, 2010](#)). Sketching has been successfully operationalised in research processes as a means to overcome communication difficulties with children ([Clark, 2010](#)). Positive viability in certain research studies indicate that drawings have allowed for practitioners, researchers, and parents to gain insights into children’s perspectives, thereby opening up conversations which have hitherto been unexplored ([Clark, 2010](#)).

When combined, the playful, inclusive, creative, and pedagogical aspects of sketching put it at the forefront of non-digital approaches that can facilitate richer and wider citizen participation – and is therefore why the act, and process, of sketching is centralised in the participatory utopian sketching framework. Further than sketching, the participatory sketching framework also offers additional flexibility and versatility that sketching alone does not offer (see [Section 5.2](#)). For this reason, we argue that participatory utopian sketching as a framework, and utopia as an approach, offers a highly accessible opportunity for citizens – of all ages, and across intersectional inequalities – to be actively engaged in the urban research process.

5. Participatory utopian sketching: a four-stage methodological framework

The potentialities of utilising futures in informing policy-making processes are abundant (van Dorsser, Taneja, Walker, & Marchau, 2020) and our novel framework of participatory utopian sketching offers an imaginative and future-oriented design intervention that is reflexive and inclusive. We argue that participatory utopian sketching offers an arena for inclusive collaboration, playful experimentation and iterative reflective activity that is low cost, accessible, flexible, and permits a bottom-up learning of values. Occurring at an early stage of urban (re)development, the four-stage framework harnesses pre-existing local knowledge and networks, as well as motivates proactiveness within communities to support wider collaborative planning efforts.

To reiterate, the mutual tenets between CP and PAR, as offered in Figs. 1 and 2, are experienced-based learning, experimentation, interpersonal sharing, and reflective thinking. Participatory utopian sketching builds on these tenets using a four-stage framework (see Fig. 3):

1. Experiencing the Space (representing the need for embodied collective experiences),
2. Sketching of Utopias (representing the need for joint experimentation with novel, imaginative, and provocative ideas),
3. Sharing of Utopias (representing the need for engaged dialogue that is inclusive),
4. Collaborative Analysis (representing the need for a reflective analysis beyond the individual – opening up for the possibility of emerging collaborative knowledge).

The stages cannot exist independently from one another; a novel aspect of the framework thus lies in its interdependence and interconnectedness between the stages. Each stage feeds into the next, and it is through this iterative reflection cycle that in-depth and meaningful findings emerge.

Reflective thinking permeates all four stages of participatory utopian sketching via an ‘Iterative Reflection Cycle’ (see Fig. 3). This is informed and supported by Donald Schön (1983)’s argument that the act of doing and thinking are inseparable. The notion of “reflection-in-action” is explained as, “[d]oing extends thinking in the tests, moves, and probes of experimental action, and reflection feeds on doing and its results. Each feeds the other, and each sets boundaries for the other,” (Schön, 1983, p. 280). Thus, reflective activity (both solitary and collaborative) forms the backbone of the entire framework – not unlike the iterative reflection cycle also seen in PAR. The ‘iterative’ component is fundamental to reflective activity, since reflective conversations and their consequent enlightenment leads to the constant framing and re-framing of problems (Schön, 1983). The simultaneous act of *doing* with materials, in parallel to *thinking* in the social world, often results in the situation ‘talking back’ and providing new meaning. This contributes to a spiralling process of appreciation, action, and re-appreciation (Schön, 1983) – “[t]he unique and uncertain situation comes to be understood through the attempt to change it,” (p. 131).

The participatory utopian sketching framework is rooted in qualitative and context-driven epistemology. The framework described in the coming sections is positioned as a guide for researcher-facilitators (i.e., researchers acting as workshop facilitators) to operationalise. While we are aware that the central role of researcher-facilitator(s) is to initiate and navigate the participant group through the different activity stages, we argue that the emerging knowledge created is still fundamentally collaborative – in other words, co-created (Sanders & Stappers, 2008). Several steps are taken to ensure the essence of collaboration, and these are described in the different stages. On a practical note, it is important that there are several researcher-facilitators that carry out the workshop, such that clear roles can be allocated to the different facilitators (e.g., one or two who lead the workshop, and one or two to document data). Outside the scientific research community, urban designers and planners interested in citizen engagement tools may also utilise the framework for urban redevelopment processes. Therefore, the guide offers clear, practical steps for both urban practitioners and researchers to follow.

We describe the four-stage framework with the support of a pilot study conducted in Porsön, a neighbourhood with approximately 5500 inhabitants, in the Swedish city of Luleå (Luleå Municipality, 2019). The pilot study took the form of an exploratory workshop,

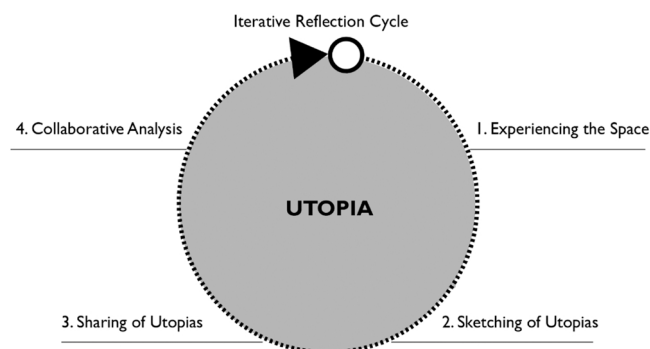


Fig. 3. Participatory utopian sketching as a framework with four assigned stages, guided by a backbone of iterative reflective activity. Modified and based upon the learning tenets from CP and PAR to address wider and richer citizen participation.

