PARTICIPATORY SYSTEMS CHANGE: A PRIMER
ACKNOWLEDGEMENTS

We would like to acknowledge the thought leadership of Professor David Kahane from the University of Alberta, who originally suggested to us the possibility of exploring the meeting place between the fields of citizen engagement and systems thinking, and proposed that we jointly convene a retreat on this topic. The additional event advisors Matt Leighninger, Alex Ryan and Shauna Sylvester played critical roles in framing, designing and facilitating the retreat. Seventeen thought leaders travelled from across North America, the United Kingdom and Taiwan to participate. The names and affiliations of these participants are printed in the box on this page.

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Retreat Participants*

Simon Burall, Involve UK
Martín Carcasson, Colorado State University/Public Agenda
Aftab Erfan, University of British Columbia
Suzanne Hawkes, Rockwood Leadership Institute
Joe Hsueh, Academy for Systemic Change/National Taiwan University/Harvard University
Robert “Jake” Jacobs, Real Time Strategic Change
David Kahane, University of Alberta/Alberta Climate Dialogue
Matt Leighninger, Public Agenda
Carolyn Lukensmeyer, National Institute for Civil Discourse
Mary Pat MacKinnon, Hill + Knowlton Strategies (H+K)
Peter Padbury, Government of Canada (Policy Horizons)
Monica Pohlman, Reos Partners
Darcy Riddell, J.W. McConnell Family Foundation
Alex Ryan, Government of Alberta (Co-Lab)/Syntheskos Strategy Consulting
Shauna Sylvester, SFU Centre for Dialogue
Michel Venne, Institut du Nouveau Monde
Mark Warren, University of British Columbia

*Organizations accurate at the time the retreat was held in October 2016.
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Participatory Systems Change: A Primer

ABSTRACT

Addressing many of today’s most pressing problems—from climate change to unsustainable borrowing to rising inequalities—requires both engaging broad public audiences and working with complex systems of institutions, actors and drivers to mobilize solutions. Over the past thirty years, advances in the field of public engagement have enabled citizens to meaningfully affect government decision-making, while evolutions in systems approaches have created new opportunities for experts to understand and intervene in complex systems. Yet, until recently there has been little interaction and exchange between these two fields.

Building on the results of a gathering of 17 thought leaders in Whistler, Canada in October 2016, this report explores possibilities for connecting public engagement and systems approaches to enable more effective and democratic ways of creating change.

The report provides brief introductions to systems approaches and public engagement, their evolution, context of use, underlying values, cultures and assumptions, their unique contributions, as well as the limitations of both approaches. We surface challenges that practitioners, researchers and participants of systems approaches and public engagement typically grapple with, including tensions between power and equality or democracy and expertise and other considerations.

The report then asks how systems approaches can become more democratic and how public engagement can benefit from systems lenses and tools. We explore how the two fields might combine or collaborate to create democratically supported systems change and showcase methods from both areas of practice.

Based on the characteristics that emerged from the retreat discussions, Participatory Systems Change...

01... includes mechanisms for sponsorship and governance that recognize both the need to include communities affected by the decision-making process as well as the capability to influence formal government policy;

02... recognizes that issue framing matters and must enable participation across a broad range of perspectives and interests;

03... uses sequencing and iterative processes in recognition that learning is an integral part of responding to complex problems. Follow through and implementation

04... allows for democratic exchanges to identify and work through value trade-offs and come to informed judgement;

05... applies methods of analysis to understand complex problems, explore tensions and identify opportunities to affect change; and...

06... leverages strategies for mass communications that reach a critical mass of citizens and actors to affect and sustain change.

The report concludes by identifying critical questions for further investigation and points readers towards a sampling of additional resources and meeting spaces that may help to inform collaboration between these two fields.
ONE

Introduction

From climate change to unsustainable borrowing to rising inequalities, societies are facing challenges that test both their cohesiveness and their ability to respond with the necessary speed and agility. Compounding these challenges is a decline in the public’s trust in major institutions and a renewed rise in populism and authoritarianism across many liberal democracies.

Addressing many of today’s most pressing problems requires both engaging broad public audiences and mobilizing solutions by working within complex systems of institutions, actors, and drivers. Governments are democratically elected to address these problems, but often can’t do so alone. In this report we explore how success in these cases might benefit from a systems-based approach that takes into account the values of citizens, identities leverage points for intervention and builds collaboration among multiple actors.

As stated by Professor David Kahane from the University of Alberta: “Our toughest challenges...cannot be solved through piecemeal reform or change within particular jurisdictions; they are rooted in far reaching, insistent and complex systems dynamics. Adequate responses need tools to understand and act within complex systems. And as both a principled and pragmatic matter, adequate responses need to be grounded in broad public will and action. To bring about the changes we need, we have to work with both systems and democratic publics.”

The past thirty years have seen a revolution in the field of citizen engagement where increasing adoption of Open Government policies, rising levels of citizen education, rapidly evolving communications technologies and the maturing of deliberative facilitation processes make it possible for citizens to contribute informed and actionable ideas like never before. For example, 55 National Policy Conferences were held in Brazil between 2003 and 2009, involving citizens across the country in consensus-building and policy formation on issues such as public health, human rights and environmental issues. In the United States of America, AmericaSpeaks was invited in 2016 to convene thousands of citizens to deliberate on the re-building of New Orleans in the wake of Hurricane Katrina after earlier design efforts failed due to a lack of representation and citizen input. In British Columbia, Canada, the Citizens’ Assembly on Electoral Reform broke new ground in 2004 when participants were empowered to recommend a new voting system for their fellow citizens to consider in a provincial referendum.

