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The Value of Words: Narrative as Evidence in Policymaking

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Policymakers today rely primarily on statistical, financial, and other forms of technical data as their basis for decision-making. Yet, there is a potentially underestimated value in substantive reflections of the members of the public who will be affected by a particular piece of regulation. We discuss the value of narratives as input in the policy making process, based on our experience with Regulation Room–a product of an interdisciplinary initiative using innovative web technologies in real-time online experimentation. We describe professional policymakers and professional commenters as a community of practice that has limited shared repertoire with the lay members of the public trying to engage with the policymaking process, which constitutes a significant barrier to participation. Based on our work with Regulation Room, we offer an initial typology of narratives–complexity, contributory context, unintended consequences, and reframing–as a first step towards overcoming conceptual barriers to effective civic engagement in policymaking.

Introduction

At a time when citizens of many nations are fighting (sometimes, literally) for fundamental rights of participation in government processes, established democracies are contending with the opposite problem: lack of meaningful citizen engagement in processes that determine national and local public policy.[1] Especially in light of the participatory nature of the Internet and the burgeoning transnational "open government" movement,[2] the need to understand this phenomenon has become more pressing. This paper begins to delve into one

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[1] Throughout this paper, we do not intend the term "citizen" to be limited to its strictly legal meaning of an individual who by place of birth, nationality of one or both parents, or by going through the naturalization process has sworn loyalty to a nation.

[2] For example, see the "Open Government Partnership" at http://www.opengovpartnership.org/

significant, but largely unexplored, factor: a conceptual gap between how the lay public and professional policymakers perceive and discuss policy-relevant evidence. While policymakers rely primarily on economic, technical, and other quantitative data, statistical analyses, and formal "premise-argument-conclusion" argumentation as their bases for decision-making, members of the lay public tend to offer context-based reflections on first-hand experiences with the particular problem or general domain that policymakers are proposing to address—a form of contribution we call "situated knowledge." We argue that bridging this conceptual gap may help improve civic engagement in decision-making processes and enrich final policy outcomes.

We perceive two barriers to making lay participants' situated knowledge explicit and useful for the policymakers: (1) what decision-makers consider to be legitimate evidence, and (2) the rhetorical imbalance (found even in policymaking processes that explicitly purport to seek "public" comment) that privileges formal argumentation over the narrative style in which lay people naturally and comfortably communicate (Polletta & Lee, 2006). The second is the process entailment of the first but, importantly, it has the independent effect of constructing a participation environment lay participants find, at best, intimidating and, at worst, hostile.

In this paper, we focus on rulemaking – the process used by the U.S. federal government agencies to make new environmental, health and safety, economic and social regulations – as an instance of a complex policymaking process in which the conceptual gap is particularly evident between the kind of participation decision-makers value and the kind lay participants tend to provide. Rulemaking has become the most prominent avenue for U.S. federal policymaking (Kerwin, 2003). From its formal inception in the in the mid-Twentieth Century,

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rulemaking has had a built-in process for public participation in agency decision-making (Strauss, Rakoff, Farina, & Metzger, 2011). Agencies must publish proposed regulations in the Federal Register and accept public comment on the proposals. In the final version of the regulation, the agency must respond to significant criticisms, concerns, and questions in the comments, and discuss why alternate proposals would have been less effective – or face possible litigation from commenters that could overturn the regulation. Despite its formal guarantees of transparency and participatory inclusiveness, the rulemaking process has historically been dominated by sophisticated and resourceful commenters from either the regulated community (e.g. industry, lobbies, trade associations, etc.) or organizations representing the beneficiary community (e.g. unions, consumer groups, advocacy organizations, etc.) (Kerwin, 2003). Small businesses, local governments and civil society groups, affected individuals, and interested members of the general public have largely either not participated at all, or participated ineffectively (Farina, Newhart, & Heidt, 2012).