Source: Authors' own visualisation.

where local inhabitants were invited to explore alternative futures for solar energy in the neighbourhood. The workshop was situated as a part of a wider project funded by the Swedish Energy Agency, designed to explore homeowners' acceptance of, and motivation for, consuming and producing solar energy. The researcher-facilitators in charge of conducting the workshop were tasked to creatively explore means of understanding bottom-up values in solar energy planning, and how local energy planning efforts can become more inclusive and democratic. The project thus provided a suitable opportunity for the testing and experimentation of the participatory utopian sketching framework.

Previous research has claimed that current energy policy and planning is decontextualised and disembodied (Wilhite & Wallenborn, 2013), which calls for an increased focus on situated value explorations. Furthermore, as rhetoric on the energy transition moves from a techno-economic focus towards the transition's socio-cultural implications, "what publics think, know, say and do have become core concerns of energy research, policy and practice," (Chilvers et al., 2018, p. 199). Mobilising utopia, as a larger paradigm, can thus serve to address this concern directly. A limitation of the workshop, however, is that it can be considered an isolated and discrete citizen engagement event, with little integration with broader urban planning processes. The researcher-facilitators attempted to address this by communicating workshop process and findings to municipal urban planners, ensuring that valuable insights are furthered along in the urban planning process.

Three public spaces were selected for the workshop: a playground, an intimate neighbourhood square, and an underpass. These areas were chosen because they were considered high activity nodes within the neighbourhood (see Lynch, 1960). An outreach effort via posters, flyers, social media channels and email was conducted to reach as many neighbourhood inhabitants as possible. Seven participants attended: five males and two females, working in academia, sales, and design. It is notable that the participants were highly educated; all worked in professions where they routinely process ideas, communicate, and collaborate. Moreover, participants who were also practicing designers were familiar with drawing as a means of developing knowledge. Whilst the pilot study was a suitable occasion to explore and experiment with the framework, we acknowledge the pilot's limitations in representing the framework's aforementioned strength of inclusivity among participants. The pilot study does not attempt to represent the true demographics of society, but serves as a stepping stone to further studies and insights on how the framework may be operationalised in context. The opportunities and challenges of the framework's tenet of inclusivity is further discussed in Section 6.

The pilot study depicts one of many ways that the four stages of the participatory utopian sketching framework can be interpreted and implemented. The details of the pilot study are outlined in Table 1. Although we focus on particular methods in this pilot study, other methods may be utilised for alternate applications of this framework – depending on the specific research question, context, and resource constraints. The framework's versatility and flexibility to align with different research constraints and contexts is a notable strength. For example, the pilot study utilises transparent laminate overlays as a central medium for sketching utopias. However, the framework has scope for flexibility of methods throughout – alternative methods of sketching could include collage, use of digital sketching tools, or pen and paper for instance (for a non-exhaustive list, see Table 1). While a variety of methods could be used across the four stages of the methodological framework, it is important to select those which align with and achieve the conceptual goals of each stage.

The core dimensions of data collection are suggested as participant-generated sketches, and the photography (perhaps filming), audio-recordings, observations, and field notes about the practices, actions, and discussions during workshops. Potential data collection methods are vast, and due to the flexibility and versatility of the framework, they may vary across applications depending on need and context. We offer several suggestions for alternative data collection methods in Table 1. However, it is necessary to note that all data collection methods should undergo ethical preparatory procedures, such as acquiring consent in line with GDPR regulations.

5.1. Stage 1: experiencing the space

The first stage of the approach seeks to understand the participants' lifeworlds (Seamon, 1980), attachments (Shamsuddin & Ujang, 2008), and process of sense-making (Wunderlich, 2008) of the space in question. This entails a walking tour of the urban space, followed by taking photographs of the space for the subsequent three stages. Walking has long been an integral, embodied dimension of our everyday lifeworld that is crucial to the sense-making of our urban spaces (Seamon, 1980; Wunderlich, 2008). We use this medium to access and experience spaces and places, and it is therefore considered a critical spatial practice (Careri, 2017; Rendell, 2006) that affects our relationship with urban places (Ambrose, 2020; Shamsuddin & Ujang, 2008; Vaughan, 2009; Wunderlich, 2008). In working with participatory utopian sketching, experientially understanding the relationship between people and the space or place is necessary for further reflection. This can be done through observation of participants' behaviour and practice in the context of the urban space, in order to develop a sense of (and for) the space (Vaughan, 2009). This process is crucial because as the lived experience of the space is developed, people tend to attach meanings to the spaces (Shamsuddin & Ujang, 2008). These feelings, meanings, perceptions, and experiences that people have of (and with) a place can influence wider issues of citizen ownership and belonging in the city. Uncovering citizen values latent in their reflections of the urban space, and then conveying these values into future planning processes, is central to the participatory utopian sketching framework – and also considered, by some, as the central goal of urban design: the pursuit of the creation of a sense of place (Shamsuddin & Ujang, 2008).

Table 1

Outlining the practical approach to the four stages of the participatory utopian sketching framework, as undertaken in the pilot study in the neighbourhood of Porsön.