Yet, by themselves, each field faces limitations in its ability to respond to our most critical challenges. Whereas systems approaches have significant ability to harness power and expertise, they are at risk of being disconnected from grassroots experiences, leaving values trade-off in the hands of an arbitrary few, and/or lacking transparency in their methods and outcomes. Similarly, citizen engagement approaches allow us to understand the values, needs and experiences of citizens, but often at the expense of simplifying complex issues, remaining within the comfort zones of governments and participants, and/or slowing down urgent responses.

The field of systems thinking has developed similarly advanced and exciting tools over the last sixty years, building upon early work in fields such as ecology and artificial intelligence. The result is a growing network that includes design labs, social innovation hubs and expert interventions. Together, these initiatives help to create a holistic understanding of how complex systems work, capture and compare mental models, identify leverage points to intervene in system behaviour, and collaborate in creating and piloting solutions. For example, in Canada, MaRS Solutions Lab uses systems methods to solve complex social and economic challenges for topics such as food, health, government and learning. The MaRS umbrella organization now serves as the world’s largest urban innovation hub and has helped start-ups and growing ventures to raise $2.6 billion in capital. In Mexico, systems mapping has helped to surface the feedback loops that have led to overfishing on the Pacific coast and has allowed stakeholders to contribute to an agreement for sustainable fisheries management. In the USA, the Garfield Foundation uses systems methods to support RE-AMP, a network of 175 nonprofits, in its work to reduce greenhouse gas emissions. Among its achievements, RE-AMP is credited with halting the development of 28 new coal plants in its first six years.

Addressing many of these problems requires both engaging broad public audiences and mobilizing solutions by working within complex systems of institutions, actors, and drivers. Governments are democratically elected to address these problems, but often can’t do so alone. In this report we explore how success in these cases might benefit from a systems-based approach that takes into account the values of citizens, identities leverage points for intervention and builds collaboration among multiple actors.

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1 Kahane (2016): Private communication to retreat participants.
2 See p. 1 for full list of participants.
3 Existing examples that extend and blend aspects of these two fields include Casteino & Sprink (2014); who put forward the idea of Deliberative Inquiry as an extension of Deliberative Dialogue (Kahane et al. 2015); who explore ways to blend end sequence citizen and stakeholder engagement, and Marsbridge et al. (2012); who explore deliberative democracy through a systems lens.
TWO
An overview of citizen engagement and systems thinking

2.1 WHAT IS CITIZEN ENGAGEMENT?

Citizen engagement describes ways in which members of the public exert direct influence on government decision-making. In most established democracies today the predominant process for making decisions is an indirect one where citizens participate by electing representatives to make decisions on their behalf, with the understanding that most citizens do not have sufficient time or expertise to be involved in every decision. In most established democracies today the predominant process for making decisions is an indirect one where citizens participate by electing representatives to make decisions on their behalf, with the understanding that most citizens do not have sufficient time or expertise to be involved in every decision. In addition to representation there are usually a number of formal channels for citizens to present their viewpoint for the public record including public hearings, petitions or referendums.

The trouble with “conventional” participation methods is that they are often poorly attended, often involve only a small segment of the interests and perspectives present in the community and frequently leave those who do attend with a feeling of inefficacy and powerlessness. As noted by Tina Nabatchi and Matt Leighninger, conventional meeting formats typically include an audience-style room setup, a pre-set agenda and public comment segments “during which citizens have two or three minutes at an open microphone to address their elected officials.”

Conventional engagement also often fails to maximize the unique contributions that citizens can make. Citizens are the only experts on their “lived experience” and the only ones who can speak directly to the values and identities that inform their judgment of available policy choices. Citizen input is therefore critical for helping government make decisions on questions that are not technical in nature and require learning, adaptation and the weighing of options and trade-offs. By “working through” their responses, citizens are able to weigh available options and come to an informed judgment. The result is that citizens often contribute new, innovative ideas and are able to participate in the implementation of solutions.

Since the 1980’s the implementation of access to information legislation and open government policies in OECD countries has coincided with rising levels of citizen access to information and technology. A rich body of knowledge has developed over this period on how participation can best support collaborative decision-making between citizens and government representatives, and thereby enhance the democratic process in ways that maximize the best capacities and contributions of each.

BOX 1
IAP2 core values for high-quality citizen engagement

The International Association for Public Participation (IAP2), a leader on standards and capacity building in this field, has established a set of core values that characterize high-quality engagement. According to these values, public participation:

- is based on the belief that those who are affected by a decision have a right to be involved in the decision-making process;
- includes the premise that the public’s contribution will influence the decision;
- promotes sustainable decisions by recognizing and communicating the needs and interests of all participants, including decision makers;
- seeks out and facilitates the involvement of those potentially affected by or interested in a decision;
- seeks input from participants in designing how they participate;
- provides participants with the information they need to participate in a meaningful way; and
- communicates to participants how their input affected the decision.

