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Balancing Inclusion and “Enlightened Understanding” in Designing Online Civic Participation Systems: Experiences from Regulation Room

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ABSTRACT

New forms of online citizen participation in government decision making have been fostered in the United States (U.S.) under the Obama Administration. Use of Web information technologies have been encouraged in an effort to create more back-and-forth communication between citizens and their government. These “Civic Participation 2.0” attempts to open the government up to broader public participation are based on three pillars of open government—transparency, participation, and collaboration. Thus far, the Administration has modeled Civic Participation 2.0 almost exclusively on the Web 2.0 ethos, in which users are enabled to shape the discussion and encouraged to assess the value of its content. We argue that strict adherence to the Web 2.0 model for citizen participation in public policymaking can produce “participation” that is unsatisfactory to both government decisionmakers and public participants. We believe that successful online civic participation design must balance inclusion and “enlightened understanding,” one of the core conditions for democratic deliberation. Based on our experience with Regulation Room, an experimental online participation platform trying to broaden meaningful public engagement in the process federal agencies use to make new regulations, we offer specific suggestions on how participation designers can strike the balance between *ease* of engagement and *quality* of engagement—and so bring new voices into the policymaking process through participating that counts.

Categories and Subject Descriptors

H.3.3 [User Interfaces] – User-centered design; H.5.3 [Information Interfaces and Presentation]: Group and Organization Interfaces—Asynchronous Interaction

General Terms

Design, Experimentation, Human Factors, Legal Aspects

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Keywords

e-rulemaking, rulemaking, deliberative democracy, Regulation Room, open government, e-participation, participation design.

1. INTRODUCTION

Discussions of increasing civic participating often reveal an underlying assumption that citizens are naturally imbued with the capacity to engage effectively in government policymaking processes. In fact, this ability does not emerge spontaneously; it has to be learned and practiced. For many U.S. citizens, the predominant learned civic responses are to vote (i.e., express a preference without further explanation or consideration) and/or “to jump into the political fray and make a lot of noise” [57].

While these behaviors may be participatory, they have little value in discussion about complex policy issues that government actors perceive as requiring reasoned decision making, rather than majoritarian politics. Effective input in such processes requires citizens to be willing to consider relevant facts, seriously reflect opposing policies and arguments, and give reasons for their preferences that “make sense” within the fact and policy landscape.

Web 2.0 is replete with participation mechanisms that allow for “quick and easy” user engagement. Government officials may find it tempting to employ such mechanisms to increase citizen participation in public policymaking. The reality, however, is that low-information, low-thought participation is not useful in many policymaking contexts. How to design civic participation systems that support citizens in developing the capabilities needed to engage effectively in new participation opportunities is one of the open government movement’s greatest challenges.

2. LAUNCHING THE “CIVIC PARTICIPATION 2.0” REVOLUTION

Even before Barack Obama took the oath of office, he had changed the way public participation in government decisionmaking is conceptualized. Following his pathbreaking use of Twitter, Facebook, and YouTube for campaign fundraising and grassroots organizing, his transition team launched Change.Gov, to allow ordinary citizens to recommend policy goals for the new Administration. Visitors could not only add their own recommendations, but also comment and vote on others’. The results were compiled into a “Citizens’ Briefing Book” intended to help the President get the best ideas for the beginning of the administration.

On his first day in office, the President issued a Memorandum to agency heads directing them to use Web 2.0 and other Internet and Communication Technologies (ICTs) to increase transparency, public participation, and collaboration in their decisionmaking [43]. The Memorandum was to be followed by a detailed implementation directive. Seeking public input on what this should include, the White House launched a three-phase online Open Government Dialogue. Reminiscent of the way the Citizen's Briefing Book was created, a period of brainstorming using the IdeaScale platform allowed people to make suggestions, as well as comment and vote on others' suggestions. This phase was followed, first, by a period of discussion using a blog format to collect comments on a subset of the ideas that had emerged and, finally, by a period of collaborative proposal drafting using MixedInk, which combines wiki functionality with a "democratic" rating system aimed at ensuring that the final text reflects participants' collective voice.

Six months later, the White House issued the implementing Open Government Directive. It calls for online disclosure of government data and for expanded government e-services, but places particular emphasis on using Web 2.0 ICTs to expand public participation in agency decisionmaking. Agencies were given 4 months to create open government plans and 6 months to identify at least one open government "flagship initiative" project.

Shortly thereafter, the General Services Administration (GSA) announced a government-wide terms-of-service-agreement making IdeaScale available, free of charge, to help agencies meet the tight timelines of the Directive. Describing it as a tool that "provide[s] citizens a forum to share ideas, give feedback, and engage in Web-based discussions with their government," GSA explained: "By leveraging a single solution government wide, GSA can simplify the public engagement process for both agencies and the citizen, helping to build and offer uniformity and consistency in how the public engages with their government..." [27]. Within a month, nearly two-dozen major federal agencies had begun using IdeaScale to crowdsource ideas and suggestions on policy.