Stage	Purpose (Conceptual Goals)	Practical Implementation	Alternative (or Supplementary) Methods	Options for Data Collection and Analysis Approaches
Stage 1: Experiencing the Space	Participants develop a sense for (and of) the space in question.	<ul style="list-style-type: none"> • Participants visit, walk through, and take photographs of the site. • Approximate duration (<i>on-site</i>): 1 h. • Approximate duration (<i>off-site</i>): 30 min. 	<ul style="list-style-type: none"> • Photo-voice (e.g. Bell, 2010). • Participatory and multisensory mapping (e.g. Literat, 2013; Powell, 2010). • Observational sketching with pen and paper (e.g. Heath & Chapman, 2018). • Longitudinal urban studies: change and continuity of the space over time (e.g. Collier & Collier, 1986). 	<p><i>Data Collection:</i></p> <ul style="list-style-type: none"> • Filming, photographs, or sketches of the site. • Journaling of participant experience. • Observations and field notes from researcher-facilitator(s) involved. <p><i>Analysis Approach:</i></p> <ul style="list-style-type: none"> • Thematic content analysis of themes discussed (e.g. Braun & Clarke, 2006). • Context Mapping (e.g. Visser, Stappers, van der Lugt, & Sanders, 2005).
Stage 2: Sketching of Utopias	To playfully speculate alternative visions through sketching, such that the plurality of values, desires and needs of the local community may emerge. The main purpose of the stage is collaborative creative serendipity, and the uninhibited meeting of ideas.	<ul style="list-style-type: none"> • Participants return to a workshop setting, and, • Print out their photographs in A4. • They slip the translucent laminate folder over the photographs and begin sketching their utopia(s) on the folder with permanent markers. • Approximate duration: 30–45 min. 	<p><i>Non-digital alternatives:</i></p> <ul style="list-style-type: none"> • Mixed media collages and utilisation of hobby crafts. • Photo-elicitation (e.g. Harper, 2002). • Rapid prototyping (e.g. Sanders & Stappers, 2014). • Messy, exploratory and generative idea sketches with pen and paper (e.g. Self, 2019). • Object interviews and elicitation (e.g. Woodward, 2016). <p><i>Digital alternatives:</i></p> <ul style="list-style-type: none"> • Digital sketching applications or programmes (e.g. Hsiao et al., 2013). • Mixed reality tools and visualisation programmes (e.g. Sareika & Schmalstieg, 2007). 	<p><i>Data Collection:</i></p> <ul style="list-style-type: none"> • Filming, photographs of the sketching process or product. • Participant sketches or prototypes. • Observations and field notes on the sketching process and group dynamics from researcher-facilitator(s) involved. <p><i>Analysis Approach:</i></p> <ul style="list-style-type: none"> • Visual analysis (e.g. Alexander, 2001).

(continued on next page)

Table 1 (continued)

Stage	Purpose (Conceptual Goals)	Practical Implementation	Alternative (or Supplementary) Methods	Options for Data Collection and Analysis Approaches
Stage 3: Sharing of Utopias	<ul style="list-style-type: none"> To provide a non-threatening, collaborative platform for mutual dialogue, sharing, and empathetic learning of different worldviews and desires. A pedagogical opportunity for both the researcher-facilitator and participants: a bilateral exchange of knowledge about the context in question. 	<ul style="list-style-type: none"> Each participant is given the opportunity to present their sketch(es) to the group. The researcher-facilitator facilitates a semi-structured, round-table discussion by posing open-ended questions about the participants' sketches. Participants are encouraged to discuss their own and each other's sketches on the ideas they represent. Approximate duration: 30 min. 	<ul style="list-style-type: none"> An agonistic pluralist approach for representation, diversity and dialogue in workshops (e.g. Keshavarz & Mazé, 2013; Mouffe, 2000). 	<p><i>Data Collection:</i></p> <ul style="list-style-type: none"> Audio-recording or filming of presentations. Observations and field notes with 'thick' and 'rich' descriptions from researcher-facilitator(s) involved (e.g. Merriam, 1988). <p><i>Analysis Approach:</i></p> <ul style="list-style-type: none"> Visual analysis (e.g., Alexander, 2001). Thematic content analysis of themes discussed (e.g., Braun & Clarke, 2006).
Stage 4: Collaborative Analysis	To enable a safe and empathetic space for collaborative reflection, emerging perspectives, and the creation of <i>perspective-transcending</i> knowledge (see Section 5.4).	<ul style="list-style-type: none"> The researcher-facilitator mediates a collaborative reflective session that focuses upon themes and issues that have surfaced repeatedly or are deemed important from the proceeding stages. Supplementary methods and tools can be used to facilitate this stage. Approximate duration: 30–45 min. 	<ul style="list-style-type: none"> Back-casting (e.g. Robinson, 1982). Open-ended forms of expression through imprography (e.g. Tarr, Gonzalez-Polledo, & Cornish, 2017). 	<p><i>Data Collection:</i></p> <ul style="list-style-type: none"> No recommended filming or photography, to encourage feelings of safety and open sharing. Observations and field notes with 'thick' and 'rich' descriptions from researcher-facilitator(s) involved (e.g., Merriam, 1988). <p><i>Analysis Approach:</i></p> <ul style="list-style-type: none"> Collaborative analysis (e.g. Flick, 2014; Simonsen & Friberg, 2014): between facilitating researchers, between researchers and participants, and among participants themselves.

During the walking tour, it is recommended that the participants take photographs of the space to capture its pre-existing conditions. This method, called ‘photovoice’, has been used extensively in cultural explorations (Bell, 2010); photos capture the physical particularities of the space at a certain timestamp, which then offers a tangible baseline for future utopias to be built upon. Using the participants’ own photographs through photovoice, rather than those provided by the researcher-facilitator, could reveal the subjective relationship between photographer and place, and the meaning and narratives individuals construct around the photographs (Frølund, 2014). The photographs also document placement and style of features within the space (such as street and traffic light placement), and track maintenance, cultural change and continuity of the space over time (Collier & Collier, 1986).

In the case that a walking tour of the site cannot be performed, an alternative method could be a combination of photo elicitation and mapping participants’ experiences (see Table 1). This alternative method combination works well with participant groups that are already well acquainted with the space. An example of such a case is offered by our pilot study. Participants were familiar with the public spaces in question for the study, as each of them lived or worked in the neighbourhood and experienced the spaces daily. The workshop thus commenced with *Stage 1: Experiencing the Space* via a participatory mapping activity. The stage was carried out over a duration of approximately 30 min. Participatory mapping was selected as a visual elicitation method, as previous research has shown its capacity to provide a platform where nuanced processes of both individual and collaborative reflection can occur, which is often considered unrealisable through purely textual methods (Literat, 2013). The participants were provided with a satellite image of the entire area of Porsön, and then asked to draw and annotate their experiences on the map, according to the routes taken by their daily commutes (see Fig. 4).