We use the term “citizen engagement” rather than “public engagement” or “public participation” to emphasize the accountability between government and the people it represents, and to differentiate from stakeholder engagement, which is common within systems-based approaches. We understand the word “citizen” broadly to include affected individuals who may not hold formal citizenship rights or be eligible to vote. For a similar definition, see: Open Government Partnership, Open Government Guide – Glossary, available at https://www.opengov-partnership.org/open-government-guide-glossary (retrieved 15 Aug 2017).

In this section, our emphasis is on seeking citizen input to influence government decision-making. Other important areas relevant to Participatory Systems Change include collective action between citizens and government, and the ability of citizens and stakeholders to self-initiate actions to effect change.

OECD (2009).

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High-quality citizen engagement requires public trust in the convenor’s neutrality. Martín Carcasson describes the role of the convenor as “passionate impartiality”:

“Impartiality is our primary responsibility and is critical to cultivating the reputation and trust that bring people together and change the conversation, but the commitments are similarly critical for changing the conversation in particular ways… equality and inclusion make up one key set of democratic commitments deliberative practitioners hold dear—we cannot be neutral about whether voices are heard or when the powerful attempt to silence others. The second is the importance of good information, a key epistemic commitment we must also make to support quality decision making.”

In particular, Carcasson describes the need for passionately impartial convenors to take active interest in the issues power and information, as shown visually in Figure 1. In the context of citizen engagement this might mean that convenors must take responsibility to create a fair and equal platform for communities that lack political power or face discrimination such as Indigenous, racialized and low-income communities. This may also mean ensuring that participants have access to evidence-based information to protect the integrity of their deliberations.

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**FIGURE 1**
Passionate Impartiality
The recognition of tensions between:

- Impartiality
- Honoring sound data & reasoning
- Honoring equality & inclusion

Courtesy of Martín Carcasson

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12 Carcasson (2017).
Researchers and practitioners within the citizen engagement field have developed a rich set of tools and methods that embody the IAP2 core values (see Box 1) and have been deployed in a wide array of contexts, ranging from small groups of citizens helping to solve issues in their communities to large-scale processes involving thousands of citizens across entire nations. Full-scale engagement processes often include variations of the following six basic stages:

1. Raising awareness
2. Surfacings values and aspirations
3. Developing options
4. Evaluating options and trade-offs
5. Making decisions/recommendations
6. Follow through and implementation

The National Coalition for Dialogue and Deliberation (NCDD) as well as IAP2 provide sets of tools that can be used at each of these six stages. They include commonly used conventional engagement tools such as online and paper surveys, open houses and outreach campaigns. They also use methods for what Nabatchi and Leighninger call “thick” engagement methods that enable “large numbers of people, working in small groups (usually five to fifteen),…” to make a decision or judgment based on the numbers of people, working in small groups (usually five to fifteen), to make a decision or judgment based on the numbers of people, working in small groups (usually five to fifteen), to make a decision or judgment based on the numbers of people, working in small groups (usually five to fifteen), to make a decision or judgment based on the numbers of people, working in small groups (usually five to fifteen), to make a decision or judgment based on the

**BOX 2**

**Citizen Juries as an example of deliberation**

Developed by the Jefferson Centre, Citizens Juries normally range from 15 to 24 randomly selected participants and address an issue in depth over several days. Juries hear from a diverse range of experts and proponents and deliberate as a group. The jury will compile its work with a recommendation that the members consider to be in the best interest of the community. “Citizens’ Review Initiatives are similar to Citizens Juries but focus on proposed laws or constitutional amendments that will be put to a ballot in upcoming elections.”

The final stage of an engagement process, following through, is often critical as it is frequently overlooked. This stage involves communicating results and/or recommendations to decision-makers and the public; ensuring that decisions are acted upon; reporting back on how citizen input was used and on progress of implementation; and involving citizens and stakeholders in collective implementation.

David Kahane and Mary Pat MacKinnon have identified several common barriers to the implementation of citizen recommendations following deliberative dialogue, including insufficient links to civil society, a lack of connection to formal governance mechanisms and insufficient visibility in the eyes of broader communities. Even when governments successfully act upon citizen recommendations, a lack of consistency in communicating these results back to participants often threatens to damage citizen good will. The follow-through and implementation of citizen input is therefore critical, not only to ensure that the visions put forward by citizens are realized, but also to build lasting relationships with the community and create a sustained culture of participation.

**2.2 WHAT IS SYSTEMS THINKING?**

Systems thinking is a field that seeks to understand and respond to the complexity of systems, ranging from cybernetics to biological ecosystems to economics to social innovation. Systems approaches seek to both identify the individual parts of a system (e.g. people, institutions, places, etc.) and to characterize “the nature of… the relations or ‘forces’ between them.”

While some systemic approaches seek to predict future system states through detailed modelling, others focus on problem solving and identifying leverage points where interventions can change system behaviour. Problem-solving approaches are especially relevant for issues where coordination between multiple actors is necessary to effect the desired change and for circumstances where the risk of unintended consequences is high. Problem-solving approaches can also be used to support organizational learning, as popularized in books such as “The Fifth Discipline” by Peter Senge.

Whereas quantitative modelling relies upon the technical knowledge of experts, other forms of systems thinking place additional emphasis on understanding and accommodating diverse world views, and on creating opportunities for small group participation. One frequent purpose for including participation by small groups of users or stakeholders is to understand and compare the mental models held by individual participants—implicit or explicit—when explaining system behaviour.