We are part of an ongoing research project of CeRI (the Cornell eRulemaking Initiative), that is attempting to change this historical pattern. At the core of the project is an experimental online civic participation platform, RegulationRoom.org, on which we offer selected "live" rulemakings, from the US Department of Transportation (USDOT) and other agency partners. The project goal is discovering how information and communication technologies (ICTs) can be used most effectively to get broader, better participation in rulemaking and similar types of complex public policymaking (Farina, Miller, et al., 2011; Farina, Newhart, Cardie, & Cosley, 2011). The analysis and examples in this paper grow directly out of our first two years' experience with rulemakings on Regulation Room.

Civic engagement in rulemaking

The lack of broad and effective public participation in rulemaking has made it a longstanding target for open government efforts, and more recently, for electronic government programs (Farina, Miller, et al., 2011). The Internet brought with it new promise for meaningful civic engagement in this important policymaking process, which was already structured to include a public participation component. Up through the mid-2000s, the dominant operational theory was that putting rulemaking materials online would engender broader participation. This "first generation" approach held that physical access to information was the main barrier to civic participation and that moving the process online would allow the lay public to read rulemaking materials and comment from anywhere, rather than having to go to an agency reading room in Washington, D.C. (Farina, 2008).

The primary result was creation of a government-wide website, regulations.gov, which today hosts commenting for rulemaking proposals from over 300 federal agencies. Putting the process online has produced some increase in commenting from the lay public, but the majority of this participation has taken the form of mass email campaigns that involve short, duplicate or near duplicate comments. Using text typically supplied by advocacy groups, these comments state strong support or opposition for the proposal with very conclusive discussion. They are, effectively, votes rather than informational or analytical contributions. Rulemaking agencies are legally required to make policy decisions based on fact-based, reasoned analysis rather than majority sentiment; hence, even hundreds of thousands of such comments have little value in the rulemaking process (Farina et al., 2012; Shulman, 2009). First-generation e-rulemaking approaches are now generally regarded to have failed in creating broader and more effective

public participation (Bryer, 2012; Coglianese, 2005; Farina, 2008). Sophisticated and resourceful professional participants still dominate the rulemaking process.

Assuming the reins of power in 2009, Barak Obama brought a renewed enthusiasm for the inherent benefits of the Internet for public participation in government practices. The result of this enthusiasm was the (somewhat forced) adoption of social media and interactive communication tools by the federal agencies for the purposes of public consultations. The White House led the way with its use of blogging software, Twitter, YouTube, platforms such as IdeaScale, and other Web 2.0 technologies for solicitation of public comments. In general, however, these methods have been used for brainstorming, agenda setting, and communication of new initiatives, rather than for seeking focused public engagement with the substance of complex policy proposals. These second-generation e-rulemaking approaches are based in a great belief in the agency of technology and in the inherently collaborative nature of online interaction; they are focused primarily on the search for the right tools and design solutions (e.g. Towne & Herbsleb, 2011; Wright & Street, 2007). In our research, we aspire to go beyond purely technical difficulties, such as access to materials or lack of communication channels, to examine the structural challenges for public engagement in rulemaking or complex policy-making more broadly.

The public as an outsider

Why has it been so difficult to achieve broader effective civic participation even in a policymaking process such as rulemaking that is formally structured to require public consultation? The literature on e-participation suggests a number of reasons including the lack

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of appropriate tools (or the failure to select them) (Towne & Herbsleb, 2011; Wright & Street, 2007), practices (Shulman, 2009), and political culture (Coleman & Gotze, 2001; Innes & Booher, 2004). These reasons, however, deal with the consultative process around specific policy issues as separate and external to pervasive policymaking practices. Yet, as we argue elsewhere, the barriers to participation by lay citizens range beyond technical or procedural factors to: lack of awareness (Farina, Miller, et al., 2011), knowledge and skills needed to engage effectively in a particular policymaking environment (Epstein & Vernon, 2012; Farina et al., 2012), and information overload (Farina, Newhart, Cardie, & Cosley, 2011).