Participants’ annotations on the Post-Its were descriptive, with most expressing different observations, reactions and emotions relating to the urban spaces (e.g. feeling unsafe, pleasantness associated with routes close to nature, different experiences in the summer than in the winter). This active recalling of different observations and experiences in the spaces appears to provide a springboard for further reflection and ideation; participants often went on to consider creative improvements that would lead to what they perceive as a ‘better’ future. For example, in Fig. 4, the annotations begin with a pre-existing observation or experience of a space, followed by a suggestion for improvement (e.g., a café with solar panels or an artwork to light up dark public spaces). Such facilitation of reflective thoughts via material intervention aligns with Levitas (2013) notion of *Utopia as a Method*. This is because while brainstorming improvements to current states, utopian thinking emerges, reflecting individuals’ values and experiences. In other words, the participants were actively and continually striving towards conceptually achieving a state that reflects their own values. Stage 1 thus aptly serves as a warm-up or inspirational segue into the next stage.

Data collection for this stage primarily occurs through the maps and annotations produced (as in the case of the pilot study), photographs, and perhaps journaling of site visits and observations of participant practices via field notes from an accompanying researcher-facilitator (i.e., a researcher-facilitator whose sole role is to document data from the ongoing workshop). Beyond the thematic content analysis of maps and annotations that was conducted in the pilot study (see Braun & Clarke, 2006), an alternative analysis approach could be context mapping (see Visser et al., 2005). This approach to analysis is a temporal and longitudinal process that deeply explores an experience of an individual or collective, pertaining to a space, artefact, or topic. Such an analysis would perhaps fit well with re-iterated applications of a participatory utopian sketching framework, where the temporality of a space is a key factor being explored.

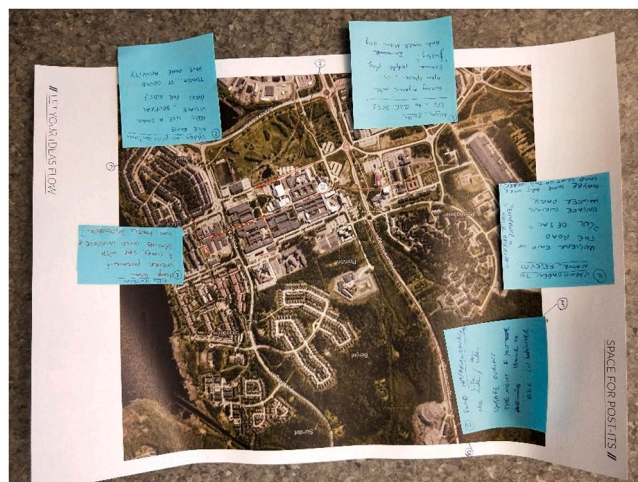


Fig. 4. An example of annotations of experiences from a participant and their daily commute through Porsön. Annotations depict an active recalling of different observations and experiences in the different spaces.

Source: Authors’ own image.

5.2. Stage 2: sketching of utopias

The practical implementation of participatory utopian sketching is based fundamentally in the framework's conceptual roots; that participants should together playfully sketch, share and analyse their individual idealised versions of the urban space in question. This process contributes to both individual and collective reflection of the values, hopes and intentions that shape urban futures. To facilitate this process, it is important that the participants have completed the previous stage and are provided reference visuals of the urban space in question whilst they sketch. Utopias are sketched in a workshop setting to allow for freer imagining of potential designs that could otherwise be restricted if participants remain physically present within the site in question. We argue that the key characteristic of utopian sketching is its layers (see Fig. 5):

- a) The underlying layer (a photograph of the space) anchors the sketching of future utopias within the temporal and spatial context of an existing physical site.
- b) The secondary layer – a clear, transparent material such as a laminate folder – acts as a medium onto which the sketcher can draw or sketch their own interpretations, ideas, and imaginations of (and for) a space.

The laminate folders provide a 'perceptual bridge': a material or concept that bridges the participants' perception of their current lifeworld and the fictional element of the future (Auger, 2013). A perceptual bridge is important in utopian studies, imaginative logics (Pelzer & Versteeg, 2019) and speculative design, to balance seemingly far-fetched futures with relevant, plausible concepts such that participant interest and engagement is sustained (Auger, 2013). While purely speculative tactics certainly have their place, the recognition that we do not start from nowhere when we want to change things is an important learning (for both researchers and participants) that is strengthened through the use of laminates. The grounded speculation the laminate allows for encourages paying attention to both how things are *right now*, and that they *could be* otherwise. While the creation of a perceptual bridge within participatory utopian sketching occurs through the introduction of laminate folders, perceptual bridges may be created in other different ways, suggested in Table 1. Again, the framework's flexibility surfaces prominently here; there is scope for a variety of methods to be implemented, so long as they achieve the conceptual goal of each stage. For example, the use of photovoice allows captured images to explicitly relate to the participants' memories of their lifeworld, where these photographs themselves act as perceptual bridges.

In the pilot study, the participants were first asked to cover their A4 printed photograph with a clear laminate folder. Next, they were instructed to individually sketch visions of their ideal future space, using a range of colourful permanent markers. To expand on their subjective interpretations of the space's spatial features, participants were encouraged to sketch freely and without inhibitions – emphasis was made on sketching, not to produce 'something pretty'. This relates to the ideas in Section 4, that sketching is an important process of 'imaginative worldbuilding', and playfulness and speculation are core traits that propel thoughts, reflections, and conversations about how "it could be otherwise" (Ashtari & de Lange, 2019, p. 77). Reflecting on their lived experiences was foundational to this process. The goal of 'quantity over quality' was suggested, in order to rapidly explore a plurality of their utopias. A new clear laminate folder was used for each new utopia sketch, and it was discovered that this interchangeability of laminate folders provides flexibility that the method of sketching alone does not encompass. The duration for this stage in the pilot study took approximately 30–45 min. Fig. 5 demonstrates how the experimentation process unfolded in the pilot study, from reflective practices through to sketching, while Figs. 6 and 7 offer examples of different utopian interpretations of an urban space.

