Deliberative Systems View of Efforts to Democratize Energy in Arizona

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ABSTRACT: Science often struggles to find answers in a world of complexity and uncertainty and deliberative democracy has been used as a way to bring in public values to help guide the scientific process. This study looks at Arizona's energy system through a theoretical lens and three separate efforts to democratize dialogue around energy in Arizona. The Arizona Town Hall, Emerge and the Solar Summit are all efforts to engage a more diverse range of stakeholders and keep dialogue progressing.

KEYWORDS: deliberative democracy, energy policy, dialogue, public engagement, democratization.

1. INTRODUCTION & FRAMEWORK

This study uses Dryzek's deliberative systems view as a framework to analyze three events designed to alter the deliberative system around energy in Arizona: the Arizona Town Hall; Emerge and the Solar Summit. First, the paper outlines Dryzek's deliberative systems view and then Arizona's energy system is explored in the context of the current political climate to give a general landscape of who is involved in dialogue, how they deliberate and how the system is networked. Information on the AZ Town Hall, Emerge and the Solar Summit, as it relates to deliberative systems, was gathered through first hand experiences and interviews with organizers and participants and is presented in section three. In section four, these accounts are analyzed through the deliberative systems framework developed from Dryzek and implications of the analysis is discussed relating to future actions and changes that could positively affect efforts to alter Arizona's energy system.

Science often struggles to find answers in a world of complexity and uncertainty (Cartwright, 1999; Dupre, 1993; Popper, 1968; Wilson, 1998). Deliberative democracy is a popular framework to help incorporate public participation and values into the scientific process (Abelson et al., 2003; Kleinman, Powell, Grice, Adrian, & Lobes, 2007 & 2009; Powell & Colin, 2008, 2009; Weeks, 2000). It has been very successful in countries around the world in dealing with complex science and technology policy issues (Anderson & Jaeger, 1999), and there are many forms of deliberative democracy, such as citizen juries, consensus conferences, and scenario workshops with many studies showing successes and failures of these different methods (Button & Mattson, 1999; Pelletier, 1999; Hagendijk & Irwin, 2006; Hendriks, Dryzek, & Hunold, 2007). The literature is full of varying claims about the efficacy of the various deliberative democracy methods but the deliberative systems' view outlined by Dryzek provides a useful framework with which to analyze varying deliberative efforts (2010).

Dryzek's deliberative system view can be summarized as a network of spaces where deliberation of different kinds happen and are linked together by various communication activities that make the network larger than the sum of the parts (C. Miller, personal communication, October 27, 2011*)*. While it sounds like a simple and straightforward idea, there are many details and concepts that must be elucidated to truly understand and apply it as a conceptual framework. The spaces where deliberation occurs within a deliberative system can be a formal network such as a government or an informal network like advocacy groups or even conversations in people's homes. Thus, defining a group of spaces as a deliberative system falls to its capacity as a system and not to the make-up of the individual actors within the system. For Dryzek, the *deliberative capacity* of a system is based on whether deliberation is authentic, inclusive and consequential (Dryzek, 2010, p. 10). *Authentic deliberation* is non-coercive in nature and uses language that all deliberators can understand and respect. *Inclusive deliberation* predicates the opportunity and ability of all affected stakeholders or their representatives to participate. *Consequential deliberation* must somehow make a difference in determining or influencing collective outcomes. Obviously, these criteria of deliberative capacity are not binary variables, there are many degrees to which a deliberative system can be authentic, inclusive and consequential; so when we look to analyze deliberative systems in the real world there will be only degrees to which a given system fits those criteria. Evaluation of a deliberative system requires some form of demarcation along these variables, so for this study a yes/no classification is assigned along with discussion and examples of how that classification was reached as well as possible contrary evidence.

