PAPER

The Possibility of the Virtual Focus Group: Communicating Agency Toward Equitable Participation Beyond the COVID-19 Pandemic

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The modes of design practice are shifting in light of the COVID-19 pandemic. We now learn, research, and teach through virtual platforms more integrally and intensively than ever. This moment begs for introspection and the reconsideration of 'conventional' workflows in the discipline of architecture. The authors of this paper are members of an interdisciplinary research team who discuss how they adapted their research methodologies with a virtual toolkit, developing focus group sessions with multi-family building residents and graduate students. The authors reflect on the benefits and limitations presented by digital tools and consider how hybridized opportunities suggest tailored approaches that facilitate the communication of agency to a representative and complex public. Participatory design frameworks ground the conversation, allowing the authors to position their methodology as an essential step to establishing equitable grounds for participation in the future.

INTRODUCTION

The COVID-19 pandemic has reframed the ways we learn, research, and teach in design practice, propelling a collective shift to virtual platforms. This increased reliance on digital tools has begged introspection and confrontation of 'conventional' workflows in the discipline of architecture. In our case, with deliverables imagined pre-pandemic—relying heavily on consultation sessions, focus groups, and interviews—the trajectory of our project required complete reimagining.

Our practices became necessarily experimental and mutable, which is to say imperfect. For instance, we had developed relationships with community housing contacts across Canada and planned to meet with several groups of social housing residents; in the transition to virtual modes of working, these plans fell through to comply with public health mandates. Thus, to adapt our research methodologies and workflows to virtual platforms, we have learned to take greater care and consideration for the complexity of publics designers engage. As a result, we uncovered systemic inequities in the processes of mass-transitions, both in new and old ways of effectively

communicating. We have come to deeply recognize that virtual platforms are not in and of themselves a universal solution nor a replacement to in-person gatherings. When seeking a representative audience towards fostering the agency of equitable communities, a more nuanced approach is required.

The following will transcribe and reflect on our experiences. First, we will offer context by defining key terms and elaborating upon the virtual toolkit used. We will then describe how we developed and executed focus group models to engage two distinct participant groups: condo building residents and graduate students. A summarising discussion of the benefits and limitations of the virtual toolkit will follow, considering how the lessons we have learned may be applied to architectural practice and pedagogy. We will close by considering how our practices contribute to literature seeking to engender equitable participation in spatial practice.

METHODOLOGICAL DEFINITIONS

We begin with definitions, detailing our research group, conveying our critical stance, narrowing our discursive strategy and selecting our virtual toolkit. These terms will underlie our practiced methodology and frame the discussion of findings.

To begin, our research group is the *Future Energy Shift Research Program*, a Canada-based interdisciplinary team at Carleton University. We have taken a particular interest in the design of sustainable energy systems for multi-family urban residential buildings. Our research investigates, through the domains of architecture, mechanical engineering, and public policy, the feasibility of implementing gravity turbine technology in multi-family urban buildings to generate electricity. [Fig. 1] Additionally, we are curious about how we might inspire diverse and complex publics to actively engage in issues related to the climate crisis and to recognize their individual agency in our collective shift to clean energy solutions - a mainstay of Canadian public policy discourse.