Professional rulemaking participants – in which we include career government decision-makers, lobbyists, regulatory consultants and lawyers– share an analytical and rhetorical repertoire about the regulated community, the scope of the promulgating agency's authority, the legal, operational and political constraints within which it must act, the prevailing practices of data collection and assessment, and, most fundamentally, the way the specific policy problem is being framed. In other words, these participants constitute a community of practice characterized by "a set of relations among persons, activity, and the world, over time and in relation with other tangible and overlapping communities of practice" (Lave & Wenger, 1991, p. 98). They share unique knowledge acquired through repeated participation in the practice of developing and wording policy or commenting on proposed regulations, typically within a particular federal agency's regulatory authority or a narrow, well-defined substantive domain (Jasanoff, 1994, 1997). As Mullan (1999) explained, "terms such as 'evidence-based' and 'data-driven' are the coin of the policy world today" (p. 123), and this is particularly true in rulemaking. Legislative, presidential, and judicial requirements lead agencies to perform

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extensive cost, risk, environmental, and other analyses (Kerwin, 2003). The prominence of hard data and cost-benefit analysis thus constitutes an important element of the shared repertoire – a boundary object that comes to delineate "legitimate" participation in the development of policy (Jasanoff, 1997; Star & Griesemer, 1989).

Lay participants, by contrast, view and experience policy problems from a very subjective and highly contextualized point of view—they may have in-depth knowledge about facts, causes, interrelationships, and likely consequences, but they do not share the repertoire of the professional participants characterized by technical data and reason-giving (Fischer, 2003). Instead they employ narratives as rhetorical means in support of their normative positions (e.g. Hampton, 2009; McDonough, 2001). But, as Mullan (1999) reports, "'the anecdote' as evidence is as much demeaned in policy circles as it is in clinical medicine" (p.123).

There is, in other words, a fundamental gap between how professional policymakers and the lay public perceive policy problems and approach the task of developing solutions (Fischer, 2003; Fischer & Forester, 1993; Forester, 1999; Majone, 1989). Fischer (1993) interprets this gap as "professional authority and technocratic methods [used] to buffer power elites against political challenges from below" (p.169. also see Fischer, 2003). Whether or not one accepts this interpretive assessment, the fact that lay participants are situated outside the community of practice, and so do not share the repertoire of the so called "policy wonks," constitutes a significant informal barrier to broader civic engagement. Technological or procedural strategies have limited ability to overcome this barrier: Bridging the gap requires rethinking what is perceived as legitimate evidence in policymaking and, consequently, what counts as effective civic engagement in the process.

Knowledge in the people, legitimate evidence, and narrative

On his first full day in office, President Obama issued the Open Government Memorandum that called upon federal agencies to use emerging ICTs to increase citizen participation in government decision-making: "Knowledge is widely dispersed in society, and public officials benefit from having access to that dispersed knowledge. Executive departments and agencies should offer Americans increased opportunities to participate in policymaking, and to provide their Government with the benefits of their collective expertise and information" (Obama 2009). If the Open Government Memorandum was not merely a collection of public participation platitudes, then the necessary assumption was that the public has valuable knowledge that the agencies have not been getting. Yet, because of the gap identified in the previous section, effectively bringing the knowledge of the people into established policymaking processes requires overcoming biases against both the *nature* and the *form* of the information supplied by lay citizens.