Techniques such as dialogue interviews are often used at the start of a systems change process to better understand existing mental models. At their most basic level, mental models include assumptions and beliefs about how a system works. These models can also extend to the motivations and relationships that guide individuals’ participation within a system. Tools used to capture mental models include causal loop diagrams and rich picture diagrams.

**BOX 3**

**Leverage points and the national debt**

Donella Meadows, among others, has used the example of the national debt to help describe the types of leverage points that allow intervention in complex systems. The list of actors related to the national debt “system” could include: lenders, who lend to citizens; political leaders, who bring forward legislation; annual budgets, which add to or subtract from the debt; and the media, which hold political leaders to account.

To intervene in this system, taxation rates and expenditures can be opened or closed like water taps to change the rate of borrowing. Changes to interest rates have exponential consequences through compound interest (positive feedback loops). Rules such as balanced budget legislation can be imposed to control spending. Changes to the flow of information from the media to the electorate can affect how parties prioritize debt reduction.

In her writing, Meadows cites “the mindset or paradigm out of which the system arises” as one of the most impactful leverage points in a system. For example, a political party running on a platform to dramatically increase or decrease the role of government in society could substantially impact the circumstances where politicians and citizens feel that debt is appropriate.
An example of a simplified causal loop diagram relating fish stocks with economic, environmental and social sustainability is provided in Figure 3. As civic engagement leads to increased conservation and sustainable fishing practices, the health of fish stocks and the overall ecosystem increases. This allows for additional income stability through tourism and sustainable catch programs, which further reduces pollution and reinforces the original civic engagement efforts by demonstrating community benefits. An expanded version of this simplified system description is provided in Figure 4 demonstrating the full and uncensored complexity of this simplified system description.
The values that guide the field of systems thinking vary depending on the area of application and are not always explicit. In the case of systemic design, Alex Ryan has drawn upon the work of Bruce Mau and Harold Nelson to explicitly identify a set of characteristics, values and habits that inform this emerging field (Table 1).21

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>VALUE</th>
<th>HABITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inquiring</td>
<td>Learning</td>
<td>Curious; observant; asks rather than assumes</td>
</tr>
<tr>
<td>Open</td>
<td>Growth</td>
<td>Defers judgement; seeks different experiences and perspectives; willing to change one’s mind</td>
</tr>
<tr>
<td>Integrative</td>
<td>Accommodation</td>
<td>Avoids binary trade-offs; seeks win-win games; utilises tension between worldviews creatively</td>
</tr>
<tr>
<td>Collaborative</td>
<td>Teamwork</td>
<td>Listens actively; builds on others’ ideas; grows social cohesion; builds shared ownership and accountability</td>
</tr>
<tr>
<td>Centred</td>
<td>Mindedness</td>
<td>Reflective self-awareness; views challenges in a larger context; mediates tensions between extremes</td>
</tr>
</tbody>
</table>

Systems-inspired processes can work towards a range of outcomes. Foresight, as described by Peter Padbury, seeks to clarify planning assumptions and identify emerging policy challenges and opportunities by surfacing a range of potential futures.22 Social Change Labs, as described by Frances Westley, Sam Laban and colleagues,23 are more oriented towards planning for immediate action with added steps such as design, prototyping and field testing. The typical steps in the Social Change Labs Method are presented in Figure 4.

A common element of systems-oriented processes is the need to surface multiple reference frames and work through differences to develop a shared frame. One influential description of this type of learning journey is found in Theory U by C. Otto Scharmer,24 which describes such steps as suspending habitual judgement, seeing with fresh eyes, presencing, crystalizing vision and intention, prototyping and performing. Scharmer discusses “heart” and “will” with equal emphasis as “mind” in Theory U, helping to clarify that science, consciousness and social change all have important roles in how we understand and transform systems.

FIGURE 4
Steps in the Social Change Labs

STEP ONE: Initiation
Confirming what the ‘conveners’ want and need / Matching needs to processes.

STEP TWO: Research + preparation
Recruiting, research and building models

STEP 3: Designing and delivering workshops/
Conducting additional research / Building model
Workshop 1: Seeing the system
Workshop 2: Designing innovation
Workshop 3: Prototyping strategies

AFTER THE LAB: Field testing, taking action and follow-up
Steps reprinted from Westley et al. (2014).

TABLE 1
Five characteristics of a systemic design mindset (Ryan 2014).

21 Ryan (2014).
22 Padbury (2016).
23 Westley et al. (2014).
24 Scharmer (2016), 39.
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2.3 COMPARING VALUES, STRENGTHS AND LIMITATIONS OF THE TWO FIELDS

Both citizen engagement and systems thinking share the objectives of understanding and addressing problems. In order to accomplish these objectives, each field uses methods to surface information and to facilitate shared learning and discussion. These similarities notwithstanding, real and substantive differences exist between typical citizen engagement and systems thinking processes as becomes evident when exploring the values that inform each field.

Public institutions frequently adopt a formal values statement to guide their citizen engagement activities. For example, the IAP2 core values are listed in Section 2.1 and include such concepts as the right to participate, the promise to consider public input, transparency and inclusion. The field of systems thinking is expansive and lacks a similarly acknowledged reference point for practitioner values, although the values proposed for the field of systemic design in Section 2.2 include accommodation to seek win-win solutions, teamwork to build shared ownership and “mindedness” of individual beliefs within the larger context of the issues under consideration. In practice, the values held by both fields are often ideals that may not be fully realised in real-world circumstances.