Next, in our thesis' critical stance, we employed three interdependent terms: agency, communication and equitable participation. First, agency is the realization of the individual as an agent. It is a process wherein individuals develop and
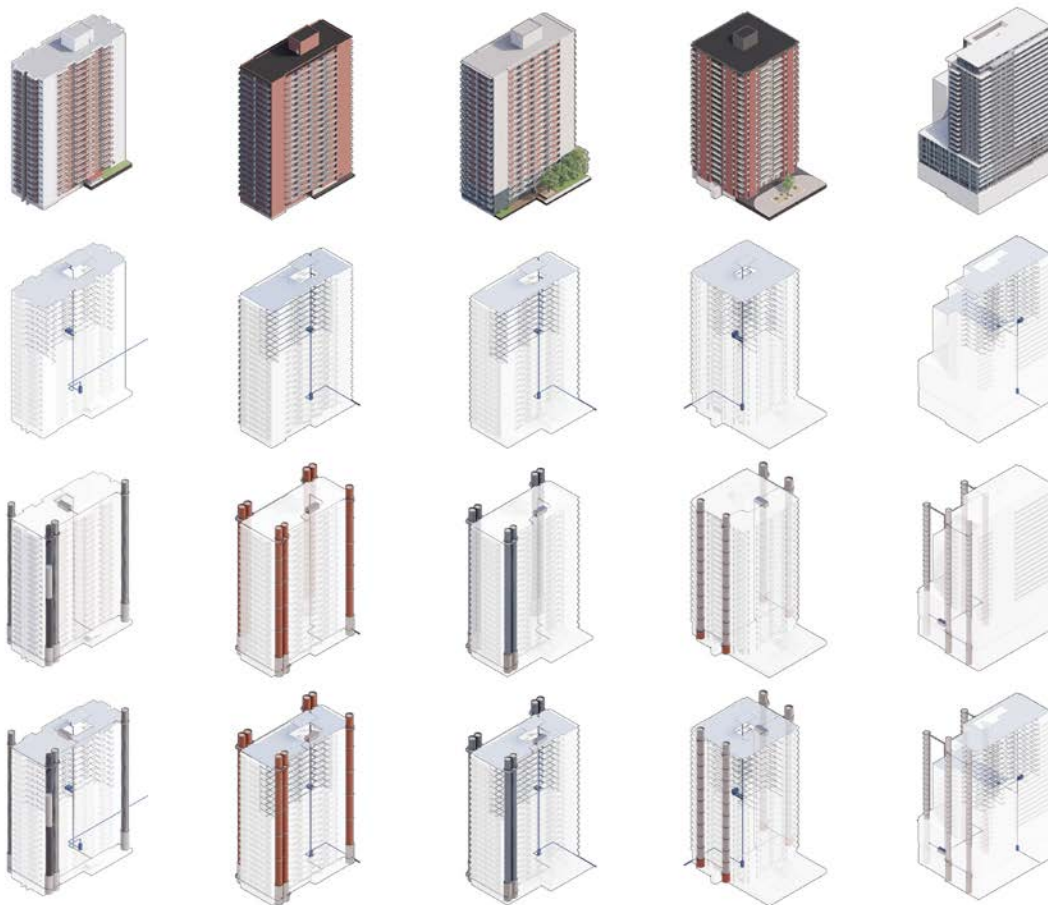
Figure 1. Multi-family urban buildings, from top to bottom, as extant, and with internal, external, and combined gravity turbine systems.

maintain the tools to acknowledge their social power, staking a claim for themselves and for their communities. These tools can be implied literally—access, say, to a dependable internet connection—but just as likely figuratively, with unactualized literacies or specialized knowledge bases creating strong barriers to discursive mobility. It is important then to note that all parties must be reasonably informed to promote productive discussion and produce affirmative action. Thus, bilateral communication is a precursor to agency. This means that 'experts'—active agents such as spatial design professionals or other privileged statuses—must translate their knowledge intelligibly, without condescension, between and beyond disciplines to broader publics. Reciprocally, these publics must trust their 'experts' to listen and to value their multitude of experiences. Here, we come to equitable participation. Should publics, especially those historically marginalized, not be provided a fair forum to iterate and integrate their own particular expertises, there cannot be meaningful communication, nor integrative action forward.

In terms of session typology or 'discursive strategy' to capture our critical stance, we considered consultation, design charrette, and focus group forms. First, the well-worn consultation has been understood, since Sherry Arnstein's *A Ladder Of Citizen Participation* of 1969, as a middling participatory strategy, seeking input but offering no assurance that concerns will inform outcomes.[1] This could not account for our sessions which, as will be seen, prioritized 'first steps', and could be placed even lower in Arnstein's 'ladder' as informing participation. Meanwhile, per our definitions, a ground is needed for individuals to find their foothold. This immediately excludes the use of the design charette, as it is described in Bill Lennertz and Aarin Lutzenhiser's *The Charrette Handbook*. In this format, it is assumed agents are adequately prepared to act and react towards developing project pathways creating a productive and collaborative feedback loop between participant and design professional.[2] Thus we landed on the focus group, where a group of individuals are gathered to engage with a topic and collectively become better informed on a subject. As Robert Shipley and Stephen Utz describe, "focus groups are a consultation method designed to illuminate citizen

perceptions."[3] As a result, both the session holders and attendees realize their individual agency and capability to become active participants. Unlike in consultations or design charrettes, the focus group is a pre-emptive strategy of communication, setting an equitable stage for future participation via engaged discourse.