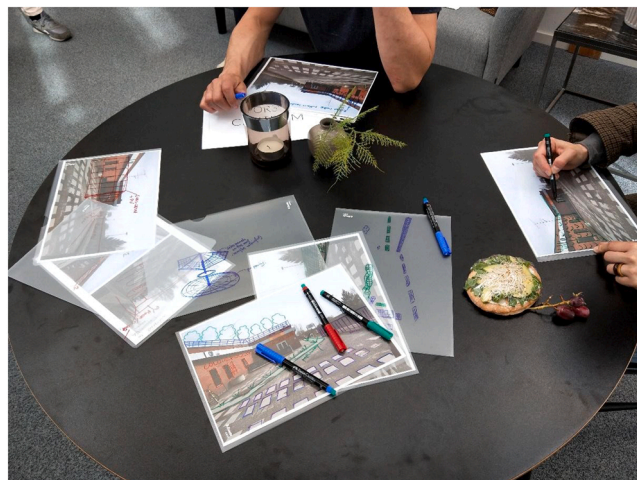


Fig. 5. Materials in action – laminate top layer showing participant sketches and underlying layer serving as visual reference to the urban space in question. Participants were encouraged to sketch as many utopias as they wanted, using a new laminate layer each time.
Source: Authors' own image.

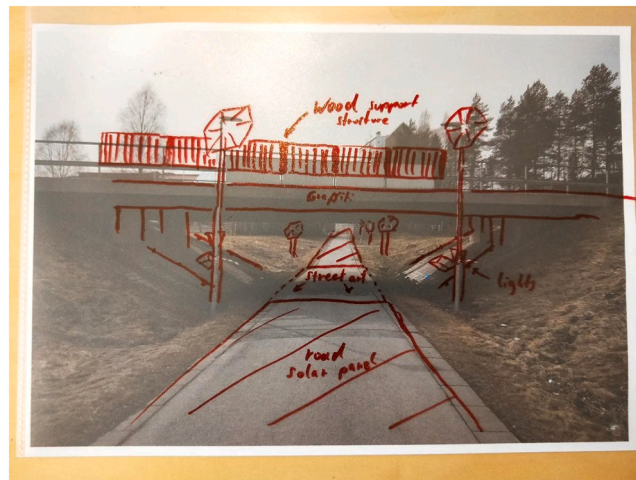


Fig. 6. An example participant utopian sketch of the underpass. Annotations of the introduced features to the space offer ideas for situated technological solutions, while also appearing to indicate a desire for a sleek style, orderliness in the space, and symmetry.
Source: Authors' own image.



Fig. 7. Another example of a participant utopian sketch of the same underpass. Annotations with keywords and human speech bubbles appear to convey the overall motivation behind the intended space: a utopia in which the space is interactive, captivating and fun.
Source: Authors' own image.

Figs. 6 and 7 offer contrasting examples of how participants may differently interpret the sketching exercise. While they vary greatly, both contribute utopias that are rich in imaginative ideas and subtleties. The examples of different utopias indicate that ideals are not singular or stagnant – even to the individual themselves – but can be formed and expressed in many different ways. Hence, the main thrust of this stage is to offer the opportunity for experimentation. In the field of design research, experimentation has been a long-established protocol for a ‘reflective practicum’, in which spontaneous experimentation comprises reflection-in-action and a way of learning-by-doing, often resulting in materials ‘talking back’ in surprising and interesting ways (Schön, 1983; Schön, 1987). Participatory utopian sketching as a form of experimentation offers the opportunity for participants to express different utopias in an open and non-threatening environment, whilst implicitly and iteratively refining their thoughts, ambitions, and values for the future urban space in the process.

To summarise, in *Stage 2: Sketching of Utopias*, participants first study the visual reference materials they have captured (or in the case of the pilot study, that were provided to them), then reflect upon their lived experiences and memories of the space, which then propels utopian formulations of how they would prefer the future space to be. Finally, they externalise their utopian formulations through sketching experimentations, which in turn propels further reflections. Thus, the sketching process entails iterative reflective activity. Data collection methods in this stage can vary from participant sketches, to photography of the participants and materials-in-action, and observations and field notes from the researcher-facilitators involved. The subsequent visual analysis of sketches can include the creation of a visual ‘code book’ (e.g., Alexander, 2001), which is further described in the next section.

5.3. Stage 3: sharing of utopias

Previous research in participatory sketching, such as within a ‘sketchcrawl’ (Heath & Chapman, 2018), has shown that sketching in a group can lead to fruitful discussions. The reasons are twofold: firstly, dialogue is stimulated through the clarification of ideas in the different participant sketches, and secondly, a dynamic, informal, safe, and playful atmosphere is created. Relatedly, the motivation behind this stage is to promote reflective thinking through open dialogue, in a way that facilitates the learning of others’ lived experiences and utopias, while also achieving a sense of deeper individual reflection upon an individual’s own utopia. Thus, *Stage 3: Sharing of Utopias* offers a platform for mutual dialogue, sharing, and empathetic learning of different worldviews and desires. It also offers a pedagogical opportunity for both the researcher-facilitator and participants: a bilateral exchange of knowledge on the current context. This stage of sharing and co-learning is driven by the dominant aspect of community collaboration and meaning-making in the CP paradigm, in which Healey (2006) describes succinctly:

“It is now widely understood in the planning field that planning is an interactive process, undertaken in a social context, rather than a purely technical process of design, analysis and management ... [O]ur interests are formed in social interaction through culturally-framed systems of meaning, through which we ‘make sense’ of our relations with each other and the natural world. In this effort in building understanding and ‘making meanings’, we draw on all our senses – our material appreciation and technique, our moral concerns and our emotive appreciation ... Our understandings are shaped by and filtered through our thought-worlds, our cultural systems of meaning,” (p. 65).

