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KNOWLEDGE IN THE PEOPLE: RETHINKING “VALUE” IN PUBLIC RULEMAKING PARTICIPATION

*Cynthia R. Farina,¹ Dmitry Epstein,² Josiah Heidt,³ Mary J.
Newhart,⁴ & CeRI⁵*

Why is it . . . that in the middle of listening to someone give their side of a problem I have a natural inclination to make a list, to break their story down into parts such as issues and concerns? But, when I ask them about issues, they seem to have a natural inclination to tell me yet another story.⁶

~ J.P. Lederach, conflict mediator

When eighteenth century chronicler James Boswell told Samuel Johnson a story about attending a Quaker meeting at which a woman preached, the latter commented: “Sir, a woman’s preaching is like a dog’s walking on his hind legs. It is not done well; but you are surprised to find it done at all.”⁷ Dr. Johnson’s characteristically waspish response was insightful, although its insight was not the one he intended. Given the cultural positioning of women in England at the time—a highly constricted space enforced by legal, social, physical, and economic barriers—it was indeed surprising that a woman could speak authoritatively in a public setting at all. That some women did so, and did so well, was little short of astounding.

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<http://www.lawschool.cornell.edu/cei/> (last visited Oct. 27, 2012).

6. JOHN PAUL LEDERACH, PREPARING FOR PEACE: CONFLICT TRANSFORMATION ACROSS CULTURES 81 (1995).

7. JAMES BOSWELL, THE LIFE OF SAMUEL JOHNSON, LL.D. 244 (David Womersley ed., Penguin Classics 2008) (1791).

So it is with public⁸ participation in rulemaking. Given the barriers to effective citizen engagement in the process—lack of understanding of the nature and importance of rulemaking, lack of awareness when rulemakings of interest are occurring, and lack of motivation and/or capacity to penetrate the linguistically and technically complex mass of agency documents—it is surprising that individuals, small businesses, non-governmental organizations, and state, local, and tribal government entities file comments at all. That some of these (whom we refer to here as “rulemaking newcomers”) not only participate, but participate effectively, is little short of astounding.

We have written elsewhere about the formidable barriers to broader, better rulemaking participation by those new to rulemaking.⁹ And we have suggested strategies for lowering these barriers based on our research in Regulation Room, an experimental online public participation platform, on which we host selected live rulemakings of our agency partners.¹⁰ In this Essay, we suggest an additional, more subtle but no less daunting barrier that has become evident to us from observing the behavior of new rulemaking participants in Regulation Room: a fundamental incongruence between the ways that “insiders” think and talk in rulemaking, and the ways that novice commenters do.

8. We use “public” in the sense it is intended for this entire Symposium: individuals and entities other than those industry representatives, trade and professional association, and advocacy groups who routinely participate in the administrative regulatory process. Those routine participants (whom we call “sophisticated commenters”) are, of course, also public commenters in the legal sense, but concern for increasing “public participation” in rulemaking and other agency processes rarely, if ever, extends to getting *more* participation from those already engaged (although there have been calls for better, more dialogic participation from sophisticated commenters. See, e.g., Philip J. Harter, *Negotiated Rulemaking: A Cure for Malaise*, 71 GEO. L.J. 1 (1982).)

9. See Cynthia R. Farina et al., *Rulemaking 2.0*, 65 MIAMI L. REV. 395, 395 (2011) [hereinafter Farina et al., *Rulemaking 2.0*]; Cynthia R. Farina et al., *Rulemaking in 140 Characters or Less: Social Networking and Public Participation in Rulemaking*, 31 PACE L. REV. 382, 383 (2011) [hereinafter Farina et al., *Rulemaking in 140 Characters*].

10. See sources cited *supra* note 9; see also Cynthia R. Farina et al., *Rulemaking vs. Democracy: Judging and Nudging Public Participation that Counts*, 2 MICH. J. ENVTL. & ADMIN. L. 1, [2] (2012), available at <http://www.lawschool.cornell.edu/ceri/upload/FINAL-FARINA-12-20-Rulemaking-v-Democracy.pdf> [hereinafter Farina et al., *Rulemaking vs. Democracy*].

Our principal agency partner has been the Department of Transportation, one of the most prolific rulemaking departments and a leading innovator in using technology to improve rulemaking participation and practice. As this Essay goes to press, we are beginning collaborations with two newer, but similarly innovative, agencies: the Consumer Financial Protection Bureau (an independent agency initially in the Treasury Department and ultimately in the Federal Reserve) and the Office of the National Coordinator of Health IT Services (Department of Health and Human Services).

By rulemaking "insiders" we mean agency and other executive branch staff involved in writing and reviewing new regulations; industry, trade associations, and national advocacy groups who routinely take part in the process (whom we call "sophisticated commenters"); and reviewing courts. We argue that these groups constitute a "community of practice." As Part I explains, a community of practice comprises people and groups who engage in a process of collective learning within a specific domain, developing shared rhetoric, competencies, experiences, and expertise over sustained interactions.

Two aspects, in particular, of the rulemaking community of practice operate to discourage and marginalize contributions of rulemaking newcomers: (1) the type of evidence and claim substantiation that is valued, and (2) the form of argumentation that is privileged. Rulemaking, as it has been legally constructed, emphasizes empirical "objective" evidence in the form of quantitative data and premise-argument-conclusion analytical reasoning. By contrast, the behavior of novice commenters in Regulation Room confirms the observations of social scientists from various fields: neither of these practices "comes naturally" to people. Rather, as Part II explains, what rulemaking "outsiders" tend to offer is highly contextualized, experiential information, often communicated in the form of personal stories. We refer to this kind of information as "situated knowledge," and we offer an initial typology of the first-person narrative accounts through which it is often conveyed. We use multiple examples drawn from two Department of Transportation rulemakings offered on Regulation Room: a proposal that commercial motor vehicle operators acquire electronic on-board recording equipment to replace handwritten logs of driving and resting time (the "EOBR rule") and proposed new requirements that would make air travel websites and airport check-in kiosks accessible to travelers with disabilities (the "Access rule").¹¹