Conventional policymaking discourse (particularly in rulemaking) privileges the data-driven, reasoned argumentation of experts in science, law, economics, finance, etc. From this perspective, the problem with lay citizen participants is that they *are* laymen and laywomen – i.e., they lack the tools, training, and credentialing of the professional. The literature on public engagement has argued against this bias by uncovering the value of lay perspectives in the process of policy deliberation.[3] López Cerezo and González García (1996), for example, pointed out that "expert knowledge is not epistemically self-sufficient" (p.57), but rather contextually

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[3] The instrumental value of public engagement in policy decision-making processes lies in increasing trust and reducing resistance to the final outcome. It also serves as a system of checks and balances on the decision-makers, thus mitigating potential expert biases (e.g. Hampton, 2009; López Cerezo & González García, 1996; Stern & Fineberg, 1996).

dependent. In other words, expertise is bounded by available empirical data and constrained by social, political, and economic factors (e.g. organizational culture, current political leadership, funding). López Cerezo and González García propose the notion of "negotiated expert knowledge" that is enriched by "useful information and new perspectives" (p.58) through public deliberation. They argue that lay knowledge "can provide useful information concerning known parameters (e.g., economic or biological variables) and their relative significance for the social system's equilibrium" as well as "point out new perspectives in the sense of showing the relevance of dimensions (e.g., culture and traditions, local economic practice) that have so far been omitted from expert knowledge claims" (p.59). In fact, the mere process of consultation with the public offers opportunities to combine previously unconnected bodies of knowledge or reinterpret existing knowledge in novel ways (Sole & Edmondson, 2002).

Fischer (2003) observed that "[n]on-specialists may contribute substantially to problem characterization by identifying various aspects needing analysis, by raising important questions of fact that experts have not addressed, and by offering knowledge about specific conditions that can contribute more realistic assumptions for analyses" (p.206). He pointed out that "[l]ay participation can also play a significant role in the examination and consideration of social, ethical, and political values that cannot be addressed solely by analytical techniques" (p.206). Similarly, Horlick-Jones, Rowe, and Walls (2007) argued that "lay publics typically include a wider range of considerations than technical experts do in their reasoning process" and that lay knowledge "offers the possibility of contextualizing, or re-framing, abstract, general knowledge, in order to engage more effectively with the specifics of, for example, everyday working practices, or the details of a patient's lifestyle" (p.260-1). As Hampton

explained, "local knowledge provides useful information about the social system and cultural perspectives and physical environment in which policy is going to be developed and new perspectives on unexpected social and environmental impacts of a policy" (p.237-8).

All this suggests that the conventional view of legitimate evidence in policymaking is far too narrow. A different, but complementary, route to the same conclusion comes from projects aimed at redefining expertise and examining the discursive aspects of the policymaking process. Collins and Evans (2007), for example, argued for moving away from the expert vs. layperson dichotomy towards a more granular view that unpacks the notion of specialized knowledge. This move highlighted the boundaries of the various communities of practice involved in the policymaking process, thus offering a discursive reflection on the social system and an opportunity to reconsider it. Specifically, Collins and Evans described how the "meta-expert" can build lines of communication between traditional experts and "experts without formal qualifications" (pp. 48–49). The latter category consists of participants whose situated experience in the domain being analyzed gives them important contributory knowledge, despite their lack of formal training in the field.

There is, additionally, the problem of form. Lay participants tend to engage policy issues (at least initially) from the vantage point of personal experience; often, they express what they know in the form of stories. The personal narrative does not fall within the repertoire of acceptable forms of communication shared by the policymaking community of practice (Coleman & Gotze, 2001; Jasanoff, 1994). Indeed, stories about individual experience appear diametrically opposed to the arguably objective verifiability of empirical data and abstract logic

of principled argumentation. Thus, the personalized, narrative form of lay citizen participation may interfere with the policymaker's ability to "hear" the knowledge being conveyed.

The bias against personal narrative as a form for imparting information in policymaking is heightened by the fact that "situated knowledge can be invisible to 'non-natives' (…) because they lack exposure to it" while, at the same time, the natives "can take their knowledge for granted, making it effectively invisible to them too" (Sole & Edmondson, 2002, p. 30). When lay citizens employ their communication form of convenience (i.e. narrative), the result is to further obscure the concrete contribution situated knowledge may bring to the policymaking table. For these reasons, personal narratives offered in the policymaking context are frequently treated as purely persuasive mechanisms, not as part of the body of evidence relevant to the proposed policy (e.g. Steiner, 2005).