As such, Stage 3 utilises urban space as a platform for the exchange of knowledge and different meaning-making of utopias between local inhabitants. In doing so, it offers the opportunity for a collective activity in learning and shaping future spaces and communities. In the pilot study, the researcher-facilitator initiated a round of informal participant presentations of their sketches and ideas. Participants were encouraged to explain the content and choices within their sketches, and after each presentation, others were given the opportunity to issue questions to clarify any curiosities they may have about the sketch. The researcher-facilitator encouraged dialogue about topics that are fundamental to urban public spaces, such as: *What do the sketches show in terms of the purpose of the space? Who are the intended users of the space? What community needs should be fulfilled by the space?* Such questions motivate participants to envision the urban space in different ways and encourage open dialogue about similarities and differences regarding how people interpret the space. The duration for this stage in the pilot study was approximately 30 min.

At this point, it was important for the researcher-facilitator to respond to, and pick up on, visual cues and themes from the participant sketches in an organic and spontaneous way, in order to effectively facilitate the discussion. Certain visual cues and themes were chosen to be investigated further, guided by the pilot study’s exploration of citizen-participant values towards solar panels in the urban environment. Some example themes are: spatial function and innovation (the intended purpose in a space), attractiveness (through beauty and meaning-making) and human-technology relationships (how the solar panels and the social world interact). Visual cues and themes of interest can be decided upon before the workshop, based on the plethora of visual analysis frameworks that exist in contemporary literature today. For example, Alexander (2001) refers to the use of a ‘visual code book’ that can serve as a guidance towards identifying different visual signage existing in images. The visual code book can vary from one interpretation of the participatory utopian sketching framework to another, but it is nevertheless important that the visual codes chosen align with the purpose and aim for the participatory utopian sketching workshop.

No photographs of the participants were taken during this stage in the pilot study, and data was otherwise captured through ‘thick’ and ‘rich’ descriptions of the event via field notes from an accompanying researcher-facilitator (Merriam, 1988). Alternative data collection methods in this stage include photography, filming and audio recording conversations. To reiterate, it is important that consent from the participants is first sought – primarily through the guidance of GDPR regulations.

5.4. Stage 4: collaborative analysis

The previous stage focuses on creating a natural segue from the act of sketching and experimentation, to interactive dialogue and reflective discussions. This final stage focuses on achieving collaborative knowledge about certain issues through a semi-structured session of collaborative analysis. It creates space for further discussion about pertinent issues that have repeatedly or dominantly surfaced in the previous stage of sharing and storytelling of the participants’ sketches. These issues are assumed to have surfaced in a bottom-up manner, located in the frequency of, or commonalities in, the ambitions and values present in the participants’ sketches. Ideally, issues and topics for discussion would emerge organically from layered and evolving conversations, however, the session could be loosely led by the researcher-facilitator if need be. The potential lack of structure within this stage can appear daunting for some, and researcher-facilitators should be equipped with a level of reflexivity to adapt to the situation. Previous research in design interventions has indicated that it is within such spontaneity and ambiguity that a plurality of perspectives can emerge – “it is a matter of enabling collective action in the face of uncertainty,” (Binder, Brandt, Ehn, & Halse, 2015, p. 162). In essence, the collaborative analysis process takes place *together*; among the researcher-facilitators and the participants.

This stage aims to facilitate the co-creation of *perspective-transcending knowledge* (Flick, 2014). Perspective-transcending knowledge occurs when a group undertakes collaborative analysis of a certain event together. This analysis process often results in a higher level of understanding, beyond the individual perspectives involved, thereby entering a realm of ‘emergence’ (Zittoun, Baucal, Cornish, & Gillespie, 2007). In this ‘emergence’, different views are synthesised and evolve from one another, propelling emergent knowledge from its distinct, separate parts. Although Flick (2014) and Zittoun et al. (2007) identify the advantages of collaborative analysis

within the scientific research community, we argue that similar benefits can extend to its democratic application in wider society. Collaborative knowledge production is also thus an exercise of reflexivity, contributing to a collective learning process for all involved. The core essence of reflexivity – learning to be open, to support and to adapt to each other’s ideas and perspectives – forms the basis of an essential environment for emergent knowledge production and is therefore a necessary trait for the participatory utopian sketching framework.

In the pilot study, this stage was prepared for by placing the sketches aside and arranging the chairs in a circle to facilitate discussion. The small number of participants allowed the session to be run in an informal and relaxed way. A back-casting exercise was then mobilised to provide a springboard for collaborative analysis and an issue-based discussion. Back-casting exercises can be characterised as, “‘working backwards’ from a particular future end-point to the present to determine what policy [or other] measures would be required to reach that future,” (Robinson, 1982, p. 337). Back-casting exercises are commonly used in collaborative settings to help shift seemingly daunting and overwhelming visions or ideas into digestible and strategic smaller steps, through the brainstorming and formation of realistic goals in the near future. This aligns suitably with the overarching utopian framework and on the topic of energy, since energy utopias and alternative futures are often intangible – in other words, it is challenging to discuss something that does not yet exist, or has not been experienced (Levitas, 2013). Furthermore, energy research has not only called for increased knowledge accessibility on energy issues to a wider audience, but also for a strategic feedback loop system across different levels of governance, from local governance to national governance, in which empirical grassroots knowledge and values can feed into higher levels of planning (Törnroth & Sotoca, 2020). Back-casting as a supplementary method thus serves as a transparent and structured documentation method that can be carried across different stages of energy planning, and its future-oriented nature and the inherent reflective activity draws out the possible tensions surrounding future energy projects, which can then further propel a fruitful conversation on energy utopias.