In Part III, we begin to make the case for an expanded understanding of the kinds of comments that have value in rulemaking. Our argument is threefold. Initially, relying on literature on policy planning and the strengths and weaknesses of experts, we consider how the situated knowledge of rulemaking newcomers can supplement the expertise of rulemaking insiders. Our typology of experiential narrative accounts is a first step in

11. See generally Nondiscrimination on the Basis of Disability in Air Travel: Accessibility of Web Sites and Automated Kiosks at U.S. Airports, 76 Fed. Reg. 59,307 (proposed Sept. 26, 2011) (to be codified at 14 C.F.R. pt. 382, 49 C.F.R. pt. 27); Electronic On-Board Recorders and Hours of Service Supporting Documents, 76 Fed. Reg. 5,537 (proposed Feb. 1, 2011) (to be codified at 49 C.F.R. pt. 385, 390, 395) [hereinafter EOBR Rule]. Neither rulemaking had been completed by issuance of a final rule at the time this Essay was written.

conceptualizing how the kind of participation that *does* come naturally to new commenters can provide valuable input to agency decisions. Next, we point out that the narrative form may be particularly well suited to conveying situated knowledge. Indeed, a close look at comments filed on Regulations.gov (the official government rulemaking portal) reveals that even sophisticated commenters rely on stories to convey information and advance value preferences. That these corporate narratives are not generally perceived as storytelling underscores the role of in-group norms of language and presentation in privileging the contributions of sophisticated commenters. Finally, we make the pragmatic argument that if broader participation in rulemaking is a genuine public policy goal, then a more capacious view of the kinds of comments that “count” will be required.

We have argued elsewhere that different notice-and-comment *outputs* are necessary to bring more voices into the rulemaking process.¹² Here, we emphasize that these changes will likely not be sufficient unless agencies also learn to listen to different kinds of participatory *inputs*. This Essay takes the first steps in articulating a justification for rethinking “value” in public rulemaking participation, and in considering how agencies can evaluate and appropriately use the experiential, situated knowledge of new rulemaking participants.

I. INSIDERS: RULEMAKING AS A COMMUNITY OF PRACTICE

Scholars have considered the phenomenon of rulemaking from many perspectives: as an artifact of public choice;¹³ as an exemplar of the strengths and weaknesses of courts as participants in public policy processes;¹⁴ as a study in management and organizational behavior;¹⁵ as an arena for conflict between law, science and

12. See sources cited *supra* notes 9 & 10 (urging, inter alia, new communication strategies to alert more stakeholders, and simpler, more concise statements of the relevant issues and questions).

13. E.g., Peter H. Aranson et al., *A Theory of Legislative Delegation*, 68 CORNELL L. REV. 1, 5 (1982); Matthew D. McCubbins et al., *Structure and Process, Politics and Policy: Administrative Arrangements and the Political Control of Agencies*, 75 VA. L. REV. 431, 432 (1989); David B. Spence & Frank Cross, *A Public Choice Case for the Administrative State*, 89 GEO. L.J. 97, 97 (2000).

14. E.g., JERRY L. MASHAW & DAVID L. HARFST, *THE STRUGGLE FOR AUTO SAFETY* (1990); Thomas O. McGarity, *Some Thoughts on “Deossifying” the Rulemaking Process*, 41 DUKE L.J. 1385, 1385 (1992); Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1667, 1669 (1975).

15. E.g., DAVID E. LEWIS, *THE POLITICS OF PRESIDENTIAL APPOINTMENTS: POLITICAL CONTROL AND BUREAUCRATIC PERFORMANCE* 1–10 (2008); Sidney A. Shapiro & Thomas O. McGarity, *Reorienting OSHA: Regulatory Alternatives and Legislative Reform*, 6 YALE J. ON REG. 1, 2 (1989); William F. West, *The*

politics;¹⁶ as game theory;¹⁷ and as political philosophy.¹⁸ We add to this array the perspective of rulemaking as a community of practice, in order to further illuminate the problem around which this Symposium is organized: the persistent dearth of effective *public* participation in an administrative process formally structured to require public consultation.

A concept originating in social anthropology and learning science, a “community of practice” comprises “people who engage in a process of collective learning in a shared domain of human endeavor.”¹⁹ Three elements are key:²⁰

(1) *a community*: a set of individuals who interact with one another regularly in discussions and activities. The community need not be formally designated or recognized as such. What is important is that members are brought together by joining in shared activities, and by what they learn through their mutual engagement in these activities.

(2) *a shared domain*: a common enterprise around which community activities revolve. Members are committed to acting within this domain, and they develop a shared competence in the enterprise that is not possessed by non-members.

(3) *a practice*: not merely shared interest, but sustained co-participation in pursuit of the common enterprise. Members are practitioners who, in multiple interactions over time, develop common tools, experiences, and ways of understanding and addressing recurring issues—“in short, a shared practice.”²¹

Growth of Internal Conflict in Administrative Regulation, 48 PUB. ADMIN. REV. 773, 773 (1988).

16. *E.g.*, Sheila S. Jasanoff, *Contested Boundaries in Policy-Relevant Science*, 17 SOC. STUD. SCI. 195 (1987); Sidney A. Shapiro, *OMB and the Politicization of Risk Assessment*, 37 ENVTL. L. 1083, 1083 (2007).

17. *E.g.*, Jason Johnston, *A Game Theoretic Analysis of Alternative Institutions for Regulatory Cost-Benefit Analysis*, 150 U. PA. L. REV. 1343, 1343 (2002); Matthew C. Stephenson, *The Strategic Substitution Effect: Textual Plausibility, Procedural Formality, and Judicial Review of Agency Statutory Interpretations*, 120 HARV. L. REV. 528, 566 (2006).

18. *See, e.g.*, EDWARD L. RUBIN, *BEYOND CAMELOT: RETHINKING POLITICS AND LAW FOR THE MODERN STATE* 2 (2005); Mark Seidenfeld, *A Civic Republican Justification for the Bureaucratic State*, 105 HARV. L. REV. 1511, 1512 (1992).