Policy scholars have attempted to articulate frameworks that reveal the existence and utility of narrative in the policymaking process. For example, Hampton (2009) stressed the role of the "meta-narrative" as a construct that embraces, however temporarily, both the narrative of the policy and its opposition. He argued that the meta-narrative serves as an alternative to actively seeking consensus at the time of policy consultation, thus making a controversial issue more amenable to policy intervention. Roe (1994) described meta-narrative as a "candidate for a new policy narrative that underwrites and stabilizes the assumptions for decision making on an issue whose current policy narratives are so conflicting as to paralyze decision making" (p.4). Jones and McBeth (2010) offered the Narrative Policy Framework as a construct for systematic and replicable analysis of the narratives in policy analysis. They define the narrative structure (context, plot, characters, and moral) and suggest assessing these elements in relation to belief

systems, which allows the authors develop a series of specific hypotheses at a number of levels of analysis.

All these approaches, however, focus on the narratives *of decision-makers and public discourse*, not on narratives offered by individual citizens trying to engage with the policymaking process by sharing their highly contextualized experiences. We begin the necessary work of uncovering the value of lay participant narratives, and the situated knowledge they can convey, by offering an initial typology based on public participation in Regulation Room.

Lessons from Regulation Room participation

Regulation Room is an evolving, socio-technical civic engagement system that has, to date, focused specifically on broadening effective public participation in rulemaking.[4] CeRI's multidisciplinary nature – including researchers from communications, computing, conflict resolution, information science, and law – has shaped our approach, combining the "participatory web" ethos, practical knowledge about agency processes from administrative law studies, and insights into facilitating meaningful participation from the field of conflict resolution. Our initial working hypothesis was that lack of awareness of rulemakings of interest, information overload from voluminous rulemaking materials, and unfamiliarity with this type of participation are the principal barriers to broader meaningful public participation (Farina, Newhart, et al., 2011). We therefore developed (1) communications outreach strategies to alert and engage individuals and entities that historically have not participated in the process; (2)

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[4] The project is now expanding to civic engagement in other forms of complex policymaking, including strategic planning and even constitution-building.

methods of information presentation that reduced volume and complexity; and (3) protocols

for human facilitative moderation that mentored effective commenting (Farina, Miller, et al.,

2011; Farina, Newhart, et al., 2011). With these strategies, we believed we could inculcate lay

participants with the norms of effective participation to a sufficient degree that they could

provide information perceived as useful by agency decision-makers.

To some extent, we succeeded: the vast majority of Regulation Room commenters (up

to 95% in some rulemakings) had never before participated in federal rulemaking, and agency

rulemakers reacted positively to the comments received from Regulation Room. Yet, gradually

we recognized that our efforts to mentor effective commenting reflected the perspective of

those *within* the community of policymaking practice. We knew that Regulation Room

participants would rarely be able to provide legally or technically sophisticated arguments or

detailed empirical evidence or statistical analysis. Still, both our information presentation

strategies and our moderation protocols assumed that our commenters must (and could)

engage in explicit reason-giving and adequate substantiation of factual claims in order to

participate effectively.

Our commenters have challenged us to recognize our uncritical acceptance of the

"insider" paradigm of the nature and form of legitimate participation. They persisted in telling

stories, offering personal examples, and recounting on-the-ground, experiential, and highly

contextualized information. As we reviewed and summarized their comments, we realized that

these accounts often provided useful (though non-standard) evidence, and that storytelling

could be a valid (though non-standard) form of reason-giving (Farina et al., 2012). The non-

standard nature and form of this information obviously presents new challenges for

policymakers, including questions of veracity, typicality, and interpretation. Similar challenges

exist for privileged types of evidence and discourse; the difference lies in novelty and lack of

shared repertoire – at this point, policymakers have access to generally accepted techniques for

vetting and interpreting quantifiable evidence and legalistic, premise-argument-conclusion

argumentation. We believe that the information that can be gained by attending to these non-

standard types of evidence and discourse justifies the effort to develop guidance for their

appropriate use in policymaking.