Further defining the nature and expectations of Civic Participation 2.0, the Obama Administration has sought to turn all the most popular social media into forms of broadscale civic engagement. After both the 2010 and 2011 State of the Union addresses, the President gave an exclusive YouTube interview, answering questions submitted via a Google Moderator tool on the CitizenTube channel. The 2012 address was followed by a "hang out" on Google Plus. During 2011, he held a series of Town Halls using Facebook, Twitter, and LinkedIn, to discuss questions and suggestions that people submitted through those media. Federal agency officials are slowly following suit, aided by GSA's government-wide agreements with most major social networking services.

3. CONCEPTUALIZING THE NEW CIVIC PARTICIPATION: UNIVERSALISM AND THE CROWD'S WISDOM

A striking characteristic of Civic Participation 2.0 as it has been operationalized thus far is its embrace of radical inclusiveness. The archetypal mode of citizen participation in democracies is voting, but even voting-rights systems in mature democracies fall considerably short of universal access. Minors and resident aliens are virtually never allowed to vote and, in the U.S. at least, it is common for convicted felons and persons deemed incapacitated to

be excluded. Registration requirements—which demand that residence and identity be proved, in legally satisfactory form, to some official at some minimum interval before the election—impose practical barriers that end up excluding many formally eligible participants.

Equally important, democratic elections are typically preceded by efforts to provide information to voters: campaign ads, postcards and leaflets, debates and town hall sessions, editorials and endorsements, door-to-door canvassing, email and telephone campaigns, and, increasingly, various types of online political information. To be sure, the quality of this information often leaves much to be desired. Moreover, there are no "entrance exams" to the voting booth that ensure minimal civic competency—in the U.S., any sort of qualifying test for voting is irrevocably tainted with a racist history of excluding non-white voters. Still, candidates, political parties and referenda sponsors, and civil society groups all behave as if educating voters about platforms and issues is an essential aspect of the electoral process.

By contrast, the Obama Administration's conception of Civic Participation 2.0 really *is* universal in scope, and this conception is embodied in the participation mechanisms it has championed. Anyone—regardless of age, citizenship, or other status—can make a suggestion on IdeaScale, comment on an agency blog or YouTube video, or pose a question to the President or a Cabinet Secretary on a Facebook or Twitter town hall. If registration is required, it typically demands only an email address (and sometimes merely establishing a username and password). And some forms of participation—e.g., voting ideas up or down—may not require even this minimal commitment prior to voicing one's preferences.

Significantly, these participation opportunities are typically not structured to include a knowledge-imparting component aimed at giving individuals information useful to their participation (beyond perhaps, instructions on using the technology.) Information about the agency's mission, authority, and mode of operation—which often is crucial to understanding what kinds of topics, ideas, and solutions it can consider—can be found by going to its main website, but these links rarely appear on the public participation page with any kind of prominence.

Civic Participation 2.0, then, is modeled not on traditional models of citizen participation but on the philosophy and expectations of Web 2.0. As Wikipedia (itself a Web 2.0 icon) explains: "Web 2.0 offers *all* users the *same* freedom to contribute...[C]haracteristics such as openness, freedom and collective intelligence by way of user participation, can...be viewed as essential attributes..." [56]. Collective intelligence should be permitted to emerge: "Knowledge," the President says, "is widely dispersed in society and public officials benefit from having access to that dispersed knowledge" and hence to "collective expertise and wisdom" [43]. Barriers to participation should be low; users should be enabled to set the agenda of discussion and freely contribute and judge content [41]. And so, today, anyone can go to one of scores of official federal agency website (Open [Agency Name].ideascale.com) and propose an idea or comment on topics from nuclear regulation to foreign policy to space travel. Participants curate the contributions by voting ideas to the top of the list.

4. THE CIVIC KNOWLEDGE DEFECIT

In a nation with an established civic culture of informed citizen participation in government, such an approach to public

participation could be celebrated as perfecting conventional democratic practices. Unfortunately, the U.S. is not such a nation. It is well recognized then that people in this country tend to know very little about political, legal, and public policy matters.

This “civic knowledge deficit” has been documented on several levels. Many, if not most, citizens do not know even the basics of how government institutions and regulatory programs work and what key government officials do [16,28,34,49]. Even in policy areas they self-identify as important, they are often unaware of what law and government policy is [16,54]. As voters, they are often mistaken about the record of government leaders and positions of candidates for major office, even on policy issues that matter to them [34,46,54]. As a result, as measured by the issue positions they profess to hold, a substantial percentage vote for the “wrong” candidate [35,1]. As participations in surveys and opinion polls, they often express policy positions that in reality contradict their self-declared preferences [35,7].