Once a deliberative system's capacity is identified, we need a conceptual way to look at the system. Dryzek outlines six categories of a deliberative system; public space, empowered space, transmission, accountability, meta-deliberation and decisiveness (Dryzek, 2020, p. 11). *Public spaces* would be informal deliberations open to anyone who wishes to participate including lay citizens, media, advocacy groups or politicians and could happen over the internet, in a café or in a public square. *Empowered spaces* are the more formal institutions charged with decision making like the legislature or courts but could also include informal networks that produce collective outcomes. *Transmission* is a means through which deliberation in a public space can influence that in an empowered space and might include social movements or advocacy. *Accountability* is how the empowered space answers to the public space. A formal example would be elections or informally it could be decision makers explaining why they made a particular decision. *Meta-deliberation* is discussing how the deliberative system itself should be organized and *decisiveness* is the degree that the previous five categories effect the collective decisions. These six categories not only help give a clearer picture of what a deliberative system looks like but also offer a coherent framework to begin analyzing efficacy of the system itself. Dryzek states that a well-functioning deliberative system will have authentic deliberation in categories 1–5, be inclusive in 1, 2 and 5 and will be decisive in its collective outcomes. *Democratic legitimacy* is another fundamental theme in this deliberative systems view which simply means that people affected by a decision or action should be allowed to participate directly or through representation in a consequential deliberation about said decision (Dryzek, 2010, p. 3). There is no deliberative system that has all of the characteristics outlined above and sometimes improving one quality takes away from another but that is always the challenge inherent when applying a conceptual framework to real-world examples.

2. ARIZONA'S ENERGY SYSTEM

Arizona's deliberative system around energy is fairly unique in the U.S., in that the Arizona Corporation Commission is constitutionally charged with regulating the utilities and setting energy policy within the state. Commissioners are appointed to a four-year term via general election. The ACC makes up the principal body in the *empowered space* of the deliberative system. Also in the empowered space, are the utilities, power cooperatives and the Governor's Energy Policy Office. The legislature is currently trying to insert itself into this empowered space as another sphere of influence in the energy policy-making arena. The *public space* consists mainly of university groups that focus on energy issues and public advocacy groups on certain energy issues, most notably new project siting. *Transmission* and *accountability* both come from 'public meetings' held by the ACC, power providers and the Governor's Energy Policy Office. The availability of public meeting information does lead to questions of how effective they really are at providing accountability of the decision making bodies to the public as well as providing transmission opportunities from the public to the empowered spaces. The ACC and the state legislature are really only accountable to the public through the election process. University and public advocacy help transmit dialogue from the public to the empowered spaces, albeit limited. Intra-space communication is also fairly constrained. The empowered space is primarily connected through formal channels of regulation and policy creation with little deliberation within. The public space has more informal connections but seem to be more diverse and numerous, connecting through various institutions and across several groups.

Meta-deliberation does not appear anywhere in Arizona's energy system except in the very abstract at high level university discussions. With the lack of robustness in the first five categories, *decisiveness* is a quality absent within Arizona's energy system. Public and empowered spaces have very little transmission and accountability between them or even within themselves and meta-deliberation only happens at the very abstract level among a select few stakeholders. *Authenticity* of deliberations is often compromised with technical jargon or partisan political views and *inclusiveness* is low due to poorly advertised 'public meetings.' As a result of poor inclusiveness, *democratic legitimacy* is also sacrificed because there is not representation of all the relevant stakeholders affected by a given issue.

Table 1: Arizona's Energy Network: A Deliberative System Perspective

	Authentic	*Inclusive*	*Consequential*	*Legitimate*
Public Space	Yes	No	Yes	No
Empowered Space	No	No	Yes	No
Transmission	No		No	No
Accountability	Voting only		Voting only	Voting only
Meta-Deliberation	No	No	No	No

*Grayed boxes indicate where a deliberative capacity trait is not required within a certain part of the deliberative system (Dryzek, 2010).

Energy policy is an important topic for public input because we are in a unique situation historically to shape our energy future and the decisions that are made regarding our energy future will deeply affect our society as a whole for decades. Advocating for alternative energy and bringing together citizens to discuss topics is nothing new but understanding the

deliberative system and the related activities that attempt to alter the dialogue process is a useful way to inform planning, structure, execution and outcomes of future deliberative system activities.

Our energy production methods as a civilization must change by definition; using a finite resource mandates an end to that supply. With future change a certainty, we are then left with the questions of how, when, where and with whom the change will happen. This is a unique opportunity in human history to actively and intentionally shape our energy future, how it will look, when it will happen, where it will take shape and most importantly *who* will decide what gets done. To take full advantage of this opportunity for collective change, we must understand the energy system and actions designed to intervene in it from a deliberative democracy point of view.