The pilot study’s central focus on energy leads the researcher-facilitators to operationalise *Energy Backcasting: A Proposed Method of Policy Analysis* by Robinson (1982), where the participants were instructed to delineate (a) the goals of their utopias, and (b) five concrete steps they saw as important to do in the near future to jumpstart their utopia into realisation. Participants were given ten minutes to complete this exercise, before sharing their thoughts. From this, an issue-based discussion ensued, where the researcher-facilitator offered some common themes from the answers: priorities in municipal spending and investments versus priorities of local inhabitants, future challenges presented by the climate and environment and different views on possible local solutions, and finally, actor responsibilities – *Who has the power to enact change?* The participants were then encouraged to analyse these themes together. The realm of ‘emergence’ occurred when participants argued for their separate viewpoints, but culminated in a shared understanding that some issues were possibly more important or complex than they had first thought. For example, proactiveness in project collaborations was deemed as a significant takeaway from this stage, as the different participants came to the realisation, through discussion, that enacting local change in renewable energy solutions primarily stems from citizen awareness via bringing solutions into the public sphere (e.g., through tactical urbanism, public art, or rapid prototyping). The duration of this stage in the pilot study was approximately 45 min.

6. Discussion and reflection

We began by outlining the traditions of CP and PAR, and how, when combined with utopia, they may contribute to wider and richer citizen engagement. We argued for a four-stage framework in participatory utopian sketching, which was also tested via a pilot study exploring solar panel futures. This section conceptually elucidates how the four-stage framework of participatory utopian sketching, together with learnings from the pilot study, contribute to different opportunities and challenges for the making of collaborative urban futures.

6.1. Strengths and opportunities for future development

Urban planning often comprises a series of complex inter- and intra-organisational and institutional processes, which are greatly influenced by time, governance and policy, and public spending. Participatory utopian sketching therefore offers a playful and exploratory way to carry out citizen engagement events in the initial stages of urban (re)development processes. We argue that the shift from a problem-based citizen discussion to one that is values-based early in the urban planning process is beneficial in two ways: (1) citizen input enters and informs the planning process from the beginning – as opposed to being sought only when finalised plans have been put forth by planners and architects – and (2) the co-learning and co-creation of local knowledge based on lived experiences offers an empathetic approach to planning in which citizen values are prioritised. Co-creation through collaborative analysis creates the opportunity for participants to discuss and debate matters that are important to their community. Participatory utopian sketching thus offers an opportunity for citizens and planners alike to challenge the status quo, and to revisit the values that are deemed meaningful for the existing situated context. As a framework that can be pedagogically and methodically implemented, its practical benefits are dual-pronged: (1) the required materials do not pose a barrier to use – they are inexpensive, accessible, and easily transported equipment and materials (e.g., camera, paper, laminate folders, and pens), (2) leading to the ease of potentially impromptu or ad-hoc implementation within urban planning processes.

Conceptually, experiencing the space, experimental sketching, interpersonal sharing, and collaborative analysis together form a four-stage framework that is fundamentally interdependent; the strengths of participatory utopian sketching are realised when all four stages are operationalised in relation to each other. We argue that the combination of these stages offers deeper, dynamic, and iterative learning about an urban space. It is built upon knowledge spanning across ethnography studies, design studies and urban planning that

together offer a holistic understanding about communities' relationships to space, and how place attachments and identity is (re)built over time. The four-stage framework offers a guide for future citizen engagement sessions since shifting the rhetoric towards play, imagination, and speculation, arguably opens up urban planning conversations to a wider audience and makes them more inclusive. As mentioned earlier, playful experimentation encourages the involvement of a wide spectrum of society, ranging from children to older adults. To reiterate, playful experimentation offers an inclusive way for all social groups to coalesce, as it serves as a common language or bridge between individuals who might otherwise have little in common (Ashtari & de Lange, 2019). A common language can result in the promotion of experiential knowledge, local expression, community collectives, and proactiveness (Ashtari & de Lange, 2019). The opportunity to shape community life and politics, together with the creation of meaningful relationships, work, and identity, also contributes to greater human well-being (Büchs & Koch, 2019).

Participatory utopian sketching offers a platform in which plural, and possibly conflicting, perspectives can meet, resulting in an opportunity to develop more inclusive citizen engagement discourse. This is significant in light of the fact that conflict over the design of the urban public realm is inevitable, as it affects a large range of individuals and social groups who may be extremely different in their identities, possibilities and capacities for communication, as well as their temporal and socio-spatial standpoints (Keshavarz & Mazé, 2013). As such, many scholars today assert the need for alternatives to consensus, such as agonistic pluralism (Mouffe, 2000), so that both design and its processes do not simply reaffirm the prevailing constitution of society (Keshavarz & Maze, 2013). This plurality-informed thinking lies in stark contrast with the predominant culture surrounding citizen engagement events today, in which participation is understood primarily as the practical matter of achieving harmony "or agreement upon and stabilisation of a particular set of social relations, norms and courses of action," (Keshavarz & Maze, 2013, p. 9). Participatory utopian sketching thus offers a playful environment in which participants can engage with and possibly reconcile conflicting or controversial views in the making of future urban spaces.