Here, we offer a modest beginning of this effort by suggesting an initial typology of

narratives that contain situated knowledge. "Situated knowledge," as we use it in the

rulemaking context, is information about impacts, problems, enforceability, contributory

causes, unintended consequences, etc. that is known by the members of the public because of

lived experience in the complex reality into which the proposed regulation would be introduced

(Farina et al., 2012). The examples given here are actual comments from rulemakings offered

on Regulation Room; in all instances, spelling and punctuation from the original comment is

preserved.

Narratives of complexity – stories containing situated knowledge that reveal and explore

contradictions, tensions, or disagreements within what may appear to the agency to be a

unitary set of interests or practices. For example, in one rulemaking (the Accessibility rule),

USDOT believed that requiring airlines to make airport check-in kiosks accessible to travelers

with disabilities would greatly benefit these travelers, both in terms of time saved and being

able to avoid the stigma of requiring extra human assistance. Organizations representing

travelers with visual disabilities emphatically supported this approach. However, comments

from individuals with disabilities revealed disagreement within the group of intended

beneficiaries about whether the agency's emphasis on accessible technology best served the

interests of travelers with disabilities. Regulation Room commenter "Alposner" explained:

> As a visually impaired person I DO NOT believe kiosks access would be beneficial. In fact, I suspect that the plan may 'backfire', making airport access more difficult. Not being able to read airport signage, and therefore requiring "meet and assist" assistance to my designated gate, I find it most convenient to fint a ticket agent who will also call for assistance to take me through security and to my gate. If kiosks become more widely used (or possibly required) in the future, it is likely tomean fewer ticket agents, thus longer wait times on line, and more difficulty and delays acquiring the assistance I need. Making keosks available to those disabled individuals who wish to use them may be a good idea in theory, but, as proven by the growth of ATMs and self service checkouts, the more automation – the less human assistance!

Similarly, in a rulemaking proposing to increase air passenger rights in areas such as tarmac

delay and bumping (the APR rule), commenters debated whether requiring aircraft to return to

the gate and deplane during long tarmac delays would actually help travelers, if wandering

passengers delayed final departure time or missed the flight entirely. For example, "sdm1146"

made this comment during the discussion on deplaning:

> On a recent flight, we were delayed about 2 hours on the tarmac. The crew did a good job of keeping us updated every 15 – 20 minutes, if only to say they didn't know anything new. [the issue was weather elsewhere] I was concerned when the pilot announced we would return to the gate if anyone wanted to deplane – losing our place in line, disrupting connections even more, etc. I realize there are medical issues which are emergencies – I'm not talking about those. I agree with the 3 hour rule in principle and think it's reasonable to extend it to more airports and all airlines – I actually think passengers should have less control than we apparently had in this setting.

In a rulemaking proposing to require commercial motor vehicle operators to use electronic

equipment to monitor driving and resting time (the EOBR rule), small company owners (which

constitute a large segment of affected businesses) contested the agency's unitary estimate of

offsetting savings in administrative paperwork processing costs. User "idb" explained:

[T]he cost savings are incorrect. I buy 12 log books a year at approximately $1 each for a total of $12 per year. Since I fill out , file, etc., the RODS myself there are no other costs. If the big companies find the cost EOBR's cost effective, they should use them. If Qualcomm made a product that was cost effective, I would buy it. Unfortunately, this is another example of a company using the federal Government to mandate use of a product they can't sell in the free market to enrich themselves. Recommendation – rework the cost saving as they are unrealistic.