19. Etienne Wenger, *Communities of Practice: A Brief Introduction*, ETIENNEWENGER.COM (June 2006), <http://www.ewenger.com/theory/>. The concept was originally proposed and explained in JEAN LAVE & ETIENNE WENGER, *SITUATED LEARNING: LEGITIMATE PERIPHERAL PARTICIPATION* 29 (1991). Lave and Wenger’s original examples included U.S. Navy quartermasters, meat cutters, and nondrinking members of Alcoholics Anonymous. Wenger’s later work broadens the examples—“a band of artists seeking new forms of expression, a group of engineers working on similar problems, . . . a network of surgeons exploring novel techniques, a gathering of first time managers helping each other cope.” Wenger, *supra*.

20. *See* Wenger, *supra* note 19 (describing these elements).

21. *Id.*

The “shared practice” element is central. Over time, a community of practice creates a common repertoire of ideas, experiences, and ways of framing problems and seeking solutions. Members develop shared resources that include tools, vocabulary and symbols, documents, and routines. These resources embody and express the community’s accumulated knowledge. The capacity of the community as both origin and repository of specialized knowledge and skill is important, but equally important is the set of relationships among members over time. Through sustained co-participation in the activities that exchange information and create knowledge, members acquire a sense of joint enterprise and identity. Full participation comes from “learning to speak, act and improvise in ways that make sense in the community.”²² Communities of practice thus generate social capital²³—i.e., they are social networks that have value to members as real as possessing a laptop or a J.D.

We suggest that the rulemaking community of practice comprises:

- agency program and legal staff (and their outside consultants) who draft and internally review new regulations and supporting analyses, and read and evaluate comments;
- economists and others in the Office of Information & Regulatory Affairs (“OIRA”), whose authority to enforce compliance with statutes and executive orders requiring various economic and policy justifications makes them gatekeepers at multiple points in the process;
- representatives of industry, trade associations, and national advocacy groups (and their lawyers and other consultants) who routinely engage in formal and informal discussions and information exchanges with the agency before, during, and after the formal notice-and-comment period (called “sophisticated stakeholders” here);²⁴ and
- federal judges who adjudicate challenges to new regulations by assessing whether the agency has engaged in reasoned decisionmaking using the required procedures; these requirements, although originating in

22. Mark K. Smith, *The Social/Situational Orientation to Learning*, THE ENCYCLOPEDIA OF INFORMAL EDUC., <http://www.infed.org/biblio/learning-social.htm> (last updated May 29, 2012).

23. See Wayne Baker, *Market Networks and Corporate Behavior*, 96 AM. J. SOC. 589, 619 (1990) (“[A] resource that actors derive from specific social structures and then use to pursue their interests; [social capital] is created by changes in the relationship among actors.”).

24. For empirical and descriptive data on pervasiveness of contacts between rulemaking agencies and sophisticated stakeholders, see CORNELIUS M. KERWIN, *RULEMAKING: HOW GOVERNMENT AGENCIES WRITE LAW AND MAKE POLICY* 178–211 (3d ed. 2003).

statute, have acquired complex and arcane meaning over time through the interaction of court, agency, and sophisticated stakeholders in judicial review.²⁵

To consider federal rulemaking a shared domain does not deny the existence and significance of local variations. The political and policy history of a program area, the organization and culture of the primarily responsible agency, and the nature and structure of the regulated industry often give rise to distinctive expectations and practices.²⁶ These can be understood as sub-domains (a view reflected in the fact that large law firms' regulatory practice groups will have specialists in telecommunications, financial institutions, environmental, international trade and customs, etc.). Sub-domain knowledge, while obviously important, is embedded in a larger practice structured by powerful cross-cutting legal mandates, including the Administrative Procedure Act (as heavily judicially glossed),²⁷ the Paper Work Reduction Act,²⁸ the Small Business Regulatory Enforcement Fairness Act,²⁹ and Executive Order 12,866³⁰ and its predecessors. The understanding of rulemaking as

25. The profound impact judicial review has had over time on the entire process of rulemaking, as well as the frequency (anticipated by agency and sophisticated stakeholders alike) of adjudicatory interaction as a stage in the process, justifies including reviewing courts in the rulemaking community of practice. We are less persuaded that the agency's political overseers—Members of Congress, the President and his/her advisors, and the political appointees at the top of the agency—are appropriately included. To be sure, they can wield considerable power during the rulemaking process, but our own experience accords with published accounts indicating that these actors often do not understand the structures and forms of rulemaking, and they may seek policy outcomes without regard to the process. *E.g.*, Robert V. Percival, *Presidential Management of the Administrative State: The Not-So-Unitary Executive*, 51 DUKE L.J. 963, 998–99 (2001) (describing high level White House discussion of the desired outcome of a proposed FDA rule).

26. Even with a single Cabinet Department, the Department of Transportation ("DOT"), CeRI researchers have encountered these distinctive elements in working with DOT's various agencies or, as they are known within the Department, "modes" (itself obviously a distinctive local vocabulary).

27. Administrative Procedure Act (APA), 5 U.S.C. §§ 551–706 (2006). APA § 553 (procedures for rulemaking) and § 706 (standards for judicial review) are the most significant. For a description of the extensive judicial glossing of the statutory requirements, see JEFFREY S. LUBBERS, A GUIDE TO FEDERAL AGENCY RULEMAKING 423–84 (5th ed. 2012).

28. Paperwork Reduction Act (PRA), 44 U.S.C. §§ 3501–3521 (2006 & Supp. 2011). The PRA empowers the Office of Management & Budget to review and approve agency actions that will impose information collection burdens on the public. Information collection requests are very broadly defined, which makes PRA approval a significant step in many rulemakings.

29. Small Business Regulatory Enforcement Fairness Act (SBREFA), 5 U.S.C. §§ 602–612 (2006 & Supp. 2011). SBREFA requires agencies to analyze the impact of proposed new regulations on small businesses and governmental entities.

30. Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Oct. 4, 1993). E.O. 12,866 requires executive agencies to prepare regulatory impact assessments,

a single, distinctive policymaking domain is confirmed by, among other things: the trend towards centralizing rulemaking management, guidance, and review in OIRA and its parent agency the Office of Management and Budget;³¹ the creation of a single government-wide online rulemaking docket and comment-submission portal (Regulations.gov);³² and the calls for recognizing rulemaking as a government-wide professional specialization³³ and for improving channels of communication among rulemakers across agencies.³⁴

Over nearly four decades, interactions among members of the rulemaking community have created a highly characteristic and esoteric set of practices around writing, justifying, commenting upon, attacking, and defending new regulations. Some of these practices involve form—that is, the expected rhetoric and structure of presentation and argument. Others involve substance—that is, the types of evidence and kinds of reasoning that are valued. In Mariano-Florentino Cuéllar's illuminating study of comments in three agencies' rulemakings, rulewriters were asked "what features of [a] comment, other than the identity of the sender, [make] it worthwhile to take its contents seriously."³⁵ Five criteria emerged: Does the comment (1) "distinguish the regulation from the statutory requirements?"³⁶ (2) "include at least a paragraph of text providing a particular interpretation of, and indicating an understanding of, the statutory requirements?"³⁷ (3) "propose an explicit change in the regulation provided in the notice of proposed rulemaking

including cost-benefit analyses, for significant proposed rules. President Obama issued E.O. 13,579 asking the independent agencies to assess the costs and benefits of new regulations.

31. SBREFA §§ 602–612.

32. COMM. ON THE STATUS & FUTURE OF FED. E-RULEMAKING, ACHIEVING THE POTENTIAL: THE FUTURE OF FEDERAL E-RULEMAKING 21–25 (CYNTHIA R. FARINA, REPORTER, 2008), available at <http://ceri.law.cornell.edu/erm-comm.php>.

33. E.g., CORNELIUS M. KERWIN, IBM CTR. FOR THE BUS. OF GOV'T, THE MANAGEMENT OF REGULATION DEVELOPMENT: OUT OF THE SHADOWS 33 (2008), available at <http://www.businessofgovernment.org/report/management-regulation-development-out-shadows>.

34. E.g., COMM. ON THE STATUS & FUTURE OF FED. E-RULEMAKING, *supra* note 32, at 53–59.

35. Mariano-Florentino Cuéllar, *Rethinking Regulatory Democracy*, 57 ADMIN. L. REV. 411, 431 (2005).

36. *Id.* at 431 n.70 ("This category is meant to distinguish between comments that primarily address the scope of the underlying statute from comments that recognize in some way that the agency cannot legally abrogate its responsibility under the statute and must therefore issue regulations of some kind.").

37. *Id.* at 431 n.71 ("Whether or not the commenter distinguishes the regulation from the statute in a comment, there is the question of whether the commentator understands the scope of the statutory requirement.").

(NPRM)?”³⁸ (4) “provide at least one example or discrete logical argument for why the commenter’s concern should be addressed?”³⁹ (5) “provide any legal, policy, or empirical background information to place the suggestions in context?”⁴⁰ As Professor Cuéllar explains, these characteristics reflect “rhetorical, cognitive, and technical complexity.”⁴¹ They embody a particular conception of communication and reasoning, a conception in which *value* (what “[makes] it worthwhile to take the comment seriously”⁴²) is associated with “the provision of examples and separate arguments justifying a specific position”⁴³ and with “differentiating between general and specific rules and reasoning from certain core abstract premises.”⁴⁴

This conception of valued forms of communication and reasoning is very familiar in law: It is central to the legal academy’s goal of teaching students to “think like a lawyer.” Jean Lave and Etienne Wenger (originators of the community of practice concept) frame the initiation of new community members in slightly differently terms: “For newcomers, then, the purpose is not to learn *from* talk as a substitute for legitimate . . . participation; it is to learn *to* talk as a key to legitimate . . . participation.”⁴⁵

Consistent with what the community-of-practice perspective would predict, Professor Cuéllar found that (1) comments having more of the identified characteristics were more likely to be effective (measured by whether the final rule accepted the comment’s suggestion or argument);⁴⁶ and (2) sophisticated commenters made substantially more of such comments than did rulemaking

38. *Id.* at 431 n.72 (“[T]he capacity to ask for such a specific change plausibly reflects a commenter’s degree of sophistication about the rule and the underlying statute.”).

39. *Id.* (“This is meant to assess whether the commenter provided some measure of justification for the concerns raised, rather than simply stating the concern without indicating why such a concern was important.”).

40. *Id.* You might be surprised not to see “relevance” appearing as a criterion. Professor Cuéllar’s experience in reviewing public comments corresponds to our own in Regulation Room: Rarely are the comments of even rulemaking newcomers not relevant to the agency’s proposal, in the sense of offering some observation, criticism or suggestion that is arguably within the scope of the rulemaking. *Id.* at 414. There can be, we have discovered, a surprisingly small overlap between the set of comments that is “relevant” and the set that is “worthwhile to take . . . seriously.” *Id.* at 430–31.

41. *Id.* at 430.

42. *Id.* at 431.

43. *Id.* at 430 n.69 (citing Roberta Corrigan, *A Scalogram Analysis of the Development of the Use and Comprehension of “Because” in Children*, 46 CHILD. DEV. 195 (1975)).

44. *Id.* (citing Shawn W. Rosenberg, *The Structure of Political Thinking*, 32 AM. J. POL. SCI. 539 (1988)).

45. LAVE & WENGER, *supra* note 19, at 109.

46. Cuéllar, *supra* note 35, at 432.

newcomers.⁴⁷ Similarly, in the EOBR and Access rulemakings, sophisticated commenters routinely framed their submissions in the rhetorical and reasoning style valued within the rulemaking community.⁴⁸

Another marker of a community of practice also appeared in the submissions of sophisticated commenters in these two rulemakings. Even when members of the community have very different interests, the repeated interactions and exchanges of information around the enterprise of making and amending federal regulations create relationships. These relationships have been sharply criticized by some observers of the regulatory process,⁴⁹ but the salient point for present purposes is that community membership is recognized as having value. In both the EOBR and Disability Access rules, the formal comments of sophisticated commenters often assert their in-group status by recalling in their comments prior interactions with the agency:

TCA [Truckload Carriers Association] has commented on a number of EOBR-related proposals in the past and is extremely interested in submitting comments regarding the current proposal.⁵⁰

Indeed, in its March 4, 2011 comment to the FMCSA's December 29, 2010 Notice of Proposed Rulemaking on Hours of

47. *Id.* at 414 (“[T]he sophistication with which a comment is written seems to affect the probability that the agency will accept suggestions in that comment.”).