To rescue the legitimacy of core democratic practices in the face of these troubling observations, some citing researchers suggest information shortcuts and contextual factors that enable voters to behave *as if* they were civically smarter [8,18]. But even if those devices do ameliorate the civic knowledge deficit in elections (and political scientists vigorously debate this [49,35]), voting is a minimalist form of civic participation compared to the broadly substantive role in government policymaking envisioned by the Open Government Memorandum and Directive. It seems reasonable to expect that the costs of the civic knowledge deficit—in terms of the reliability, usefulness and even relevance of public input—will be greater as more is demanded of participants. Some support for this prediction can be found in the output of large-scale White House e-participation efforts, in which good ideas were buried in a massive volume of ungermane proposals (e.g., produce Obama’s birth certificate) and unrealistic suggestions (e.g., abolish the income tax) [55].

5. AN ALTERNATIVE MODEL: CIVIC PARTICIPATION BASED ON “ENLIGHTENED UNDERSTANDING”

A very different model for public participation comes from the theory and practice of democratic deliberation. Although there is no one, uncontested version of what deliberative democracy requires [17], there is agreement on a core condition: what Dahl terms “enlightened understanding,” i.e., “an understanding of means and ends, of one’s interests and the expected consequences of policies for interests, not only for oneself but for all other relevant persons as well” [14]. Enlightened understanding, Gastil explains, “separates a deliberative system from an unreflective one” [25]. Gastil predicts that a system “that gives everyone the opportunity to speak but does not grant the time (or tools) to think will be a dismal one indeed, full of empty speeches and reckless voting” [25]. This prediction is supported not only by some of the Open Government Dialogue experience, but also by a larger literature on attitudes and opinions.

At least in some settings, citizens will express a strong opinion *even when they realize that they lack necessary knowledge*. Fronstin found that 81% of respondents to the 2011 Health Confidence Survey reported being “not at all familiar” or “not too familiar” with health insurance exchanges (a key provision of the Affordable Healthcare Act)—yet 57% said they were not confident that state or federal governments could run the exchanges [24]. This may reflect participants’ general lack of

confidence in government, but meaningful civic engagement about healthcare reform could hardly be expected with such a knowledge deficit.

Moreover, a series of deliberative exercises have revealed that citizens’ preferences can change when they acquire relevant knowledge. For example: Providing accurate information about the percentage of the U.S. budget attributable to foreign aid shifted a majority of participants’ position on increasing that aid [23]. Participants who deliberated after a panel of experts explained the Social Security program and the various options for increasing solvency showed a shift of opinion about raising payroll taxes, compared to those who deliberated without this information [5]. A significant shift in preferences about welfare spending occurred when participants received accurate information about impact on the U.S. budget [34]. Information about crime policy coming from panels of experts and political leaders significantly shifted opinions among a group of British participants [37]. Learning more about problems facing Pittsburgh public schools substantially changed participants’ opinions on three to five policy issues [39].

To be sure, attitudinal or behavioral shifts do not *inevitably* accompany greater knowledge [26,15]. The circumstances and mechanisms by which information and discussion effect changes in preexisting beliefs are still imperfectly understood [53,5,30,34,39]. Still, these examples are sobering for advocates of Civic Participation 2.0. Should government officials heed opinions given when the participant knows she lacks relevant knowledge? Of what value to policymakers are viewpoints and choices that could shift substantially if participants better understood key facts? In light of the generally low level of civic knowledge and policy attention in the U.S., how much wisdom could federal policymakers reasonably expect to find in the crowd?

6. REFRAMING CIVIC PARTICIPATION 2.0: DESIGNING TO BALANCE INCLUSIONS AND ENLIGHTENED UNDERSTANDING

We argue that those designing for Civic Participation 2.0 must face an uncomfortable dilemma that the democratic deliberation literature [14,23] has long recognized: Civic participation systems must be prepared to trade *more* participation for *better* participation. At least in a society without strong norms of informed political engagement, making it quick and easy for everyone to participate will yield a large amount of “empty speeches and reckless voting.” From our experience with Regulation Room we offer some thoughts on designing participation mechanisms to seek a balance between inclusion and enlightened understanding. Although our experience thus far has been limited to rulemaking, we expect these recommendations would enhance any online civic engagement platform that seeks to meaningfully involve citizens in the demanding participatory environment of complex of public policymaking.

6.1 The Paradox of Rulemaking & the Regulation Room Project

Rulemaking is the multi-step process federal agencies use to make new health, safety, and economic regulations. Over the last half-century it has become one of the federal government’s most important methods of making public policy. In the typical