Finally, to communicate concisely, approachably, and engagingly, our focus groups employed a digital toolkit of entwined virtual platforms and their accompanying features. We used a video conferencing platform, Zoom, paired with an interactive digital whiteboard, Figma. Video conferencing allowed us to share screens, poll audiences, create small breakout teams, monitor comment and question messaging, and, with consent, record meetings for post-session analysis. Pre-prepared digital whiteboards meanwhile were our base for collaborative annotation as participants developed ideas and offered input. In spending over a year researching, learning, and teaching remotely, we were fortunate to be able to become familiar with this toolkit, ready to optimize workflow and organization types to the distinct structures of different focus groups. Two models were created to accommodate two participant groups: the first, a group of condo building residents, and the second, a group of graduate students.

FOCUS GROUP MODEL 1: CONDO RESIDENTS
One-hour focus group sessions were conducted with residents of two different condo buildings. The goal for the meetings was to gauge enthusiasm for our proposed energy system from the perspective of multi-family urban building residents. In the process, we wanted to inform individuals about our system and the concepts underpinning its design as well as to collect initial reactions.

We anticipated that attendees would be willing to spend a lunch hour to participate in our focus group. Additionally, we considered that they might be joining the meeting from a variety of media devices and that individuals may have a limited grasp of

video conferencing, let alone digital whiteboards. For these reasons, we prepared the session to be highly internally managed, ensuring the short session was not spent describing functions needed to participate in the discussion. This way, individuals could focus on their and peers' responses.

We began the session with roundtable introductions between research team members and attendees. We shared our screen to briefly describe the proposed technology and then led a short tutorial on video conferencing functions. Then, we launched a preliminary poll asking individuals whether they were agents in Canada's clean energy transition, sharing the anonymous results with the group and asking individuals to elaborate on their responses.

The team then shared a prepared interactive whiteboard with questions and related images about the energy system to serve as a visual basis for the ensuing discussion [Fig. 2]. While participants discussed factors of cost, space, energy efficiency and user routine, the team annotated the whiteboard with participant comments in real time, mediating the experience of participants adding comments to the whiteboard themselves. Essentially, we wanted to learn what individuals valued about our system and what kinds of sacrifices they would be willing to make to install it in their building. To this, we asked participants to reflect on the discussion that took place, ranking each factor from most to least important. As participants shared preferences aloud or as messages, we filled out a matrix on the whiteboard, and subsequently asked how they might approach a consensus prioritization of factors. To conclude the session, the team closed the whiteboard and prompted open questioning of energy generation and policy.