3. DELIBERATIVE EVENTS

The Arizona Town Hall was held on November 6th–9th, 2011 at the Grand Canyon, AZ (AZ Town Hall). It focused on Arizona's energy future, looking at technical, social, political and ethical dimensions around various energy issues. The Town Hall hosted 85 participants representing stakeholders from across the energy industry, local utilities and academia. It was noted that there were few lay citizens and mostly energy insiders at the event along with only one ACC commissioner and no state legislators. This event fit into a larger network of deliberations around energy by interfacing primarily with the empowered space. There were few non-experts in attendance and the ones that were may have been unable to understand the technical nature of the discussions. The Town Hall was structured into four panels of approximately 20 people with a moderated discussion around questions/issues derived from an in depth background report. Each panel discussed the same topics and strove for consensus around each with a moderator facilitating the discussion and a recorder present to record the opinions and recommendations of the panel.

On the second day, a large plenary session was held and the recommendations of each panel was read and discussed as one large group. Moderators fielded questions and concerns and the recommendations were modified in language and content by the recorder to reflect language that the group could all agree on. If debate persisted among a few participants, they were sent to the back where they discussed their opinions until they could reach common ground. This process resulted in a final document of consensus recommendations based on topics from the original background document. Insiders were seen to dominate the conversations and lay citizens and students did not contribute frequently, most likely due to the over-representation of stakeholders. The order in which the topics were discussed both in the panels and as a single group was important in that the first topics got more attention and debate leaving less time for the subsequent discussion topics. This format of debate and consensus building was thought to be empowering and non-conflicting where everyone had the opportunity to contribute to the conversation. Despite the majority of expert stakeholder representation there was a wide variety of issues brought up and a seemingly in-depth understanding of social, political and ethical concerns.

There are several communication and outreach activities in place to connect this event with other networks around energy. Mini-town halls are held statewide and are designed to involve lay citizens that may be underrepresented at the main, large event. These mini-town halls discuss the recommendations of the primary event and allow attendees to voice opinions

and educate themselves on topics relating to Arizona's energy future. The recommendations report of the Town Hall is sent to all state legislators in an effort to inform them of the consensus opinions across these topics. In addition to the recommendations report, there is thought to be grassroots action that springs from the Town Hall resulting from enthusiasm and empowerment of participants. It is unclear, however, if there is a productive outlet for that enthusiasm. The Town Hall can be seen as democratically legitimate in so far as the outcomes (the recommendations report) were a consensus of all the participants.

Emerge was a three day event, March 1st–3rd, 2012 held at Arizona State University (Emerge). The event brought together artists, scientists, engineers and story-tellers to participate in workshops, festivals and lectures all looking at the future of the human species and the environments that we share. The specific workshop discussed here was titled "Humanist Narratives for Energy" focusing on exploring the future of energy in Arizona to 2030. It strove to move beyond the technical issues and delve into the social, political and economic drivers that play important roles in energy. Two main variables were decided on during discussions and put on corresponding x and y axis; a decentralized, high competition (many new players) vs. centralized, low competition (legacy players) x axis and a high investment vs. low investment y axis. These two axis subsequently made a four-quadrant grid with four corresponding scenarios (high competition/high investment, high competition/low investment, low competition/high investment, low competition/low investment). Individual scenarios were then brainstormed for each set of variables using freedom, innovation, social will and state of the environment as important drivers in each scenario.

Stakeholder representation at the event was primarily academic faculty and students with some government participants, most all of whom had energy backgrounds to varying degrees. The deliberation/discussions that went on during the scenario planning resembled high-level, expert discussions with point-counterpoints and clarifications. The main themes discussed were economic concerns and how those affect the future of energy, political aspects specific to Arizona and some human and social dimensions of energy. This type of scenario planning is very conducive to producing a myriad of differing views. Contrary to the Town Hall, Emerge encourages plurality of views; consensus need only be that ideas are logical and plausible. Currently, the only communication activity in place to connect Emerge with other networks around energy is an art exhibit conveying depictions of the futures scenarios designed at the event. Given that this is the first event of its kind and that it happened very recently, it can only be hoped that the next event will have more robust methods of communication and outreach following the event. The primary outcomes from Emerge are the scenarios themselves, the embedded ethnographers' notes and the art exhibit. Participants generally had no problem perceiving each other's ideas as legitimate in their particular scenario.