Table 1. Typology of Potential Rulemaking Participants

	Sophisticated Stakeholders	Inexperienced Stakeholders	Interested Members of the Public	Unaffiliated Experts
Who they are	Directly affected by proposed rule, either as regulated parties or beneficiaries; routinely interact with the agency and the RM process	Directly affected by proposed rule, either as regulated parties or beneficiaries; do not participate in RM or other agency policy interactions	Individuals who self-identify as interested in the proposal, but are not in prior groups	Scientific, tech. or other professionals not employed or retained by a stakeholder
Examples (drawn from rules hosted on Regulation Room)	Major airlines, trade assoc. of large commercial trucking companies, multi-national manufacturers of airport kiosks	Independent commercial motor vehicle owner/operators; airline flight crews; parents of children with allergies; travelers with a disability; small airport managers	“driving public”; air travelers without a disability	Allergy researchers; accessible design experts
Understanding of RM process and larger regulatory environment	High; typically repeat players	May have patchy knowledge of regulations that immediately affect them; unlikely to understand RM process or regulatory environment	Low to nonexistent	Highly variable
Ability to comprehend meaning and implications of proposal	High; often have personnel that specialize in regulation; likely to have in-house or hired legal and technical experts	Likely to depend on steepness of learning curve (readability of agency documents; legal/regulatory complexity of proposal; etc.)	Limited	High, at least for parts relevant to their expertise
Ability to produce effective comments	High	Likely to have highly relevant knowledge but may be unable to present it effectively without help	Very limited without assistance	High

rulemaking, the originating agency must give the public notice of what it is proposing and why. (This is the Notice of Proposed Rulemaking, or NPRM). The agency must then allow time, typically 60 days, during which *anyone* may comment. By law, the agency must consider every comment. If it decides to adopt its proposed regulation, it must demonstrate this consideration in a written statement that responds to relevant questions, criticisms, arguments, and suggestions [33].

Sophisticated stakeholders (e.g., large corporations; professional and trade associations; national public interest groups) understand the process and participate effectively. Unfortunately, other kinds of stakeholders (e.g., small business owners; state, local, and tribal government entities; non-governmental organizations; individuals who would be directly regulated or directly benefit from regulation) and interested members of the public have not meaningfully exercised their participation rights [33].

For this reason, expanding rulemaking participation has been a federal e-government priority for nearly 20 years. However, “first-generation” e-rulemaking systems have not achieved this goal [4,10]. Participation has numerically increased, sometimes dramatically, but it has often taken the form of “e-postcard” campaigns launched by advocacy groups, which produce tens of thousands of short, conclusory duplicate, or near duplicate, comments [48]. This disappointing result reveals the paradox of rulemaking: *All* individuals and groups have an equal right to participate, and a *single* comment could change the rulemaking outcome, but participating effectively is difficult. Many citizens do not have the time or resources to read and comprehend complex rulemaking documents. And, since mere sentiment or opinion giving have little value in this data-driven, reasoned decisionmaking process, they continue to be effectively excluded.

Regulation Room is a theoretical and applied research project using Web 2.0 ICTS and human facilitative moderation to change this [20,21]. Designed and operated by CeRI, the cross-disciplinary Cornell eRulemaking Initiative, Regulation Room has so far offered five “live” rulemakings in collaboration with the Department of Transportation (DOT) and the Consumer Financial Protection Bureau (CFPB). Depending on the rule, 65% – >90% of participants report never having taken part in a rulemaking before. DOT selected Regulation Room for its open government “flagship initiative” project, and rulewriters there have reported a high level of satisfaction with its participation outputs. Based on the first three years of project experience, we offer the following suggestions on designing for civic participation in complex government policymaking.

6.2 For Whom Are We Designing?

Many Civic Participation 2.0 efforts seem to omit, or at least shortchange, the first step of successful participation design: focusing on users’ needs and the goals of the particular participatory context. This omission might be because the value of more civic participation is perceived as too obvious in a democracy to require further reflection [12]. Or, perhaps it reflects government officials’ discomfort with segmenting “the public” into subgroups and tailoring participation opportunities. Whatever the reason, the result can be an outcome that well serves neither the public nor government policymakers.

Based on historical patterns of participation in rulemaking and our Regulation Room experience, Table 1 suggests a typology of potential participants that includes an assessment on several dimensions relevant to effective participation in rulemaking.

Table 1, of course, oversimplifies, but it reveals several key considerations in designing a more successful rulemaking participation system:

1. *Outreach* beyond the types of notice agencies traditionally give will be needed to engage new participants. Agencies' only legal notice requirement is to publish NPRM's in the Federal Register, the daily publication of federal government activity. But only sophisticated stakeholders cull this publication for rulemakings of interest, so agencies will need to engage in more proactive outreach to alert and engage new participants. Social media such as Twitter and Facebook can provide more proactive, numerous, and targeted communications, as well as lead the public directly to the participation platform they will use [21].

2. *Ways to reduce information complexity* will be essential for the kinds of participants we most want to bring into the process: i.e., inexperienced stakeholders and interested members of the public. Both legal requirements and the complex nature of many regulatory problems make rulemakings extraordinarily information intensive [21]. For example, a DOT rulemaking considering additional air passenger rights in tarmac delay, baggage fees, fare advertising, etc. was very nontechnical and straightforward as rulemakings go—yet the NPRM was 24,800 words long, supported by 34,000 more words of cost and benefit analyses. These tested at a graduate school readability level.