Narratives of contributory context – stories containing situated knowledge that identifies contributory causes that may not necessarily be within the agency's regulatory authority but could affect the efficacy of new regulatory measures. For example, in the APR rule, commenter JetJock (who self-identified as a commercial pilot) explained how some airlines' compensation systems create incentives for flight crews not to return to the gate:

Yes, most airlines pay flight crew members scheduled flight time or actual time away from the gate whichever is more. Eg. if a flight is scheduled for 2 hours "block to block" (from/to the gate) but it takes 3 to fly it, the crew gets 3. If the flight leaves that gate and returns 2.5 hours later, most airlines only pay that crew either the 2.0 scheduled (if it cancels) or much less. For most crewmembers, the notion that 1 hour at the gate, 2.5 hours of sitting on that taxiway and only get paid for 2 is not very palatable. Whereas sitting for 2.5 hours then fly 2 totals 4.5. It is mostly the pay structure of pilots/flight attendants that poorly designed. Most people would balk at the notion of working 4.5 hours and getting paid for 2.

Similarly, in the EOBR rule, truck drivers recounted instances when irresponsible or unorganized third-party shippers, over whom they had no control, caused them to lose hours sitting at the loading dock waiting for cargo they were contractually obligated to transport. As "barney" explained:

The use of EOBRs will tell you how long the truck has been in operation. Road conditions and other delays are not addressed. Shippers/receivers have no respect for deadlines they have placed on drivers to move their products. Once they get the truck loaded their job is done.
I've sat in a loading dock for 13hrs before and then I had to be at my delivery site in 10hrs. I couldn't sleep while in the dock because the truck would shake

everytime the forklift loaded another pallet.
It also sounds to me that FMCSA is mandating the use of EOBRs REGARDLESS whether those of us in the industry think that they will be effective or not. The shippers and receivers are an integral part of the problem that can't seem to be addressed by FMCSA.

Narratives of unintended consequences – stories containing situated knowledge that identifies possible outcomes and effects of the proposal other than those the agency is seeking to achieve. In the EOBR rule for example, several truckers described occasions when driving with a company-required electronic time management system had forced them to stop when close to home, or to pull over in an unsafe location, because unexpected traffic or weather conditions had spent all their legal driving time. Commenter "virgil tatro" recounted:

> Ok i just took a trip to red deere alberta canada.. I am sampeling AN e-log, as i said i am sitting on an exit ramp in Reed Point Montana, 16 miles from my home and I have to sit here for 10 hours before I can legally drive the 16 miles home.. I could legally unhook from my trailer and drive home, Personell conveyance.. but not with an electronic recorder.. so ill sit here on this exit ramp for 10 hours and then drive the 16 miles to my home.. makes alot of sence.

Also in the EOBR rule, drivers for companies already using electronic time management systems described instances when dispatchers used electronically transmitted information to pressure drivers to be on the road for the maximum possible number of hours, even though this increased fatigue by disrupting normal sleeping patterns. The agency's proposal did not include further regulation to alleviate these pressures. Commenter "idrive" explained the problem:

> I work @ sunset logistics in FT WORTH, TX. We are already using the EOBR but since we have a day and night crew, we are having to wait anywheres from 1 to 4 hours for an available truck just to log in to begin or daily HoS. The company says it is how it is done and we just have to "suck it up" as drivers and "grow up".
> I have a friend that works for a major food supply chain that uses the EOBR and they have one in the drivers room to log in when you arrive to start your HoS.
> I feel my company is abusing the rules by telling us we have to wait for a truck to log in and the wait time we use before logging in just doesn't count towards any on duty time.

And if i run a paper log, which they absolutely hate for us to do, i will not have
enough time to complete my loads for the day.
And for instance, one occasion i had a break down and my truck was broke down
for several hours leaving me with exactly 5 hours of driving and on duty time left.
When i finally got back to the yard, I was told to get in another truck, log into the
peoplenet (EOBR) and i will have a full daily HoS to complete my run.
I have asked the safety DEPT about this but got the usual "i will look into it" as he
heads off to the break room….
I am sure it is not right but am just asking. Maybe somebody will see this and let
me know who's right and what steps i need to take to protect my lively hood.