The Arizona Solar Summit was held on March 26th & 27th, 2012 at the Arizona Biltmore. This was the second Solar Summit. Stemming from the first Solar Summit in 2011 were four working groups (Supply Chain/Workforce Development, Applied Research Collaborations/Pilot Projects, Policy/Finance & Building and Strengthening the Narrative) that continued the dialogue and initiative between the Summits and reported back on progress made during the previous year at the most recent Solar Summit. Over 200 people attended the Solar Summit in March, and in addition to working group reports there were several expert panel discussions on relevant issues to solar energy in Arizona and the Southwest region. The format was a panel discussion of the topic followed by audience Q&A and panel recommendations for action on that particular topic. In the context of a stakeholder forum or a policy-making forum,

the Solar Summit would offer little in the way of representation or legitimacy to issues discussed but viewed through the lens of a conference the Solar Summit fairs more positively. The working groups are made up of participants and audience Q&A is incorporated into action items from each panel and those items become part of the agenda for the working groups in the interim between Solar Summits.

Organizers see this event fitting into a larger network of deliberations around energy by convening most of the relevant policy players and stakeholders in Arizona and some nationally to continue the dialogue on renewable energy policy that may be lacking at the state level. It fills a gap where the ACC and the AZ legislature should be making progress, by keeping dialogue going despite the political and economic climate of the state, region and the nation. The Solar Summit connects with energy networks on several levels: the Greater Phoenix Economic Council (GPEC), the Energy Consortium, ASU, UA, NAU, utilities, local policy makers and energy-industry insiders. There was a noted lack of state-level ACC commissioners and state legislators present at the Summit. Outcomes from the Solar Summit are seen primarily in the working groups' activity, a ten-minute solar documentary, the Solar Summit website, conference video and presentations of the panels. Legitimacy of these outcomes is questionable due to the lack of Republican legislators or commissioners and too many like-minded people (no dissenting opinions to solar energy were heard, Tea Partiers for example). There was, however, great representation across the solar industry and its stakeholders. A representative of the Republican governor was there as well as the head of the Governor's Office on Energy Policy. Due to the convergence of opinion around solar energy at the event there was not a large variation of views presented and only details were debated. Consensus was the goal around ways to move solar forward in Arizona and to identify steps to make that happen. It was felt that the discussions were somewhat superficial and that truly fleshing out what different solar futures might look like and the steps needed to achieve them were left unexplored.

4. FRAMEWORK ANALYSIS OF EVENTS

The public space was only represented at one event, the Town Hall, and this was still very limited in number so inclusiveness of this part of the deliberative system is certainly lacking across all three events. Democratic legitimacy requires that a deliberation be inclusive and consequential, so if the event is lacking both, legitimacy cannot be achieved; unfortunately the energy system as a whole and all three events failed to measure up to this standard across all categories. Authenticity was acceptable at both the Solar Summit and Emerge primarily because there were few public participants so discussions were tailored to the energy experts in the attendance. At the Town Hall, authenticity is brought into doubt due to the technical detail and complexity of the background material and the wanting participation of the public participants who were in attendance. Although public participation was low, all three events' deliberations produced outcomes that are consequential to the public via documentaries, public dissemination of reports and art exhibits.

All three events succeeded in authenticity within the empowered space as discussions were suited for energy insiders; this is an improvement over the whole deliberative system that sees deliberations within empowered stakeholder groups (usually divided along political lines) that is sometimes very coercive. Inclusion of the empowered stakeholders was good but due to the absence of state policy-makers at all three events, they cannot be categorized as inclusive.

Although the events were consequential in the public space, they have little impact on the outcomes that the empowered stakeholders are responsible for (primarily setting policy). Transmission from the public to the empowered space does not readily happen in the deliberative system as a whole but in the Town Hall, due to some public participation, the mini-Town Halls that happen around the state and the recommendations report being sent to stakeholders in the empowered space, it has both authentic and consequential transmission. The Solar Summit and Emerge did not achieve consequential transmission due to lack of public space stakeholders.

Accountability in the deliberative system is through the election of some empowered space stakeholders and public meetings if and when stakeholders from the public attend. Neither of the events in this study attempted to influence the authenticity or impact of that accountability of the empowered space to the public space. Deliberations at all the events were of a detailed and solution-oriented nature; consequently any type of meta-deliberation about how the deliberative system should be structured was absent. Decisiveness is the degree that the five categories on the left of the table influence collective outcomes of the deliberative system. While the three events looked at here do improve some of those categorical contributions to the system as a whole, those efforts are still insufficient to make the deliberative system decisive; inclusiveness, legitimacy, public spaces, transmission, accountability and meta-deliberation all need to be addressed to improve overall decisiveness.