3. *Knowledge about broader regulatory context* must be available. Newcomers often assume that “the government” is monolithic, and agencies all-powerful. In fact, agencies have only the authority given them by specific statutes, which not only give power but also set limits. Congress may mandate action on a particular problem; it may require, or prohibit, approaches that may be taken or issues that may be considered; it may give some aspects of the problem to an entirely different agency. Wise or foolish, such provisions directly constrain the agency and, therefore, indirectly set the bounds of useful comments. Only sophisticated stakeholders are likely to know if certain kinds of arguments, ideas, or topics must be focused on or, conversely, are not worth talking about.

4. *Education about the process* must take place, overtly or covertly. In our experience, one of the most intransigent obstacles to effective newcomers' participation is the mistaken assumption that they can voice their outcome preferences, and the greatest number of “pros” or “cons” wins. The agency's legal responsibility is to create new regulations in a deliberative, technocratically rational mode that involves reason-giving, cogent policy analysis, and objective discussion of pros and cons of alternative approaches. Unfortunately, inexperienced stakeholders and interested members of the public do not routinely express themselves in the form of reasoned argumentation and critical analysis. Their tendency is to vote and vent. New participatory capacities must be encouraged and supported if second-generation e-rulemaking systems are to avoid the problem of masses of low-value comments.

With these general considerations in mind, the specific design suggestions that follow are focused specifically on two of the four participant types described in Table 1: inexperienced stakeholders and interested members of the public. These core targets for broadening rulemaking participation have been Regulation Rooms' focus so far. Occasionally we reference designing for unaffiliated expert participation, largely by way of contrast. This is a group whose participation is desired in order to improve the quality of information available to

rulemakers; Regulation Room is just now beginning to concentrate on this type of participant.¹

6.3 How Can We Provide Necessary Information?

If Civic Participation 2.0 is modeled on the libertarian universalism of Web 2.0 and a strong belief in the crowd's wisdom, then knowledge is conceptualized as flowing *from* the people *to* the government. If, however, Civic Participation 2.0 is modeled on democratic deliberation, then participation system designers recognize a responsibility to enable “enlightened understanding.” In the offline context, this is done with pamphlets or briefing books, videos, panels of experts, etc. with reasonably accurate and balanced information about the policy issues to be discussed [23].

The emphasis on conveying relevant information to participants as part of the civic engagement process has several justifications: Information enables exercise of genuine considered judgment rather than “top of the head” impressions [23]; it increases participatory equality by narrowing the gap between layperson and expert, and between citizens of different classes, races and ethnicities [16] it can enhance tolerance for other interests and perspectives and increase participants' sense of political efficacy [16].

In this model, the participation designer still believes, with the President, that “knowledge is widely dispersed in society,” and that participation opportunities should be expanded so that “public officials benefit from having access to that dispersed knowledge.” However, she recognizes that knowledge-imparting inputs are often essential to get participation outputs government decisionmakers can responsibly use.

In rulemaking, Regulation Room uses several strategies to provide the information new participants need in a form they can use.

6.3.1 Triage: What Do People Need to Know to Participate Effectively?

The problem that has plagued efforts to expand rulemaking participation is not a lack of information per se, but rather that information is provided in a one-size-fits-all package: an NPRM and supporting analyses that can be the length of a novel, written in legally, technically, and linguistically complex language that even specialists find taxing. In other words, one size fits only a few. Therefore, it is essential to consider what people *need* to know for effective participation.

Information needs can vary considerably with the nature of the issues. For example, in a DOT rulemaking used for a limited beta test of Regulation Room, a central question was how to design a label for automobile tires that would effectively inform consumers about how choice of tire model could affect fuel economy. Here, the information requirements for effective participation were low: Participants needed to know the objective of the new labeling requirement and the designs DOT was considering. By contrast, in a DOT rulemaking proposing to require air travel websites and airport check-in kiosks to be accessible to travelers with physical and other disabilities, the information

¹ Sophisticated stakeholders present both less compelling need and unique problems. They already participate effectively in the process and so lack motivation to invest in a new mode of participation.

requirements were fairly high. Participants needed to know what standards of accessibility DOT was considering, when and how it proposed to phase-in implementation, and what methods would be used to verify compliance. An example in the middle comes from a DOT rulemaking proposing to require that commercial motor vehicles be retrofitted with electronic devices (EOBRs) to monitor operators' driving and rest time. Initially this sounds information intensive, but knowledge about EOBRs was widespread in the trucking community, even among the small businesses that made up 99% of affected companies (the unsophisticated stakeholders being targeted). What participants needed to know was who would be affected, when compliance would be required, and how violations would be punished.

"Information triage" is a conscious effort to identify and foreground the information in a particular rulemaking that will most likely be needed by, and of interest to, participants. On Regulation Room, this task is done with the help of law students who will later be moderators for the rulemaking (Section 6.4.3). The information is then packaged in thematic segments (typically, 6–10 "issue posts") of manageable length.