After the focus group, we examined the generated conversation matrices and supporting comments to refine design priorities and constraints for our energy system. Due to the virtual format of the session, we were able to quickly and effectively visualize,
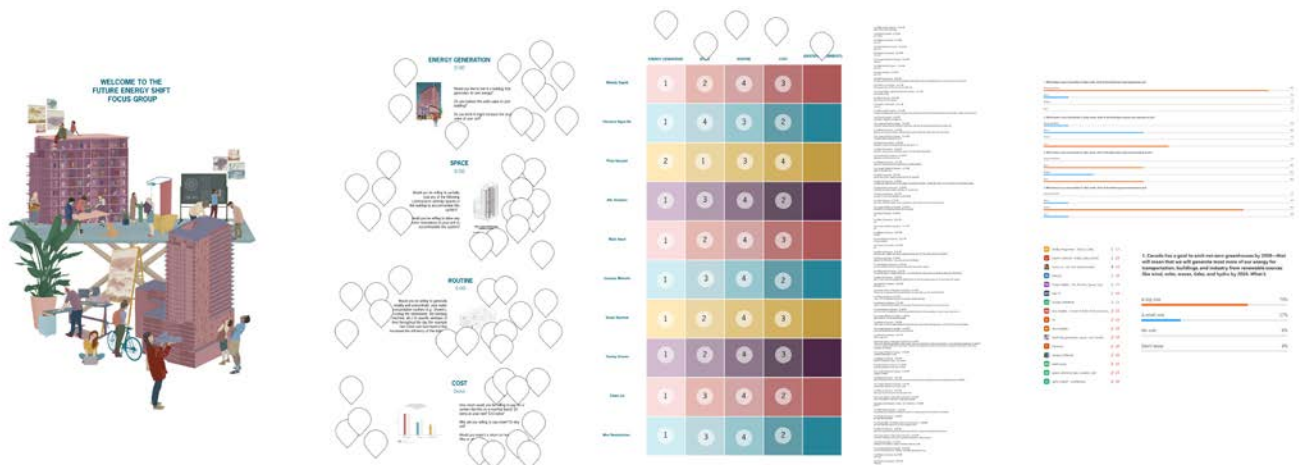

Figure 2. Screen capture from focus group session with condo residents depicting the matrix of factors, comment board and poll results.
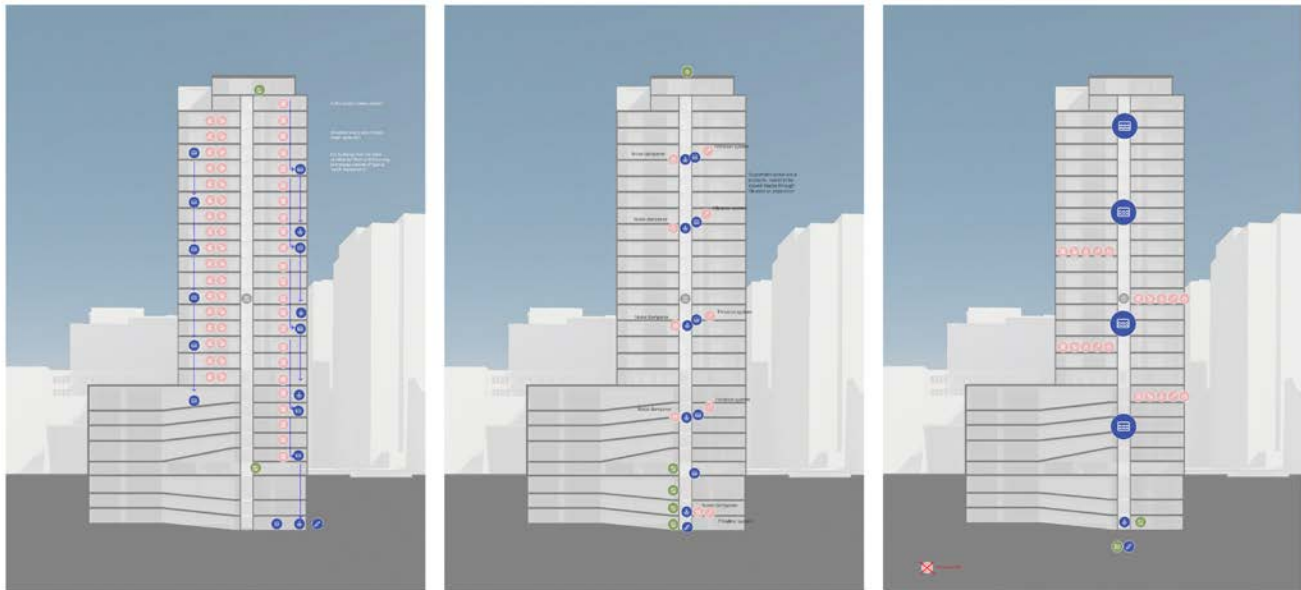
Figure 3. Screen capture from focus group session with graduate students depicting energy recapture diagrams.

and later refer to, a plurality of insights. This focus group model then served as an essential 'first step', with attendees developing interest in our research and recognizing their position as valued stakeholders. The public policy members of the team later interviewed enthusiastic participants from both focus groups, furthering a collaborative exchange of knowledge.