48. *See, e.g.*, AIRLINES FOR AM. ET AL., COMMENTS OF THE AIRLINES FOR AMERICA, THE INTERNATIONAL AIR TRANSPORT ASSOCIATION, THE AIRPORTS COUNCIL INTERNATIONAL—NORTH AMERICA, THE REGIONAL AIRLINE ASSOCIATION, AND THE AIR CARRIER ASSOCIATION OF AMERICA 3–6 (2012), *available at* <http://www.regulations.gov#!documentDetail;D=DOT-OST-2011-0177-0096>; JAMES JOHNSTON, COMMENTS OF THE OWNER OPERATOR INDEPENDENT DRIVERS ASSOCIATION, INC. 3–4 (2011), *available at* <http://www.regulations.gov#!documentDetail;D=FMCSA-2010-0167-0374>; Letter from David Osiecki, Senior Vice President, Am. Trucking Ass'ns, to Anne S. Ferro, Adm'r, Fed. Motor Carrier Safety Admin. 1 (Mar. 1, 2011), *available at* <http://www.regulations.gov#!documentDetail;D=FMCSA-2010-0167-0081>; Letter from John G. Paré, Exec. Dir. for Strategic Initiatives, Nat'l Fed'n of the Blind, to Samuel Podberesky, Assistant Gen. Counsel, U.S. Dep't of Transp. 1–2 (Jan. 9, 2012), *available at* <http://www.regulations.gov#!documentDetail;D=DOT-OST-2011-0177-0079>.

49. LAWRENCE S. ROTHENBERG, REGULATION, ORGANIZATIONS, AND POLITICS 4–13 (1994) (describing the popular theory that agencies are “captured” by regulated industry but emphasizing the complexity of relationships within and between actors in the rulemaking process); *accord* Spence & Cross, *supra* note 13, at 121–23; *see also* Jeremy A. Blumenthal, *Expert Paternalism*, 64 FLA. L. REV. 721, 730–32 (2012) (reviewing literature on “capture”).

50. Letter from Chris Burruss, President, Truckload Carriers Ass'n, to Docket Clerk, U.S. Dep't of Transp. 1 (May 23, 2011), *available at* <http://www.regulations.gov#!documentDetail;D=FMCSA-2010-0167-0352>.

Service for Drivers, FedEx noted its support of the proposed EOBR rule and suggested that the “FMCSA should first give an EOBR regulation an opportunity to improve safety compliance” before modifying the hours of service rules. See FMCSA-2004-19068-21004 at 4.⁵¹

NPGA [National Propane Gas Association] has gone on record on two previous occasions to support the concept that EOBR installation should only be on a voluntary basis for motor carriers that are not subject to remedial actions.⁵²

NFB [National Federation of the Blind] considers the accessibility of air carrier Web sites and kiosks to be one of the most important priorities for people with disabilities today. We look forward to working with DOT on these regulations, and would be happy to conduct a follow-up conversation from our June 29 meeting to discuss the SNPRM in person.⁵³

II. OUTSIDERS: EXPERIENTIAL ACCOUNTS FROM INEXPERIENCED COMMENTERS

Our North American . . . approaches are driven by analysis; that is, the breaking of things down into their component parts. Storytelling keeps all the parts together. It understands problems and events as a whole.⁵⁴

~ J.P. Lederach

In drawing the contrast between the way insiders think and talk in rulemaking and the way rulemaking newcomers tend to participate, we begin with a brief description of the Regulation Room project, and a confession.

CeRI’s Regulation Room research is driven by the belief that expanded public participation in rulemaking and similar kinds of complex government policymaking is a public good.⁵⁵ We agree in principle with President Obama’s insistence that more participation

51. Letter from Christine P. Richards, Exec. Vice President, Gen. Counsel & Sec’y, FedEx Corp., to U.S. Dep’t of Transp. 2 n.5 (May 23, 2011), *available at* <http://www.regulations.gov/#!documentDetail;D=FMCSA-2010-0167-0341>.

52. Letter from Michael A. Caldarera, Vice President, Regulatory & Technical Servs., Nat’l Propane Gas Ass’n, to U.S. Dep’t of Transp. 2 (May 23, 2011) (emphasis omitted), *available at* <http://www.regulations.gov/#!documentDetail;D=FMCSA-2010-0167-0351>.

53. Letter from John G. Paré Jr., Exec. Dir. for Strategic Initiatives, Nat’l Fed’n of the Blind, to Samuel Podberesky, Assistant Gen. Counsel, U.S. Dep’t of Transp. *supra* note 48, at 11.

54. LEDERACH, *supra* note 6, at 81.

55. The project is now expanding to civic engagement in strategic planning and other contexts in which the government decisionmaker is not (or, at least not yet) making legally binding policy. See *Projects*, CORNELL ERULEMAKING INITIATIVE, <http://www.lawschool.cornell.edu/ceri/projects-and-publications.cfm> (last visited Oct. 17, 2012).

has the capacity to improve the quality of government decisions: “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.”⁵⁶ Unfortunately, to the extent that modern information and communication technologies *have* increased public participation in rulemaking, the new participation has not been the kind that allows agencies to access this knowledge in the people. Mass comment campaigns orchestrated by advocacy groups can generate tens or hundreds of thousands of submissions⁵⁷ by new rulemaking participants. However, as we have explored elsewhere, such comments typically are neither factually informative nor reliable indicators of citizens’ informed value preferences.⁵⁸

The design and operating protocols of the Regulation Room participation platform are premised on a particular theory of what “the people” can add to rulemaking—i.e., information about impacts, ambiguities and gaps, enforceability, contributory causes, unintended consequences, etc. that is known by participants because of their lived experience in the complex reality into which the proposed regulation would be introduced. This “situated knowledge” is on-the-ground information that the agency may not possess, and that organizations purporting to represent these commenters may not reveal at all, or do not convey in sufficient detail. Regulation Room therefore focuses on increasing participation by individuals and small private or public entities who would be directly affected (either being regulated by or benefiting from the agency’s proposal) but who, based on historical participation patterns, are unlikely to engage in the conventional comment process. In the EOBR rule, for example, these included individual commercial motor vehicle (“CMV”) drivers and small business owners (who comprise more than ninety-nine percent of firms in the industry).⁵⁹ In the Accessibility rule, we targeted travelers with disabilities, their families and friends, and web accessibility practitioners.