6.3.2 Translation and Layering: How Do We Make This Information Easily Available to Participants?

Additionally, the information must be presented in a way that users are able and motivated to acquire participation-enhancing knowledge from it. Here, the design focus shifts from "what?" to "for whom?" In the air travel disability access rulemaking, for example, making the required information available in a form usable by travelers with a disability poses a very different challenge than conveying it to experts in accessible web design.

Unless only unaffiliated experts and sophisticated stakeholders are expected to participate, "translation" is essential. This is an appropriate term because the vocabulary, usage, and even syntax of rulemaking documents can impede comprehension by uninitiated stakeholders and interested members of the public. The drafting of Regulation Room issue posts therefore emphasizes using relatively simple vocabulary and sentence structure.²

The practices of information triage and translation might be considered objectionable because of the power over participant knowledge that they place in the hands of the designer. "Information layering" somewhat ameliorates this concern.

Information layering is the practice of purposefully deploying linking and other Web 2.0 functionality to provide information in a way that allows users, at *their individual choice*, to get deeper or broader information—or, conversely, to find help greater than what triage and translation has already provided.

On Regulation Room, deeper and broader information is offered in several ways. Issue posts contain links to the relevant sections of primary documents including the NPRM, and supporting analyses (e.g., "Read what [the agency] said" and "Read the text of the proposed rule."). Textual references to statutes or other regulations, and to research studies or other data, are linked to those documents. References to federal or

private entities are linked to the most relevant section of their websites. For users needing additional help, a mouse-over glossary defines acronyms and terms that might be unfamiliar. Also, links may give users access to other pages on the site that offer brief explanations of regulatory background or other relevant topics.

Through information layering, *all* content in the NPRM and supporting documents is available on Regulation Room. But it is structured to give users control, in a form less likely to overwhelm novices or to distract the more knowledgeable user.

We acknowledge that this does not fully obviate concerns [41] about participation site designers framing citizens' understanding of the issues, and controlling to some degree the knowledge they then bring to the discussion. Of course, this concern applies equally to off-line civic participation systems. More generally, we share the view of Thaler & Sunstein: "There is no such thing as neutral design" [51]. When a participation system *fails* to include a meaningful information-imparting component, it signals to users that their comments are valid in the policymaking process without regard to the degree of knowledge or thoughtfulness exhibited. Such a signal is patently false. Rulemakers and other government policymakers do not give equal weight to informed and uninformed comment—and the rest of us would not want them to.

6.4 How Can We Enable Meaningful Participation?

Purposeful selection of the functionality through which users are enabled to participate can support efforts to develop and mentor effective commenting practices. Conversely, reflexive inclusion of popular Web 2.0 functionality can undermine those efforts.

6.4.1 Targeted Commenting: Focusing Attention

In a context such as rulemaking—where a specific and fairly complex policy proposal is being made, and the agency is looking for reaction to that proposal—there are significant disadvantages to the standard blog format in which a comment box appears below the text of the post. Unless the post text is short and devoted to only a single idea, issue, or question, this format encourages global, unfocused and conclusory comments. Moreover, to the extent that comments *are* specific, the comment stream can become chaotic as users focus, in no particular order, on varied topics in the post. This problem becomes greater as the volume of participation increases.

Regulation Room is designed to require that comments be attached to a specific section of the issue post. The text is coded so that each section deals with a single idea or cluster of ideas. The targeted commenting application used, Digress.it, places the comment stream alongside the post text, with page width being divided roughly equally between the two. We prefer this layout to opening a comment space below the selected section because it makes it easier to users to skim all the existing comment threads for the section.

A targeted commenting functionality not only encourages more detailed participation focused on specific aspects of the agency's proposal, but also crowdsources content organization, to the benefit of both participants and government decisionmakers. Experimentation taught us that the desired user behavior of attaching comments to the substantively appropriate

² The law researchers among us admit to being handicapped in this task by our legal training; hence, the qualifier "relatively."

location *throughout* the post—rather than disproportionately to the immediately available first section—is encouraged by a topic index at the beginning of the post; this alerts users to the content of sections “below the fold.”

6.4.2 *Reining in Voting, Rating, and Ranking: Downplaying the Voting Instinct*

If Civic Participation 2.0 is modeled on Web 2.0 libertarian universalism, then users of an online participation system should hold the power to direct the discussion agenda and assess the value of contributions [41,52]. The design implications are that moderation from outside the user community, if provided at all, should be severely limited in purpose, and that voting, rating and ranking functionality should be prominently available. The first phase of the Open Government Initiative exemplifies this conception. The site’s “Moderation Policy” explained: “Our attitude is that any idea, respectfully presented, is a legitimate contribution to the site. Whether or not it is relevant to the discussion is for you to decide, which you can do by voting ideas up or down.” Accordingly, the IdeaScale platform design enabled users to add an idea and to comment and vote on other’s ideas. Voting determined the display order of content: ideas with many votes moved up to more prominence while ideas with few votes disappeared to the bottom as participation increased.