FOCUS GROUP MODEL 2: GRADUATE STUDENTS

A three-hour focus group was conducted with graduate students from the disciplines of public policy, engineering, and architecture. Our objective in this session was to better understand how emerging professionals with differing disciplinary pedagogies can intersect to collaboratively solve problems. Unlike the above focus group model organized with building residents, we anticipated that students would be willing to engage in a longer session and would have a more consistent digital skillset. The activities designed then allowed participants much greater control within the interactive whiteboard platform.

We opened our session similarly to the first focus group model with introductions, subsequently releasing the poll question on agency in energy transitions. We then presented a condensed technical tutorial, reinforced with a practice drawing exercise, before dividing attendees into three breakout rooms, each with one of our researchers to ensure activities were understood.

In a first activity, we asked breakout teams to collaborate in configuring two possible layouts for an energy recapture system [Fig. 3]. We provided diverse and optional components in the form of stickers to place on a building section diagram; while some stickers had clear, identified purposes, many were left open to creative interpretation. Alongside the diagramming process, teams brainstormed policies that might facilitate

the adoption of this technology. After thirty minutes, we reconvened, and each team shared their ideas and questions. In a second activity, we asked newly formed breakout teams to fill in a Venn diagram to contemplate the roles and overlaps of their disciplines [Fig. 4]. Each individual discussed how they perceived their peers' disciplinary responsibilities, allowing for a greater discussion about architecture and the scale of its encounters with other practices. Participants translated this discussion by moving notes from the Venn diagram onto a building lifecycle and policy-cycle visualization. Through both activities, teams independently adopted idiosyncratic visual languages to interpret prompts, prioritize different constraints, and present unified interpretations. This resulted in vibrant group discussions that demonstrated how a plurality of perspectives inform diverse

Figure 4. Screen capture from focus group session with graduate students depicting disciplinary Venn diagram.

designs and engagement beyond disciplinary boundaries. After our session we circulated a brief email survey to students who offered additional insights, reflections, and constructive feedback about the session.

For both focus group models, the team estimated how much time would be spent on activities and discussion. The focus groups were created to be flexible, including optional activities, in case the session moved too quickly, as well as notes on how to reduce the demands of the main activities, so as not to rush productive discussions for a hectic schedule. Notably, across the sessions, such discursivity expanded beyond the focus group models' allotted times.

BENEFITS AND LIMITATIONS OF VIRTUAL PLATFORMS

Authors Rachael Luck, Elizabeth Sanders, Eva Brandt and Thomas Binder have discussed the potential of virtual platforms to broaden the reach of collaborative sessions that would typically be held in person. They gesture to the developing possibilities of the social internet, video conferencing and blogging, to help individuals better articulate their knowledge, needs and visions.[4] However, these authors do not frame the virtual focus group as an optimal solution.[5] While there is an abundance of literature that establishes frameworks for participatory design methodologies, it is currently difficult to source literature with a particular concentration on case studies and focus groups that were carried out virtually. Thus, we hope to contribute to this emerging conversation by detailing four lessons learned from our virtual focus group models that might be applied to architectural practice and pedagogy more broadly.

Entrance costs are significant. While remote working and learning has allowed savings on travel, supplies, and other work-related expenses, new financial costs, including internet connectivity upgrades, high performance computers, and licensing for programs, are required to access the virtual toolkit, or risk leaving some participants lost in digital noise. While hosts of the session may front program licensing costs to support these sessions, it continues to be dangerous and exclusionary to low-income and marginalized publics to presume all attendees can afford high speed internet and robust hardware. Though it is easy to celebrate how virtual platforms allowed our research project to host otherwise disparate groups, it is crucial to note that they do not universally facilitate equitable participation and so cannot serve as the sole medium for many focus groups.

Of equal importance is the 'knowledge entrance cost' associated with virtual public meetings. It takes a significant amount of time and a diverse skillset to use what professionals now consider 'basic' virtual tools. While some will work alongside groups able to meet or overcome this knowledge barrier, it is nonetheless an obstacle to full participation for most stakeholders. To address this significant barrier, we attempted to anticipate the knowledgebase of our participant groups, curating what we considered an appropriate level of engagement with platform

functions that would be reasonable to learn within the limited time of the session.