Reframing narratives – stories containing situated knowledge that reframes the regulatory

issues. The EOBR discussion revealed that, for many drivers, concerns about expense and

counterproductive inflexibility were only part of the reason for strongly opposing the proposed

rule. Equally important was the perception that USDOT was treating them as irresponsible

lawbreakers by requiring all drivers to use monitoring equipment it had previously required

only for flagrant violators – at a time when, according to its own data, CMV-related accidents

were actually declining. Commenter "chele" argued:

I feel that there is a place for EOBR's. You are already using them where I feel
they make the best sense! On drivers & company's that have a very bad habit of
disregarding the HOS & Safety Rules. To mandate them on Every truck is
punishing (financially, morally,& ethically) those who have already proven that
we obey the laws the FMCSA have on the books.
This mandate will do less for safety , and more for the industry that produces
and maintains the records! …

Being a Owner-Operator I know trucking is NO 9 to 5 job! We have to be flexible
in so many ways the average person could not believe. This is no dreamy job, no
great adventure. We work long hours, do hard outdoor labor (I run a Step Deck
trailer) in every kind of weather, we have loads of paperwork to keep up to date.
We also need to eat, sleep, shower, house keep, maintain our equipment, &
relax, for we have a high stress job.

"traveler5014" agreed:

Like with a lot of rules now it seeems [sic] to me they are approaching this from
the wrong angle, Why punish those of us out here abiding by the hours of

service, even if we disagree with them, instead of working on better enforcement of the rules already in place.

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The typology offers a first attempt at a systematic assessment of individual narratives in terms of their usefulness in the established rule-writing routines. Each example provides relevant information that could help the agency understand more fully the impact its proposed policy is likely to have "on the ground." In some instances, the examples point to areas where additional data-gathering of the standard kind ought to be undertaken. In other instances, the examples reveal non-quantifiable values that ought to be considered in the agency's cost-benefit assessment.[5] Further work on typologies such as this one helps in operationalizing the non-quantifiable contribution of the lay commenters, thus making concepts such as meta-narrative more accessible to practitioners trained in the legalistic, premise-argument-conclusion argumentation paradigm that recognizes only statistical, financial, or other technical data as evidence in the analysis underlying policy decisions.

Conclusion

With the explosion of social media and arguably inherently participatory Web 2.0 tools, it is perplexing that the lay public still does not effectively engage with policy decisions about matters that can potentially affect them. In the U.S., the process of rulemaking has both vast policy implications and substantial built-in public participation rights. This has made it fertile ground for our research into how to engender broader and more effective public participation.

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[5] Difficult as the undertaking is, agencies are legally required to take nonquantifiable costs and benefits into account in their regulatory assessment (see Clinton, 1993).

The route we chose to explore in this paper does not go through the familiar terrain of analyzing platform features or incentive schemas. Instead, we have examined the fundamental properties of the process of civic engagement in rulemaking as one instance of the broader field of complex policymaking.

We have argued that creating a space for broader meaningful public engagement in policymaking processes such as rulemaking requires reexamining the nature of evidence deemed valuable and legitimate in the consultation process as well as the acceptable format for its presentation. Policymakers (and professional commenters) and the lay public are separate communities of practice with limited shared repertoire. Given the disparity in power between government decision-makers and the public, ways of arguing for a particular policy position and perceptions of valid evidence constitute important boundary objects that make many civic engagement efforts ineffectual. Members of the lay public largely do not have the skills and the culture necessary to engage in formal argumentation based on empirical data. Yet, they possess the unique situated knowledge of living with existing policy or proposed policy changes. Helping the two communities to establish a shared repertoire may help in creating better policy solutions.

Our proposed initial typology of narratives of complexity, causal context, unintended consequences, and reframing (based on actual comments made on Regulation Room by new participants to the rulemaking process) is a first step towards making the situated knowledge of non-professional participants accessible and relevant to the policymakers. Our role as researchers is to continue testing and refining these tools.

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