This phase of the Initiative also exemplified the risks implicit in this conception of Civic Participation 2.0. Comments from “birthers” (people questioning Obama’s eligibility for President) flooded the site, leading the organizers to ask users to help with the problem that redundant, off-topic postings were “crowding out” relevant discussion” by “vot[ing] down the postings you feel are counterproductive to maintaining a free-flowing exchange of ideas....” Ultimately, the organizers moderated more actively and removed many of the duplicative, “off-topic” posts. More subtle problems emerged when ideas recognized as promising by knowledgeable reviewers received little discussion because voting had relegated them to obscurity [22]. In the end, the ideas that moved into the next phase were not determined by crowdsourcing; rather, participants’ rankings were only one factor in the organizers’ selection process, undermining the “wisdom of the crowds” ethos the Administration espoused at the beginning of the process (and likely, the participants’ faith in this ethos being applied in future projects).

These problems occurred not because the participation design failed in implementing the organizers’ conception of Civic Participation 2.0, but rather because it succeeded. Unlike in privately sponsored political discussion sites, when government policymakers seek public participation they inevitably define relevance. The definition may be capacious and somewhat vague, as in brainstorming exercises. Or it may be quite specific, as in rulemaking, where relevance is defined by the agency’s statutory authority and the policy proposal it has made. But either way, comments that are off-topic as measured by the policymakers’ standards will be ignored—regardless of what users think ought be the agenda for discussion. Similarly, unless the official decisionmaking process is majoritarian, the number of votes an idea receives will matter far less than what policymakers perceive to be the value of the idea.

The alternative of modeling Civic Participation 2.0 on democratic deliberation and enlightened understanding addressed these fundamental differences between the role of

participants in public policy discussions addressed to government policymakers and participants’ role in other online political fora. In this alternative conception, the participation system designer recognizes that elements that facilitate low-thought, low-effort participation are presumptively inappropriate; their inclusion must be affirmatively justified on grounds consistent with the goal of reasonably informed and thoughtful public discussion and comment. Put somewhat differently, designers have a responsibility to users not to enable forms of participation that yield outputs government decisionmakers would (or should) regard as having little value in the policymaking process [22].

For these reasons, voting, rating and ranking functionality must be deployed with extreme care in a Civic Participation 2.0 system. Unless and until participants understand that most government decisionmaking involves a data-driven, reason-privileging process, inviting them to judge the quality of others’ comments is at best futile, and at worst invites gaming that distracts from the real task at hand. When might these participatory methods have some use for online participation in government decisionmaking?

1. *When the nature of the particular policy problem itself makes low-information, reactive participation useful:* Although this is fairly unusual, such situations do occur in rulemaking. DOT’s consumer tire-labeling rulemaking is a good example. Enabling users to vote for, or rank, the design options would yield information useful to rulewriters. (Optimally, design should also nudge brief reason-giving, which government decisionmakers invariably privilege over other forms of discourse) This example does not involve a regulatory issue likely to induce gaming, so increasing participation by allowing voting without registration seems a reasonable risk to take.

2. *As an achievement-oriented commitment device.* Low-effort participation methods such as voting might be used to lead participants into more meaningful discussion by exploiting the behavioral tendency to stick with an activity one has begun [3]. In the rulemaking that proposed possible new airline passenger protections, Regulation Room designers created a poll, presented when users first arrived at the site, that used visually compelling icons to represent tarmac delay; baggage fees; ticket oversales, etc. The question (“What matters to you?”) was carefully worded not to suggest an outcome referendum. Selecting an icon not only recorded a vote but also offered a link to the corresponding issue post, which explained the specific actions DOT was proposing. Because the goal was inducing more visitors to become commenters by quickly engaging them in some activity and then channeling them to the topics that interested them most, the design allowed voting without registering as a user. The risks of allowing “drive-by participation” were low: Even if gaming through multiple individual voting or voting campaigns occurred, voting had no ranking or rating utility. The data collected were not adequate to demonstrate a conclusive positive effect, but we believe further experimentation is warranted.

3. *When voting, rating or ranking is employed selectively as only one step in creating more complex participatory outputs.* At carefully selected points during group moderation or other group discussion, trained facilitators may use participant voting or ranking to advance the process, even though the aim is consensus building rather than a majoritarian resolution [31]. By extension, online discussion might similarly benefit from such techniques, particularly if participants are moving through

what is clearly framed as a multiphase process (e.g., discussion is followed by opportunities for collaborative drafting).