Table 2: Deliberative Events: Effects Within the System

	Authentic	Inclusive	Consequential	Legitimate
Public Space	*Yes*	*No*	*Yes*	*No*
Town Hall	No	No	Yes	No
Emerge	Yes	No	Yes	No
Solar Summit	Yes	No	Yes	No
Empowered Space	*No*	*No*	*Yes*	*No*
Town Hall	*Yes	No	No	No
Emerge	*Yes	No	No	No
Solar Summit	*Yes	No	No	No
Transmission	*No*		*No*	*No*
Town Hall	*Yes		*Yes	No
Emerge	No		No	No
Solar Summit	No		No	No
Accountability	*Voting only*		*Voting only*	*Voting only*
Town Hall	No		No	No
Emerge	No		No	No
Solar Summit	No		No	No
Meta-Deliberation	*No*	*No*	*No*	*No*
Town Hall	No	No	No	No
Emerge	No	No	No	No
Solar Summit	No	No	No	No

Grayed boxes indicate where a deliberative capacity trait is not required within a certain part of the deliberative system (Dryzek, 2010).
Asterisk (*) indicates a positive change a specific event had to the deliberative energy system as a whole.

This leaves one question. Have the events looked at here fundamentally altered the deliberative system around energy in Arizona? In this context, a fundamental change to the deliberative system should make it decisive as a whole. Having just said that the three events looked at here do not improve decisiveness of the system; it follows that they have also not brought about a fundamental change to the deliberative system around energy in Arizona.

5. CONCLUSION

Concluding that there has been no fundamental change to the overall system is only one step. The question is how can we succeed where these events have failed? There is no silver bullet and it will take a concerted effort from stakeholders across all the categories of the system looking at the different capacity areas and striving to achieve them. Not every area of the system needs to be successful in all areas of deliberative capacity, nor is that likely possible, but certainly large improvements can be made from the current deliberative system. Inclusion is the most lacking capacity trait within the system. The Town Hall, Emerge and Solar Summit all need to reach out to people across all facets of the stakeholder groups in the system so they at least have the opportunity to participate if they so choose. In some cases, such as the Solar Summit and Town Hall, scholarships or discounted registration fees could be given to eliminate money as a barrier to participation. Lower socio-economic groups are traditionally under-represented in energy decision-making processes so this is a very critical part of inclusion. Consequently, this may require additional funding for the events or more economically priced events themselves. Policy makers need to be encouraged to participate; they have the final acting authority on energy policy in the state making them a critical component in the deliberations.

Once inclusion is improved and you have sufficient stakeholder representation, transmission and accountability become tangible. Events can be structured to provide veto power (much like the Town Hall) to everyone and voting can be easily implemented through cell phones. Public spaces can be developed through non-profits that encourage participation, progress and interaction building on momentum following each event, carrying it throughout the year and not just during the events. Greater media attention leading up to the events and in disseminating the tangible reports and recommendations that stem from the events will improve inclusion and transmission, respectively. Improving online resources and having interactive websites will drive participation and help transmit information. Events should be structured to foster debate and discussion, not just elaborate on an already existing consensus among stakeholders of like opinions. Assuming policy-maker participation, structuring events in this way can help fill the gap between deliberation and policy implementation and can help develop new policy innovations to address the myriad of issues related to energy in Arizona. Meta-deliberation on the structure of the deliberative system as a whole would be much easier to address with these improvements. This would also enhance the democratic legitimacy and decisiveness of the energy system and would make Arizona a leader in civic process innovation nationwide. To thrive, the deliberative system needs engagement and dissent, which is the beginning of the process of change, not the end.

Fundamentally, energy decision making is a political problem that rests with the officials we elect to set energy policy. Involving policy makers in the deliberative process will not only demonstrate consensus among stakeholders, but it will give them credit for the policies that work and political cover for ones that do not. This type of collective decision

making removes individual culpability from the political process which is one of the largest barriers to policy change in Arizona.

In closing, we see that the Town Hall, Emerge and the Solar Summit did not fundamentally alter the deliberative system around energy in Arizona. However, they are a step in the direction of civic process and policy innovation that the system desperately needs to be legitimate and effective. Improvements to inclusion, public space participation, transmission, accountability and meta-deliberation will be difficult but can be achieved with cooperation across all stakeholder groups in the deliberative system currently. The consequences are too dire and the issues too important to continue with the status quo. Change is needed in the energy system in Arizona and the discussion presented here is a start down that path.

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