Virtual time is limited. With screen strain and reluctance to spend excess time in video conferences, attention spans are more overextended than ever. As such, virtual gatherings must engage attendees productively in a relatively brief period. This often leads to meaningful and effective conversation shared in less time than in person sessions, which commonly meander and run for longer periods. Participants are also more likely and able to meet for several short sessions, which can be an efficient mode of collaboration. Nonetheless, longer in person meetings, while perhaps now a luxury, retain the potential to dive deeper into content and nurture a more nuanced, novel discussion. The question that emerges is: what are the objectives of the discussion? If the goal is a final design consensus, the modes of virtual discursion are likely to be, depending on the participant group, more effective. Virtual platforms allow the fast and efficient collection of a plurality of voices. Alternatively, if seeking to expand questioning and seek out novel approaches, a plurality of solutions might more readily evolve in-person where barriers that strain focus are less cumbersome.

Virtual space is unlimited. Interactive whiteboards host unlimited space for individuals to engage in collaborative discussion that is supported and simultaneously translated into visual imagery. This interactive and live imagery becomes a record of the discussion and encourages attendees to visually contribute to the shape of the discussion. If the knowledge entrance cost can be overcome, individuals can be given complete control over these spaces to approach prompts as they wish, enabling them to find a higher agency within the discussion, beyond what any conventional in-person gathering would permit. Virtual whiteboards support image files, pdfs, videos, and other media enabling seamless and precise communal productivity. However, these spaces can quickly become chaotic should they not be organized clearly.

Virtual platforms maintain hierarchies. In the virtual focus groups we have led, individuals find themselves on more equal footing than in in person sessions, with every gathered member seeing an identical view of each attendee and a main 'shared' screen. Typical hierarchies and third-party actors that can now effectively disappear with a muted microphone and turned off camera, leaving individuals on the same level – whether they be students, building residents or project stakeholders – to feel validated and less intimidated to interact with each other and contribute to the conversation taking place. When individuals are given complete editing control in interactive whiteboards, they are suddenly able to interpret, edit, and alter the space to question and communicate ideas. They are also able to write comments, share links and notes in the chat at any moment, ensuring an outlet to voice their thoughts with the group if they are not comfortable speaking up. Meanwhile, focus group leaders have a reduced ability to manipulate and manage the

interactions, allowing attendees to hold more power in the virtual room. In many ways, the features afforded by virtual platforms lend a greater agency to individuals.

Despite how virtual platforms can flatten power structures, they quietly persist. While virtual conferencing begins to disrupt hierarchies at play among hosts and participants, these persist through this medium: while video conferencing is designed to be participatory, there is always a leader of the discussion; there is always a meeting host. However, it is easy to mitigate unproductive hierarchies by distributing control and sharing the space with other voices. In our student focus group session, we recognized an opportunity to flatten the existing hierarchies in the ways that we were able. Professors stepped out of the meeting, ceding the leadership to the team of student researchers who at every opportunity, tried to let questions and comments raised among individuals take priority. The emergence of virtual focus groups afforded a greater self-awareness about the many choices that are made when assembling a focus group session and offered an opportunity to reflect on the broader criticisms and existing issues related to public participation in research and design.

The most significant shortcoming, embedded within all these lessons learned, is that authentic interpersonal connection is lost through mediation. So many virtual layers of technological media noise and structured focus group management means that spontaneous developments, once resulting from side conversations and body language, are now difficult to perceive or fail to materialize. It is important to acknowledge that something important is lost.