Returning to the macroscopic motivation behind participatory utopian sketching, the shift from a problem-oriented mindset to a values-based mindset in planning allows us to move beyond a narrow micro-focus on specific design solutions and towards processes of futures-making that challenge existing systemic assumptions that shape our daily life. Similarly, Levitas (2013) proposes that:

"Explicit alternative scenarios for the future are fundamental to any kind of democratic debate. This means envisioning alternatives, but also setting out the images of the good society buried in the constant barrage of political rhetoric and policies ... Our institutional arrangements affect both the imagination and the reality of human flourishing through the values, skills, capabilities, experiences, and relationships they encourage or suppress. To put it another way, utopia as a method is concerned with the potential institutions of a just, equitable and sustainable society which begins to provide the conditions for grace," (p. xviii).

The desire to learn from a situated context – its people, the environment, and interrelating social and cultural processes – should take centre stage in future urban design and planning, within and beyond the participatory utopian sketching framework. Participatory utopian sketching offers mobilisation of this ideal, which proposes a transparent, accountable, and ethical means of approaching inclusive urban design and planning for increasingly uncertain futures. Ultimately, we argue for the striving towards meaningful reflection and consideration for the kind(s) of people we would like to be, and therefore, the society we would need to build, together, to uphold the vision(s) (Levitas, 2013).

6.2. Potential challenges: on power, change, and affect

While a strength of the framework lies in its flexibility that spans practical and conceptual realms, depending on how the framework is implemented, the integration of different methods into the framework (as suggested in Table 1) could impact overall accessibility and inclusivity of the participant group. For example, opting for digital methods within the framework's stages may exacerbate a potential digital divide (see Section 4). The creative nature of sketching could also potentially deter participation – some citizens may, understandably, feel intimidated by the prospect of drawing and sharing their sketches with others. Thus, the flexibility of the framework does not come without cost; the researcher-facilitators should be mindful of how the methods chosen in the different stages can be integrated, how they interact and interrelate with one another, and most importantly, whether they adequately fit the research context. Moreover, while the framework's accessibility appears promising in theory, the pilot study demonstrates how difficult it can be to operationalise notions of inclusivity in practice (e.g., although efforts were made to recruit a wide sample of the local population, only well-educated individuals chose to participate). It is important to note that inclusiveness within the framework is dual pronged: curation of a sensitive mode of communication in (1) recruiting and seeking to involve diverse communities, and in (2) how workshops are run and communicated. Thus, researcher-facilitators need to be mindful of the complex ways in which different method combinations affect workshop execution, in order to embrace and exemplify the framework's inclusivity at a maximum potential.

The second challenge lies in the inherent power differentials between the actors involved – and we return to the questions of: *Who has the power to enact change? How is change enacted?* Two related matters arise: researcher-participant dynamics and its potential power asymmetries, and the framework's ambiguous impacts on policy. In designing the practical implementation of the participatory utopian sketching framework, control over the process naturally lends itself to the researcher-facilitators (Seravalli, 2014). The researcher-facilitators may thus be considered experts of the workshop activities, and in some cases, participants may underestimate the value of their involvement – a hypothetical response being, "I do not have the expertise to contribute a solution, I will leave it to the professionals". It is important that the researcher-facilitators address such presumptions at the start of each workshop – stating clearly

that the overall aim is the co-creation of *collaborative* knowledge that responds to, and is shaped by, the existing context in which the framework is applied. Pragmatically, the researcher-facilitators should be proactive in identifying and addressing potential power asymmetries. For instance, workshop discussions should be oriented around ideas collaboratively and organically created by participants, as opposed to ideas being enforced top-down, and space should be intentionally made for a plurality of perspectives to be heard. Thus, the framework's success in the urban planning context thus requires all actors to possess a level of open-mindedness, reflexivity, appetite for risk-taking, and a proactive desire for change.

A third challenge lies with the framework's ambiguous impacts on policy. As with any participative method, the tension around *tokenism* as an issue cannot be resolved within the participatory utopian sketching framework in itself. In other words, the framework cannot bypass how planning decisions are ultimately made. Turning our attention now to practicing urban designers and planners, we argue that the implementation of the framework moves beyond facilitating workshops – it also entails the responsibility of acting on findings. Drawing upon long established discourse on citizen participation, we outline the need for practitioners to move beyond the 'degrees of tokenism', towards more meaningful 'degrees of citizen power' (Arnstein, 1969) in the implementation of the framework. Thus, urban design and planning authorities need to adopt decision-making mindsets that are values-based, where collaborative and bottom-up values may emerge.

7. Conclusion

Positioned within the overarching paradigm of utopia, we have argued that the participatory utopian sketching framework is a mechanism for achieving wider and richer citizen engagement in urban design and planning processes. Building upon the learnings from the traditions of PAR and CP, the participatory sketching framework puts forth four stages: 1. Experiencing the Space, 2. Sketching of Utopias, 3. Sharing of Utopias, and finally, 4. Collaborative Analysis. The framework emphasises tenets of collaboration, citizen inclusivity, playful experimentation, and iterative reflective activity. The pilot study presented findings related to its practical implementation, together with potential opportunities and challenges thus far. The motivation for a utopian and collaborative way of shaping citizen engagement processes is threefold:

1. It may open up avenues of empathetic and creative solutions that a top-down approach may have overlooked,
2. It ensures that citizen input is sought and incorporated early in the urban planning process, and finally,
3. Shifting from a problem-based mindset in planning to a values-based mindset may prove productive in designing for an increasingly uncertain future.

Although the nuances and situatedness of a participatory utopian sketching process depend largely on the context of its implementation, in this paper we have introduced and argued for its core guiding tenets. As the method is trialed and operationalised in novel contexts and by different researchers and practitioners, we expect to encounter and uncover additional shortcomings and challenges. We welcome feedback and look forward to engaging in fruitful dialogue about participatory utopian sketching. As a community of researchers, we can work together to advance and refine the method as it matures. This initial introduction to the characteristics and potentialities of participatory utopian sketching serves to advance practical implementations of imaginative, deliberative, and playful participatory methods – designed to engage with increasingly uncertain futures.

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