Our initial working hypothesis was that individuals and small entities do not participate because they: (1) are unaware of rulemakings that would affect them; (2) are unfamiliar with how to

56. Memorandum on Transparency and Open Government, 74 Fed. Reg. 4685, 4685 (Jan. 21, 2009).

57. Or more. See Rachel Arenstein, *2.1 Million Comments to Cut Carbon Pollution*, NAT’L WILDLIFE FED’N (June 28, 2012), <http://blog.nwf.org/2012/06/2-1-million-comments-to-cut-carbon-pollution/> (claiming that 2.1 million comments were submitted supporting EPA’s proposed new greenhouse gas rules).

58. Farina et al., *Rulemaking vs. Democracy*, *supra* note 10 (manuscript at 8–11).

59. EOBR Rule, *supra* note 11, at 5544.

participate effectively in the process; and (3) would be overwhelmed by the volume and complexity of rulemaking materials. We therefore developed communications outreach strategies to alert and engage them, and methods of presenting rulemaking information clearly and concisely.⁶⁰ Human moderators, trained in techniques of group facilitation and following a research-informed moderation protocol, were available to answer questions, point commenters to information, and mentor them in effective commenting practices.⁶¹ With these strategies, we believed Regulation Room could engage rulemaking newcomers in the process successfully, inculcating them with the norms of effective participation to a sufficient degree that they could provide information perceived as useful by agency decisionmakers.

In many respects, we succeeded. The vast majority of Regulation Room commenters (64%–98% depending on rule) have never before participated in federal rulemaking.⁶² In interviews, agency rulemakers have reacted positively to the usefulness of comments received from Regulation Room, even when they were initially skeptical about the value of the project.

Yet, gradually, we recognized that our efforts to mentor effective commenting unconsciously adopted the perspective of those within the rulemaking community of practice. We knew that the newcomers we sought to engage 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 protocol assumed that our commenters must (and could) engage in analytical reason-giving and "objective" substantiation of factual claims in order to participate effectively.

To be sure, some of this behavior did indeed occur. For example, in the EOBR rulemaking, several truckers explained their opposition to electronic monitoring by citing the agency's own statistics that the rate of accidents involving CMVs was declining. For example:⁶³

60. Farina et al., *Rulemaking in 140 Characters*, *supra* note 9, at 390–92; *see also* Farina et al., *Rulemaking 2.0*, *supra* note 9, at 420.

61. Farina et al., *Rulemaking in 140 Characters*, *supra* note 9, at 391.

62. Each rule's new participant percentage is reported in the rule's Final Summary of Discussion. *See, e.g., Final Summary of Discussion*, REG. ROOM, <http://regulationroom.org/eobr/final-summary-intro/> (last visited Sept. 15, 2012). Engaging new participants, rather than providing merely another participatory venue for sophisticated commenters, is recognized as one metric of success in participation design. *See* Jeroen van der Heijden & Ernst ten Heuvelhof, *The Mechanics of Virtue: Lessons on Public Participation from Implementing the Water Framework Directive in the Netherlands*, 22 ENVTL. POL. & GOVERNANCE 177, 179 (2012).

63. Quotations from Regulation Room commenters are not edited to correct spelling, punctuation, or grammar except in rare instances when intended meaning (as evident from the larger context of discussion) is too obscured.

trucking

MR. moderator you were asking where somebody else came up with fatality stats . . . I do not know where he found them at, but these come right off [the Federal Motor Carrier Safety Administration ("FMCSA")'s] web site. In 2009 there were 3,338 deaths in large truck related accidents and that was down 865 from 2008, in which was a 20% drop. So the numbers have been on a steady drop since about 1997. . . . Those numbers do not take into consideration the percentage of those accidents that were caused by the other vehicle in which is figured to be at 75%. Now you take and run the numbers it just does not add up The FMCSA do not have the facts on their side, and that is a fact.⁶⁴

truckdriversnews

Driver fatigue is not a real problem according to an FMCSA webinar, that was publicly was communicated on September 30, 2010, hosted by the FMCSA titled: 2009 – Historic Truck Crash Declines. The number is 1.4% fatigue related accidents in trucking My primary concern is FMCSA falsifying its own information to make it seem that new regulations and such are needed⁶⁵

Some went further to challenge the *quality* of the data, both for failing to examine the impact of current usage of EOBRs (principally by large trucking companies who, though a small percentage of firms in the industry, account for a large percentage of vehicles and drivers) and for using unreliable measures of driver fatigue:

gordon:

I took a look at the data. . . . What the study failed to report were the number of trucks with EOBRs that were involved in accidents, compared to the total number of EOBR equipped trucks and the number of non-EOBR equipped trucks compared to the percentage. In other words, the federal government is proposing that us truckers take on a tremendous expense with no evidence that this really helps. When it is all boiled down, what is the real benefit of EOBR? How many fewer fatalities/injuries can we expect to have?

Some commenters made multiple comments and, in the interest of concise presentation, we have occasionally combined information from more than one of their comments into a single quotation.

64. Trucking, Comment to *Who Would Have to Use an EOBR?*, REG. ROOM (May 1, 2011, 8:01 PM), <http://regulationroom.org/eobr/use/#comment-5-419>.

65. Truckdriversnews, Comment to *What About Privacy Concerns?*, REG. ROOM (Mar. 1, 2011, 9:13 PM), <http://regulationroom.org/eobr/what-about-privacy-concerns/#comment-5-212>.