Citizen engagement practitioners also aspire to implement many of the values of systemic design, but may find these more difficult to achieve in the context of working with citizens. For example, citizen engagement often requires proposing values trade-offs for participants who are reluctant to confront hard choices. In contrast to citizen engagement, systems thinking is relatively value neutral when it comes to democratic ideals. There is no inherent right for participation by those affected by decisions except as required by the convenor to improve the outcome, nor is there necessarily the requirement for transparency in method or outcomes. While citizens often resist change when discussing topics such as neighbourhood planning, systems change practitioners may be predisposed towards transformative outcomes based on the inherent importance of understanding “who ought to be served by the designer’s actions” and “who should make the decisions” is explored with sincerity by such systems thinkers as Harold Nelson,2 but in practice these normative choices are easily left within the hands of power brokers or technical experts to arbitrate. These common differences are summarized in Table 2, and provide an opportunity to consider how each discipline may complement the other to maximize success.

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>Summary of differences in approach between typical citizen engagement and systems thinking projects.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRADE-OFFS AND POLARITIES</strong></td>
<td><strong>CITIZEN ENGAGEMENT</strong></td>
</tr>
<tr>
<td></td>
<td>Citizens require accessible information and may be reluctant to confront hard choices.</td>
</tr>
<tr>
<td><strong>FRAMING</strong></td>
<td>Decision-makers may constrain framing to avoid raising public expectations.</td>
</tr>
<tr>
<td><strong>END GOALS</strong></td>
<td>Practitioners work towards a definitive outcome due to challenges of engaging citizens over long periods.</td>
</tr>
<tr>
<td><strong>PARTICIPATION</strong></td>
<td>Those affected by decisions have an inherent right to participate regardless of ability.</td>
</tr>
<tr>
<td><strong>TRANSPARENCY</strong></td>
<td>Industry standards call for the voluntary public release of methods and outcomes.</td>
</tr>
<tr>
<td><strong>NORMATIVE DECISIONS</strong></td>
<td>Decisions are related back to citizens’ values and interests as an exercise in democracy.</td>
</tr>
<tr>
<td><strong>CHANGE</strong></td>
<td>Citizens may be biased towards the status quo over change (e.g. neighbourhood density).</td>
</tr>
</tbody>
</table>

25 Westley et al (2014), 16
26 Nelson & Stoilerman (2003), 67

These differences point to the unique contributions and limitations within each field, and help to highlight the inherent challenges practitioners face when trying to balance tensions between such considerations as power and equality or democracy and expertise. These tensions speak to the reasons why a combination of the best features of systems thinking and citizen engagement might create powerful new opportunities to change complex systems for the public interest.
THREE

Participatory Systems Change

3.1 SIX CHARACTERISTICS OF PARTICIPATORY SYSTEMS CHANGE

This section explores opportunities to integrate the fields of systems thinking and citizen engagement to create Participatory Systems Change. It draws upon the work of the participants at the Whistler Citizen Involvement and Systems Change Retreat, who worked in small groups to develop concepts for such hybrid processes. Building on an analysis of this work, the Centre for Dialogue has identified six characteristics that appear to be central to Participatory Systems Change. These characteristics are stated at a high level in Figure 6 and described in additional detail in the sections that follow.

FIGURE 5
Characteristics of Participatory Systems Change

Participatory Systems Change…

01 ...includes mechanisms for sponsorship and governance that recognize both the need to include communities affected by the decision-making process as well as the capability to influence formal government policy;

02 ...recognizes that issue framing matters and must enable participation across a broad range of perspectives and interests;

03 ...uses sequencing and iterative process in recognition that learning is an integral part of responding to complex problems;

04 ...allows for democratic exchanges to identify and work through value trade-offs and come to informed judgement;

05 ...applies methods of analysis to understand complex problems, explore tensions and identify opportunities to affect change; and …

06 ...leverages strategies for mass communications that reach a critical mass of citizens and actors to affect and sustain change.
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Sponsorship and governance

Those overseeing a change initiative must possess the resources and influence required to create system-level change. Balancing this practical consideration is the desire for those in change to reflect the communities they serve to avoid blind spots, even (especially) where these communities lack resources and influence. Governance structures also must adapt to recognize that accountability for success is diffused over the multiple individuals and organizations whose collaboration is required to achieve success. If activities must be sustained over the long-term and government is a required participant, then the process cannot be viewed as the product of a single political party or leader. Instead the composition of individuals overseeing the initiative must establish broad credibility that transcends partisan approaches and election cycles.

Issue framing

Decision-makers often favour narrow discussion frames to enable focused conversations and avoid setting expectations beyond the boundaries where they are prepared to act. Despite these legitimate considerations, Participatory Systems Change almost certainly requires necessary discussion framing, and to use systems mapping to identify leverage points that must be encompassed within these boundaries of discussion.

Collective Impact

First introduced by John Kania and Mark Kramer in 2011,27 the concept of Collective Impact refers to “…the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem.” Kania and Kramer differentiate technical problems from adaptive problems, the latter of which have no known solutions and require multiple actors to achieve success. In order to achieve Collective Impact, these actors must join together to agree upon a common agenda, establish a shared measurement systems, conduct mutually reinforcing activities, commit to continuous communication and share a backbone support organization that coordinates their activities.