IN PURSUIT OF PARTICIPATION
In attempts at qualifying legitimate 'participatory design,' the literature has offered a myriad of interpretations and goals. Furthering Arnstein's ladder of participation, Seth Tuler and Thomas Webler's list of "normative objectives of consultation participants" includes: access to the process, power to influence process and outcomes, access to information, structural characteristics to promote interactions, facilitation of constructive personal behaviors, improving social conditions for future processes and adequate analysis.[6] Rachael Luck supplies her own list of 'characteristics of participatory design,' including: equalizing power relations, situation-based actions, mutual learning, tools and techniques, alternative visions about technology, and democratic practices.[7] Christina Harrington, Sheena Erete and Anne Marie Piper frame participatory design as "an approach to democratizing innovation in the design process by shifting the power dynamics between researcher and participant."[8] Definitions clearly remain illusory. Meanwhile, these latter authors provide the caveat that "this method and its position [is] a privileged activity, which inherently creates an imbalance in power and equality."[9] It is important then to consider the ways in which our current design practices claim and ultimately fail to achieve equitable participation.

A SPECTRUM OF HYBRID CONSULTATION STRATEGIES

STEP 1: ASSESS PARTICIPANT NEEDS AND
CONSIDER CONSULTATION OBJECTIVES

STEP 2: SELECT AN APPROPRIATE STRATEGY ON
THE HYBRID CONSULTATION SPECTRUM

ENTIRELY ANALOG ←————————————————————————————→ ENTIRELY VIRTUAL

| full in person meeting | full in person meeting | some gather in person, some join online via video conference | all online via video conference | all online via video conference |

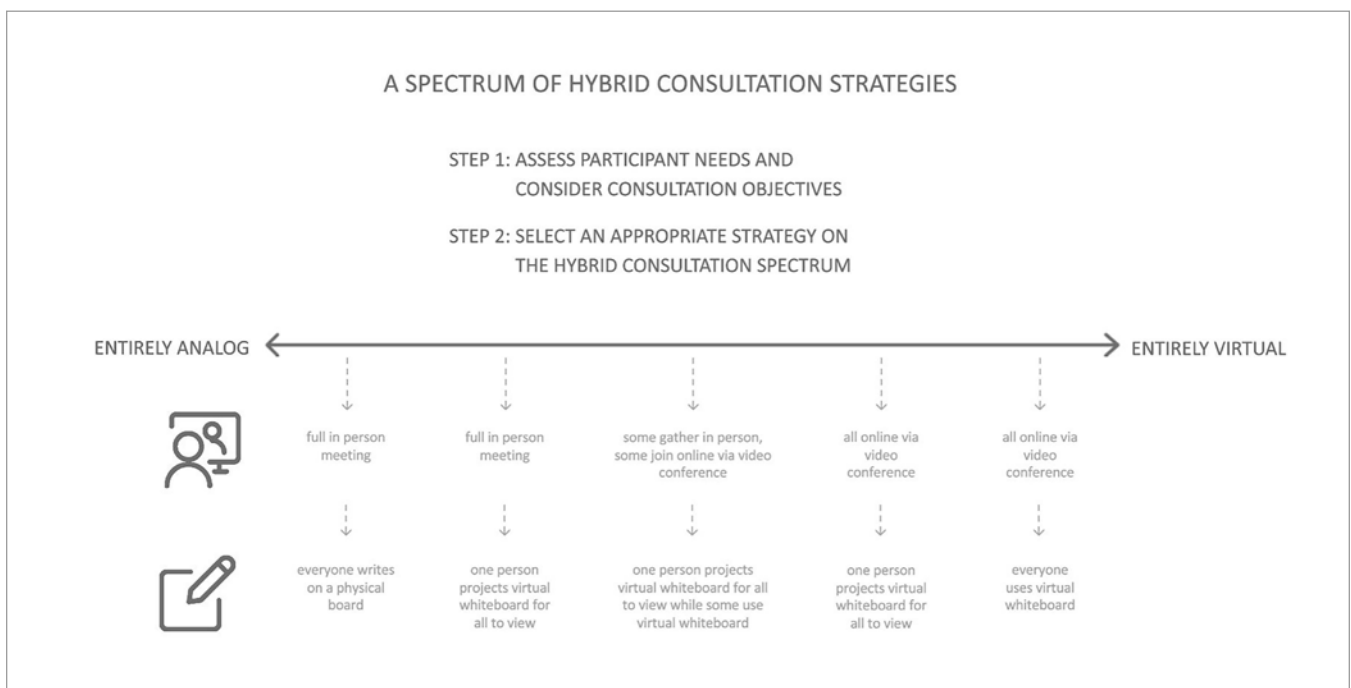| everyone writes on a physical board | one person projects virtual whiteboard for all to view | one person projects virtual whiteboard for all to view while some use virtual whiteboard | one person projects virtual whiteboard for all to view | everyone uses virtual whiteboard |

Figure 5. Matrix of hybrid consultation strategies combining virtual and analog techniques.