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It would appear to me at first blush that this is an example of bureaucracy run wild. We have created a bureau – FMCSA – to regulate trucking and by gawd we are going to have regulations.⁶⁶

rdb:

[Starting in 2010] DOT decided to include log book “form and manner” and other trivial logbook violations as evidence of “fatigued driving” in CSA 2010. The information provided by CSA 2010 is useless for measuring actual fatigued driving issues. . . . [T]he DOT position becomes a mixture of subjective opinions and political agendas, all stuffed under the banner “fatigued driving” since no one can measure fatigue or refute assertions of opinion that are masqueraded as statements of fact.⁶⁷

gordon:

[T]he current CSA 2010 criteria . . . lumps all things having to do with HOS under the fatigued driving label. Making an error on a log book is not a fatigued driver make. Falisfying a log book, does not a fatigued driver make, but is more likely.⁶⁸

Some small company owners provided financial information about their own operations to challenge the bases for the agency’s cost/benefit calculations:

rdb:

The cost figures contained in DOT’s cost analysis for EOBR’s are horribly skewed toward a big business model. I own a one-man one-truck trucking company and I only spend about \$12 a year on paper log books to comply with DOT’s Hours of Service (HOS) regulations. Over a ten-year period, I will spend about \$120, the DOT’s proposal requires me to spend \$7850 over a ten year period. That is a 6442 % increase. Also, their figures have clerical staff (I don’t have any) making between \$27-\$29 per hour. Good work when you can get it, but I don’t know of any small trucking companies that are paying anybody those kind of wages. I have been inspected for hours of service violations by DOT 6 times in the past 18 months and have never been cited for being over my hours of service. My \$12 per year program must be working.⁶⁹

66. Gordon, Comment to *What Will This Cost?*, REG. ROOM (Apr. 26, 2011, 11:29 AM), <http://regulationroom.org/eobr/what-will-it-cost/#comment-5-381>.

67. Rdb, Comment to *What Will This Cost?*, REG. ROOM (Mar. 23, 2011, 9:33 AM), <http://regulationroom.org/eobr/what-will-it-cost/#comment-5-299>.

68. Gordon, Comment to *What Will This Cost?*, REG. ROOM (Apr. 26, 2011, 11:29 AM), <http://regulationroom.org/eobr/what-will-it-cost/#comment-5-381>.

69. Rdb, Comment to *What Will This Cost?*, REG. ROOM (Mar. 28, 2011, 12:51 PM), <http://regulationroom.org/eobr/what-will-it-cost/#comment-5-313>.

patrick:

I am a Custom Harvester with 10 units that fall under [hours-of-service log-keeping] requirements for less than 15 days a year. . . . So requireing EOBRs on these units for 15 days a year of use under FMCSA estimate costs \$785 per year would be \$52 a day. This is a substantial cost over a paper log sheet costing cents a day. With the 10 units it will cost me \$520 dollars a day to move. . . . I average less than 350 miles a day. So while moving my 10 units in convoy the use of EOBRs is going to cust me \$1 to \$1.52 a mile. . . .

My employees are on salery so time for compleating [logs] is not direct cost. The clerical time for submiting paper logs will be faster and cheeper than electronic logs when done in small quantities. The cost of storing electronic data could be substancially higher when considering the computers needed to collect and store the data collected from EOBRs. What about data backup, computer data does fail and small business do not generally have the best bomb proof data backup systems. Yes paper logs can be destroid in fire and floods but how often does that happen compared to computer failure. . . .

. . . I dont think the cost of maintaining EOBRs has been fully thought out by FMCSA. I think it has been fully thought out by the EOBR manufactures and they see \$\$\$ 2 million power units required to buy these systems are going to be paying \$40 a month for subsription costs, that's \$80 million a MONTH! Everyone knows the best businesses to be in are subscription based sales were the customer has to keep paying. All the better that the customer has to pay you by force of law. I'm in the wrong business. Even by FMCSA estimates of .3% to .5% of cost [of the proposed rule] to trucking revinue that's \$1 billion to 1.7 billion a year. That might be chump change to the federal government but it is not to private industry. . . .⁷⁰

These comments obviously differ in length, tone, and style from the extended formal submissions of sophisticated industry commenters, but the kinds of evidence and argumentation they offer fit squarely within standard rulemaking discourse. More typically, however, the comments of Regulation Room participants have challenged us to recognize our uncritical acceptance of the “insider” paradigm of the nature and form of legitimate participation. When we ask for reasons and for factual support, rulemaking persist in telling stories. Instead of hypothetical examples, they offer first-person narratives. Instead of logic-based reasoning from abstract principles, they support their positions with highly contextualized argument from their own experience.

70. Patrick, Comment to *What Will This Cost?*, REG. ROOM (Apr. 4, 2011, 3:35 AM), <http://regulationroom.org/eobr/what-will-it-cost/#comment-5-322>.

We ought not to have been surprised by this. Storytelling is psychologically and linguistically innate for humans.⁷¹ Psychologist Jerome Bruner describes humans' "predisposition to organize experience into a narrative form."⁷² Philosopher and trial lawyer Robert Burns describes the narrative structure as "an innate schema for the organization and interpretation of experience."⁷³ Some theories posit that storytelling is endogenous—that is, inherent in the structure of language, or even of the mind.⁷⁴ Others' theories regard it as exogenous—that is, socially or culturally constructed.⁷⁵ Yet even if the latter is more accurate, narrative is nearly universal in human societies.⁷⁶ This may be associated with the fact that we perceive reality temporally, and that the human lifecycle, like a narrative, is experienced as having a beginning, a middle, and an end.⁷⁷ Indeed, neuroscience research has revealed that narrative is so fundamental to human cognition that injury to or deterioration of the parts of the brain responsible for narration results in loss of identity.⁷⁸

The prevalence and role of storytelling in public discourse has been studied in a variety of contexts. Sociologists, communications theorists, conflict resolution specialists, and researchers in policy studies and public administration have noted the marked tendency of "lay" members of the public to engage policy issues from the vantage point of personal experience and to use narratives to express what they know.⁷⁹ Legal scholars have noted that trials,

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72. JEROME BRUNER, ACTS OF MEANING 47 (1990); see also Martha S. Feldman et al., *Making Sense of Stories: A Rhetorical Approach to Narrative Analysis*, 14 J. PUB. ADMIN. RES. & THEORY 147, 147–48 (2004) (collecting literature).

73. ROBERT P. BURNS, A THEORY OF THE TRIAL 159 (1999); see also Laura W. Black, *Deliberation, Storytelling, and Dialogic Moments*, 18 COMM. THEORY 93, 100–01 (2008) (collecting literature on storytelling and identity).

74. See ANTHONY G. AMSTERDAM & JEROME BRUNER, MINDING THE LAW 115–16 (2000); J. Christopher Rideout, *Storytelling, Narrative Rationality, and Legal Persuasion*, 14 LEGAL WRITING 53, 57–59 (2008).