Deep Democracy and the Soft Shoe Shuffle

Deep Democracy is a facilitation method originally developed by Myrna and Greg Lewis to navigate racial tensions in post-apartheid South Africa.28 The process creates intentional space for participants to express deeply held values and worldviews in an effort to surface unspoken issues that prevent groups from moving forward. One component of the Deep Democracy toolset is the “soft shoe shuffle,” where participants are asked to state their opinions in response to a discussion question posed by the facilitator. Participants who agree with their peer’s statement move towards that individual, while those who disagree move away. By repeating this process many times, the group is able to quickly identify areas of agreement and disagreement, allowing participants to explore these issues in greater depth through facilitated discussion.

Sequencing

The transformation of complex systems may first require incremental progress that creates the conditions necessary for breakthrough change to occur. Taking the long view in this case means embracing uncertainty and accepting that the path forward will include iteration and experimentation, where some solutions will be abandoned and others will be embraced. Sequencing also implies integration between different activities. In practice this means creating opportunities for back-and-forth between citizens on the one hand and experts and key stakeholders on the other in ways that maximize the contributions of each group. This type of integrative approach makes it less likely that citizens will produce “cute” solutions that don’t account for real world constraints, or that experts will cloud the decision-making process with their own knowledge silos and biases, because the act of iteration will allow each group to provide a corrective function to the other.

The nature of democratic exchange

For reasons already explored in this report many of today’s citizen engagement processes fail to deliver results that are satisfying for rather decision-makers or participants. Fortunately a variety of methods now exist that create spaces for learning, deep reflection and informed judgment. These methods generally seek out participants who reflect the full range of interests and perspectives, and create facilitated spaces for face-to-face dialogue and collaboration. They also include steps to equalize power and participation so that equity-seeking communities are not excluded from deliberations. The citizen recommendations that result from these processes are evidence-informed and grounded in real world decision-making constraints while also reflecting the values judgments, lived experience and interests that citizens are uniquely positioned to provide.

The method of analysis

Participatory Systems Change draws heavily upon systems-based approaches to understand complex relationships between issues and actors and to inform solutions. This can involve the use of specific tools for analysis, such as systems mapping, or can focus on the specific process for analysis, for instance, through the use of change lab-style workshops. These systems-based approaches can apply to multiple stages of initiatives, from characterizing the problem statement, to identifying stakeholders, to imagining solutions. By interweaving these techniques with sponsorship discussions and democratic spaces, Participatory Systems Change can begin to take shape.

27 Kania & Kramer (2011).
28 For more information, see Lewis Method Online, available at https://deep-democracy.net/.
29 Mandridge (2010).
31 Deep Democracy has extended this concept with its 21st Century Town Meeting, engaging thousands of citizens simultaneously across multiple locations on issues such as the re-development of Ground Zero in New York and the re-building of New Orleans after Hurricane Katrina.28
Participatory Systems Change: A Primer
SFU Centre for Dialogue

Strategies for mass communications

Large scale systems change is likely to affect the day-to-day lives of many individuals and is therefore best implemented with a critical mass of public input and support. Although not as in-depth as the democratic spaces discussed above, mass communications strategies can still broaden the reach of democratic exchange, build shared narratives, and create the necessary conditions for moving forward together. This approach is qualitatively different than social marketing or traditional communications messaging because it includes an authentic desire for two-way exchange. Examples of such mass communications strategies include crowd sourcing technologies, competitions, Twitter town halls and kitchen table conversations.

Text, Talk, Act

Text, Talk, Act is a text messaging-based tool that was used to engage youth aged 14-24 as part of US President Obama’s National Dialogue on Mental Health. Using a simple mobile phone, groups of 3-5 participants could receive discussion questions, answer multiple choice questions, and receive links to further information. This technology approach allowed organizers to reach tens of thousands of participants in a variety of formal and informal settings.

Polarity Management

In his book Polarity Management, Barry Johnson defines polarities as “sets of opposites that can’t function well independently.” Johnson uses the example of centralization versus decentralization to describe the lost opportunity that occurs if the tensions between these two polar approaches are treated as a problem rather than a challenge in optimization.

In The Opposable Mind, Roger Martin describes how integrative thinkers have “the ability to face constructively the tension of opposing ideas and, instead of choosing one at the expense of the other, generate a creative resolution of the tension in the form of a new idea that contains elements of the opposing ideas but is superior to each.” Martin describes how integrative thinkers are able to consider a wider range of salient criteria, understand the full complexity of causal systems including qualitative relationships such as motivation, visualize the whole while working on individual parts, and suspend the “either/or” impulse to advocate for one approach over another. This allows integrative thinkers to imagine how existing models could change and evolve to creatively resolve problems rather than looking to pre-existing models for solutions or using repeated past experiences to extrapolate into the future.

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### 3.2 Participatory Systems Change Compared with Traditional Approaches

This section compares Participatory Systems Change with traditional approaches. In this comparison, “traditional approaches” should not be considered wrong or inferior. Rather, both Participatory Systems Change and traditional approaches are valid tools for use within their appropriate context.