4. *To provide a participation method for users who do not comment for communitarian reasons.* Preece et al. have challenged the unidimensional view of “lurkers”—those who read but do not visibly participate—as freeriders [46]. We have some survey evidence from Regulation Room to confirm that some who read do not comment for reasons that actually serve the community—in particular, “someone already said what I would have said.” Duplicative comments tax other participants as well as agency readers so this is productive nonparticipation. Still, as Preece et al. urge, design ought to provide ways for such users to be engaged. Moreover, we have some survey evidence that those who comment are more likely than those who do not to report that they better understand the rulemaking process, what the agency is trying to do, and the arguments of other commenters, which again is what the literature would suggest [9,46]. Therefore, Regulation Room has begun experimenting with a functionality that allows users to “endorse” comments, explained as: “Endorse a comment that does a good job of making a good point.” This, we concede, is thinly disguised voting and/or rating. Implementation elements, in addition to the non-standard terminology of “endorse,” aim to minimize the participatory risks: 1) only registered users can endorse, and endorse any given comment only once, discouraging gaming; and 2) the total number of endorsements received by a comment is not publicly visible (although, following the literature on appreciation increasing participation [9, 13, 36] the commenter herself can see the number of endorsements her comments have received on her profile page). We do not yet have enough data to reach definitive conclusions, but in one rulemaking, more than one-quarter of those who endorsed did not comment (the communitarian lurker pattern), and a similar proportion of those who both endorsed and commented endorsed first (the commitment device pattern). These results justify continued experimentation to discover the relative risks and benefits of such quasi-voting functionality.

6.4.3 *Facilitative Moderation: Mentoring Effective Commenting*

If Civic Participation 2.0 is modeled on Web 2.0 libertarianism and strong belief in crowdsourcing, then users will be expected to establish community norms, mentor new arrivals in participation that meets these norms and, if necessary, police violators. Based on studies of successful communities such as Wikipedia and Slashdot, participation system designers may need to provide support for the emergence of a behind-the-scenes structure of coordination and dispute resolution [13]. But, integrating active moderation by an “expert” moderator outside the community would not be part of the design.

If however, Civic Participation 2.0 is modeled on democratic deliberation and enlightened understanding, provision for moderation by expert facilitators, who are not part of the community of participants, would be understood as an integral element of system design [6,11,32]. Facilitation is one of tools that makes it possible for ordinary citizens to participate effectively in policy deliberation [6,50]. The conditions for informed and deliberative commenting rarely occur spontaneously [2,19]. Conflict among those with different

priorities, values and levels of knowledge is almost certain and must be productively managed [38, 57].

Facilitative moderation is especially important to supporting effective rulemaking participation by inexperienced stakeholders and interested members of the public. On Regulation Room, we have observed that (i) degree of participation fluency, (ii) expectations of the norms and purposes of online commenting, and (iii) level of computer skills and familiarity can vary greatly across, and even within, rulemakings. Even with site materials that explain how to comment effectively and with careful design of participation methods, many users struggle with the discourse style of giving reasons, providing factual support, and otherwise engaging in more than general expressions of outcome preferences. These observations correspond with what is seen in off-line group deliberation efforts [50]. Similarly, except perhaps in low-information rulemakings, even information triage, translation and layering are not sufficient to give some participants the information they need to participate effectively.

For this reason, facilitative human moderation, by students trained and supervised by conflict resolution professionals, is an essential component of the Regulation Room system. An evolving moderator protocol identifies several distinct Moderator roles, each of which is operationalized through one or more facilitative interventions. These roles create the conditions for effective deliberation and consensus-building by increasing task clarity and focus, helping commenters articulate their interests and contributions, fostering shared group process norms, and ensuring that individuals have the substantive and site use information required to participate effectively [44].

This activist model of moderation aligns with Edwards’ conception of the moderator as “democratic intermediary” [19]. As with the element of information design, some will be concerned about the relative power of the moderator vis-à-vis participants. We recognize the concern but the alternative is continuing to exclude inexperienced stakeholders and interested members of the public from meaningful rulemaking participation. A more practical concern is that human facilitative moderation increases the costs of expanding participation in rulemaking. This is doubtless true, and highlights the importance of selecting rulemakings in which the anticipated value of newcomer participation is likely to outweigh the cost of getting it [22]. Eventually, these costs may be lowered by natural language processing techniques that can identify comments that would benefit from moderation [44].

7. CONCLUSION

Meaningful civic participation in complex public policymaking demands a much higher level of engagement and response than either voting or venting behaviors. Therefore, the question of what capacities are required for effective citizen engagement, and how they can be developed and supported, should be central to the design of any online civic participation system. Modeling Civic Participation 2.0 on democratic deliberation and enlightened understanding enables meaningful, effective participation.

The capacities that are required for effective citizen engagement, and how they can be developed and supported, have been central to the design of Regulation Room. In our experience, getting effective comments from newcomers to rulemaking requires design and operating strategies that lower external barriers to participation *but also* challenge users to

engage in the sort of commenting that has value to agency decisionmakers. This means facilitating participation on multiple levels, while at the same time resisting the attraction of popular Web 2.0 functionality that enables easy but cheap (i.e., low information, low thought) user engagement.

Although our experience thus far has been limited to rulemaking, we expect these recommendations would enhance any online civic engagement platform that seeks to meaningfully involve citizens in the demanding participatory environment of complex public policymaking.

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