Zeynep Toker has criticized contemporary community design practices for their "lack of reference to original principles, such as advocating low-income and politically disadvantaged groups within a voluntary organisational structure."[10] Shannon Mattern expands on this, criticizing the performative and placating aesthetic of participation that developers of large urban projects tend to rely on in lieu of legitimate public participation.[11] As Arnstein states, "there is a critical difference between going through the empty ritual of participation and having the real power needed to affect the outcome of the process."[12] If the intentions behind planning a public participation session are disingenuous in nature, legitimate participation cannot occur.

Sadly, it is not uncommon for planners to enter into these engagements searching to abstract the public into data points that can be manipulated to confirm pre-existing outcomes. Furthermore, elaborate theatrics are undertaken to create visual artifacts that serve as 'proof of participation', where the focus is mistakenly placed on producing the artifacts themselves rather than understanding their meaning. As we reflect on how the virtual focus groups we lead interact with this literature and its frameworks for participation, one underlying question begs to be asked: were our sessions truly participatory? It is clear to us that while we had no ill-intent and were indeed genuinely curious to learn what focus group attendees thought about our research, we did not clearly predefine grounds for equitable participation in our sessions. How can a productive relationship be genuinely formed between researcher and participant if they are entering into the session with no prior understanding about the system being discussed? It is not reasonable to expect individuals to properly weigh in on the system unless they are considerably informed. Despite our encouragement to develop a tailored approach to accommodate the public being engaged, how can needs and barriers be accurately assessed if you have not met this public before? Presumption is dangerous.

Despite this, we maintain that the virtual focus groups we conducted offer a framework for the highly important 'first step' to establishing an equitable avenue for participation in the future: informing, inspiring and empowering a diverse public to become eager to participate. While imperfect, the focus group sessions we developed are aspirational to what is possible through virtual means. Individuals who attended our focus group sessions developed a knowledge and curiosity about our system and have importantly shared conversations about actionable ways to participate with their neighbours, stakeholders, and peers. Individuals were given a platform to recognize their position alongside the points of others. We believe that equitable participation is indeed possible, and that the work we have done only begins to uncover how the virtues of public participation can be integrated moving forward.

In future focus groups and the participatory sessions that follow, it will be important to consider how we may embrace our newfound virtual toolkits in thoughtful and considerate ways.

We acknowledge that the focus group models we offer belong on an ever-expanding lineage of discursive strategies, but that there remains significant work to be done towards empowering and uplifting a representative public. As hybrid methodologies that combine analog and virtual mediums continue to emerge [suggested in Fig. 5], we urge all researchers and practitioners to develop a tailored approach to engagement that recognizes the plurality of the public they are serving and that addresses the specific barriers to access that are faced.

Equitable communities of the future will require informed participants in a cross section of society. The goal of the *Future Energy Shift Research Program*, despite its literal study of a novel energy system, has been to enable and energize collaborative discourse that encourages both the public and practitioners across disciplines to recognize their social, political, and environmental agency. Furthermore, we implore those in the discipline of architecture to interrogate their complicity in existing exclusionary practices that are woven into the 'conventional everyday' of our profession. We must recognize the value of the reciprocal generation of knowledge that is possible when complex and multitudinous publics gain the agency to genuinely participate.

ENDNOTES

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2. Bill Lennertz, Aarin Lutzenhiser and Andres Duany, *The Charrette Handbook: The Essential Guide to Design-Based Public Involvement* 2nd edition (New York: Routledge, 2014): 3.

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11. Shannon Mattern, "Post-It Note City," *Places Journal* (2020). https://doi.org/10.22269/200211.

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