<table>
<thead>
<tr>
<th>Traditional Approaches</th>
<th>Participatory Systems Change</th>
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</thead>
<tbody>
<tr>
<td><strong>Sponsorship</strong></td>
<td>Sponsorship establishes credibility and impact</td>
</tr>
<tr>
<td>“Who is needed to effect change?”</td>
<td>“Who is responsible?”</td>
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<tr>
<td>What it might look like:</td>
<td>What it might look like: Sponsors may include:</td>
</tr>
<tr>
<td>• Decision-makers sponsor engagement</td>
<td>• Decision-makers</td>
</tr>
<tr>
<td>• Stakeholders with credibility across perspectives</td>
<td>• Citizens</td>
</tr>
<tr>
<td>• Coalitions that can ensure continuity beyond election cycles</td>
<td>• Actors critical for implementation</td>
</tr>
<tr>
<td>• Actors critical for implementation</td>
<td>• Citizens</td>
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<tr>
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<td>• Citizens</td>
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<th>Method of Analysis</th>
<th>Communications Strategies</th>
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<tr>
<td><strong>Sequencing</strong></td>
<td>Communications strategies amplify a message</td>
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<tr>
<td>Linear: series of steps to get from A to B</td>
<td>“How do we make our case and control the message?”</td>
</tr>
<tr>
<td>“What is the most direct route to the solution?”</td>
<td>What it might look like: Traditional communications strategies: how to deliver the right message to the right audience at the right time?</td>
</tr>
<tr>
<td>What it might look like:</td>
<td>What it might look like:</td>
</tr>
<tr>
<td>• Decision-makers only involved at beginning and end</td>
<td>• Traditional communications strategies: how to deliver the right message to the right audience at the right time?</td>
</tr>
<tr>
<td>• Public feeds experts, experts feed decision-makers</td>
<td>• Traditional communications strategies: how to deliver the right message to the right audience at the right time?</td>
</tr>
<tr>
<td>• Iterative and integrative: developing a phased process that creates solutions through learning and experimentation</td>
<td>• Traditional communications strategies: how to deliver the right message to the right audience at the right time?</td>
</tr>
<tr>
<td>“Issues are complex and are rarely solved through a linear process. There needs to be space for feedback loops.”</td>
<td>• Traditional communications strategies: how to deliver the right message to the right audience at the right time?</td>
</tr>
<tr>
<td>What it might look like:</td>
<td>What it might look like:</td>
</tr>
<tr>
<td>• Integration between the activities of experts, citizens and decision-makers to build upon each other’s work and provide multiple opportunities to inform each other’s contributions</td>
<td>• Traditional communications strategies: how to deliver the right message to the right audience at the right time?</td>
</tr>
<tr>
<td>• Uncertainty is embraced through prototyping and experimentation</td>
<td>• Traditional communications strategies: how to deliver the right message to the right audience at the right time?</td>
</tr>
<tr>
<td>• Sufficient time is allocated to allow for iteration and co-creation</td>
<td>• Traditional communications strategies: how to deliver the right message to the right audience at the right time?</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Nature of Democratic Exchange</th>
<th>TRADITIONAL APPROACHES</th>
<th>PARTICIPATORY SYSTEMS CHANGE</th>
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<tr>
<td><strong>Issue Framing</strong></td>
<td>Traditional communications</td>
<td>Process creates spaces for learning, deep reflection and informed judgment</td>
</tr>
<tr>
<td>Frame is set narrowly based on decision-makers’ needs and desired outcomes</td>
<td>“How can we engage affected parties to co-create viable solutions?”</td>
<td>“How can we engage affected parties to co-create viable solutions?”</td>
</tr>
<tr>
<td>“Here’s what we want to talk about.”</td>
<td>What it might look like:</td>
<td>What it might look like:</td>
</tr>
<tr>
<td>What it might look like:</td>
<td>• Traditional town-halls, open houses, public hearings</td>
<td>• Traditional town-halls, open houses, public hearings</td>
</tr>
<tr>
<td>• Issues are framed through internal government process</td>
<td>• Surveys</td>
<td>• Surveys</td>
</tr>
<tr>
<td>• Systems mapping experts work with content experts and stakeholders to identify leverage points</td>
<td>• Online portals to collect expert submissions</td>
<td>• Online portals to collect expert submissions</td>
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<thead>
<tr>
<th>Mass Communications</th>
<th>TRADITIONAL APPROACHES</th>
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<tr>
<td><strong>Communications</strong></td>
<td>Traditional communications strategies</td>
<td>Communications strategies broaden the reach of the democratic exchange to build a shared public narrative</td>
</tr>
<tr>
<td>Strategies</td>
<td>“How do we move forward together?”</td>
<td>“How do we move forward together?”</td>
</tr>
<tr>
<td>What it might look like:</td>
<td>What it might look like:</td>
<td>What it might look like:</td>
</tr>
<tr>
<td>• Mobilizing evidence-based information</td>
<td>• Mobilizing evidence-based information</td>
<td>• Mobilizing evidence-based information</td>
</tr>
<tr>
<td>• Two-way exchanges (e.g., competitions, Twitter town halls)</td>
<td>• Tools for stakeholder-hosted “kitchen table conversations” to spread awareness and inform larger process</td>
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</tr>
<tr>
<td>• Community-based ambassadors</td>
<td>• Community-based ambassadors</td>
<td>• Community-based ambassadors</td>
</tr>
<tr>
<td>• Game-based engagement (gamification)</td>
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Four

Simple starting places for practitioners

A simple approach to explore synergies between the fields of citizen engagement and systems thinking would be to start with one field as a foundation and then to layer on additional features from the other field. Although this incremental approach may not by itself be sufficient to achieve the goal of Participatory Systems Change, it provides an approachable way for practitioners from one field to extend their practice into the other.

Figure 6 provides a simple example of how a typical citizen engagement process could benefit from systems-based interventions. In this model systems practitioners are engaged from the outset to ensure that the engagement framing and problem statement account for systemic inter-dependencies. Systems approaches are further used to illuminate differences between the mental models of citizens, allowing facilitators to better identify the necessary discussion questions to guide further dialogue. Causal loop mapping could be used to inform the development of options for citizens to evaluate, and polarity management could be used to help citizens optimize trade-offs and avoid zero-sum logic. Finally, systems practitioners could help to pilot emerging solutions in a transparent manner that allows the public to participate in the learning process.

Figure 7 provides examples of how citizen engagement processes could be combined with lab-based systems change methods. In this example citizens are brought into a project advisory committee and organizers seek diverse citizen perspectives to help inform project framing and objectives. Citizens then deliberate on potential design innovations produced by systems practitioners, examining the inherent values trade-offs between different options and recommending preferred solutions. Finally, citizens receive transparent information about the project outcomes and are reconvened after implementation to confirm if the desired benefits have been achieved.

These examples focus on modifications to the standard processes of change labs and/or public engagement rather than on specific tools or methods. They are intended to provide simple and incremental examples of how each field could be extended to include elements of the other. As such they are largely linear in nature and do not necessarily feature all characteristics of Participatory Systems Change listed in Section 3. For the sake of simplicity these models treat systems-based and citizen-based approaches as completely distinct. In practice, many systems practitioners use some form of participatory methods and many citizen engagement practitioners use some form of expert analysis.
FIGURE 6
Six basic stages of citizen engagement with potential systems interventions

ONE  Raising awareness

TWO  Surfacing values and aspirations

THREE  Developing options

FOUR  Evaluating options and trade-offs

FIVE  Making decisions/recommendations

SIX  Following through

INTERVENTION 1
Systems practitioners create preliminary systems map to look for interdependencies that should inform problem framing.

INTERVENTION 2
Systems practitioners compare the mental models of participants and use differences to shape discussion topics for further dialogue.

INTERVENTION 3
Systems practitioners use causal loop mapping to identify key leverage points that should inform options going forward.

INTERVENTION 4
Systems practitioners examine tensions between objectives and use creativity to look for “win-win” solutions.

INTERVENTION 5
Systems practitioners help to design pilot processes that allow for continuous learning and improvement.

FIGURE 7
Social change labs process with potential citizen interventions

STEP ONE
Initiation
Confirming what the ‘conveners’ want and need / Matching needs to processes.

STEP TWO
Research + preparation
Recruiting, research and building models.

STEP THREE
Designing and delivering workshops / Conducting additional research / Building model
Workshop 1: Seeing the system
Workshop 2: Designing innovation
Workshop 3: Prototyping strategies

AFTER THE LAB
Field testing, taking action and follow-up

INTERVENTION 1
Citizens are included in project governance through a co-design committee or similar structure.

INTERVENTION 2
Practitioners surface interests and perspectives of diverse citizens to help inform framing and objectives.

INTERVENTION 3
A broad range of diverse citizens engage in deliberative dialogue to collectively review potential solutions and arbitrate between inherent values trade-offs.

INTERVENTION 4
Citizens receive transparent communications about process and outcomes.

INTERVENTION 5
Citizens reconvene after implementation to confirm if desired benefits have been achieved.

Advancing the field

This report provides one contribution to a wider discussion about democracy, expertise and the collective response to our most pressing and complex challenges. To help extend this conversation this section outlines several lingering questions identified by the authors and participants at the October 2016 Citizen Involvement and Systems Change Retreat. It ends by pointing readers towards a sampling of additional resources and meeting spaces that may help to inform collaboration between these two fields.

5.1 OUTSTANDING QUESTIONS

The following questions have not been addressed in this report: and point to additional discussion required to connect Participatory Systems Change to related issues and concepts:

• What is the role of social movements in creating participatory systems change?
• How can participatory systems change address challenges where existing paradigms prevent necessary changes?
• How can radical perspectives be included, knowing that unconventional ideas are sometimes necessary for innovation?
• How can practitioners and researchers work together to better integrate the toolsets of citizen engagement and systems thinking?
• What are the needs and perspectives of elected representatives in considering Participatory Systems Change? How do our systems of representative democracy need to adapt to enable these methods?
• What is the appropriate balance between incrementalism, disruption and radical change in addressing “wicked” problems?
5.2 RELEVANT ORGANIZATIONS

Academy for Systems Change
http://www.academyforchange.org

International Association for Public Participation (IAP2)
www.iap2.org

Involve UK
http://www.involve.org.uk

National Coalition for Dialogue and Deliberation
www.ncdd.org

Participedia
www.participedia.net

Public Agenda
www.publicagenda.org

School of Systems Change (Forum for the Future)
https://wwwforumforthefuture.org/school-system-change

5.3 REFERENCES AND ADDITIONAL RESOURCES