75. See AMSTERDAM & BRUNER, *supra* note 75, at 116–17.

76. Roland Barthes, *Introduction to the Structural Analysis of Narratives*, in IMAGE-MUSIC-TEXT 79, 79 (Stephen Heath trans., 1977) ("[N]arrative is international, transhistorical, transcultural: it is simply there, like life itself.").

77. Rideout, *supra* note 72, at 58.

78. Michael D. Jones & Mark K. McBeth, *A Narrative Policy Framework: Clear Enough to Be Wrong?*, 38 POL'Y STUD. J. 329, 330 (2010).

79. E.g., LEDERACH, *supra* note 6, at 6–7; Black, *supra* note 74, at 93; Laura W. Black, *Listening to the City: Difference, Identity, and Storytelling in Online Deliberative Groups*, 5 J. PUB. DELIBERATION, no. 1, 2009 at 10 [hereinafter Black, *Listening to the City*], available at <http://services.bepress.com/cgi/viewcontent.cgi?article=1093&context=jpd>; Feldman et al., *supra* note 73, at 147; Al Fuertes, *Storytelling and Its Transformative Impact in the Philippines*, 29 CONFLICT RESOL. Q. 333, 333–34 (2012); Greg Hampton, *Narrative Policy Analysis and the Integration of Public Involvement in Decisionmaking*, 42 POL'Y SCI. 227, 227 (2009); Francesca

especially criminal trials, are organized around storytelling, and argue that a central cognitive process in juror decisionmaking is constructing a convincing narrative from the evidence.⁸⁰

In their detailed study of “Listening to the City Online”—an organized online discussion, held for two weeks in 2002 as part of the process for determining future development of the September 11th site—social scientists Francesca Polletta and John Lee discovered that narrative played a prominent part in the discussion, regardless of the income, education, or race of the speaker.⁸¹ Stories, they found, were used in several ways: to establish the speaker’s stake in the issue; to illustrate a point or an idea; to serve as the springboard for examining “what if” possibilities; and to call for inclusion of a new issue in the discussion.⁸² Beyond these perhaps predictable uses, participants also told stories to illustrate a change in their own thinking, to reveal a different perspective on a principle or value being used as justification by others, to put forward in a less confrontational way an unfamiliar or unpopular point of view, and even to invite others to help the narrator clarify his/her own preferences.⁸³ Experiential accounts, in other words, forwarded the process of deliberation.⁸⁴ Polletta and Lee found that comments containing narratives were more than twice as likely as non-narrative comments to be connected to the previous discussion.⁸⁵ Moreover, such comments were 1.6 times as likely as non-narrative comments to elicit a response from another speaker, and three times as likely to be engaged by other commenters in a substantive way (e.g., request for clarification; corroborating

Polletta & John Lee, *Is Telling Stories Good for Democracy? Rhetoric in Public Deliberation after 9/11*, 71 AM. SOC. REV. 699, 699 (2006); Rideout, *supra* note 72, at 53.

80. *E.g.*, AMSTERDAM & BRUNER, *supra* note 75, at 110–64; W. LANCE BENNETT & MARTHA FELDMAN, RECONSTRUCTING REALITY IN THE COURTROOM: JUSTICE AND JUDGMENT IN AMERICAN CULTURE 3–18 (1981); BERNARD S. JACKSON, LAW, FACT AND NARRATIVE COHERENCE 58–60 (1988); John H. Blume et al., *Every Juror Wants a Story: Narrative Relevance, Third Party Guilt and the Right to Present a Defense*, 44 AM. CRIM. L. REV. 1087–91 (2007); *see also* Mark Spottswood, *Bridging the Gap between Bayesian and Story-Comparison Models of Juridical Inference* (Fla. St. U. Coll. of Law, Public Law Research Paper No. 598, 2012), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2083280 (reviewing literature on probabilistic vs. narrative theories of adjudicative fact-finding).

81. Polletta & Lee, *supra* note 80, at 711. Polletta and Lee found that storytelling in this discussion *was* gendered, with women 1.72 times more likely than men to use the narrative form. *Id.* at 710.

82. *Id.* at 711–12.

83. *Id.* at 712–13.

84. Accord Black, *Listening to the City*, *supra* note 80 (analyzing the same discussion).

85. Polletta & Lee, *supra* note 80, at 712.

information; expressions of doubt about generalizability or relevance; agreement or disagreement).⁸⁶

In Regulation Room we have observed rulemaking newcomers using first-person experiential accounts in several ways that seem to us clearly germane to rulemaking. The examples given here are actual comments from rulemakings offered on Regulation Room; they come predominantly from the EOBR rule, in which first-person accounts were especially prominent. Spelling and punctuation from the original comment is preserved to the greatest extent possible; in some instances, multiple comments made by an individual are collapsed into a single quote for the sake of brevity. All comments remain publicly viewable at regulationroom.org.

A. *Accounts of Complexity*

Comments in this category draw on the situated knowledge of personal experience to 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 the Accessibility rule, organizations representing persons with disabilities emphatically supported DOT's approach that automated check-in kiosks be redesigned for independent use by travelers with various physical and cognitive disabilities.⁸⁷ Some individual commenters with disabilities, however, disagreed that the emphasis on accessible technology best served their needs:

Alposner:

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 find 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 to mean fewer ticket agents, thus longer wait times on line, and more difficulty and delays acquiring the assistance I need. Making keosks available to those

86. *Id.* at 714.

87. See, e.g., Letter from John G. Paré Jr., Executive Dir. for Strategic Initiatives, Nat'l Fed'n of the Blind, to Samuel Podberesky, Assistant Gen. Counsel, U.S. Dep't of Transp., *supra* note 48, at 1; Letter from Robert Herman, Senior Advocacy Attorney, Paralyzed Veterans of Am., to U.S. Dep't of Transp. 1–2 (Jan. 30, 2012), *available* at <http://www.regulations.gov/#!documentDetail;D=DOT-OST-2011-0177-0105>; see also NAT'L FED'N OF THE BLIND, NATIONAL FEDERATION OF THE BLIND RESOLUTIONS 2011 (2011), *available* at <http://www.nfb.org/Images/nfb/Publications/bm/bm11/bm1108/bm110816.htm> ("strongly" urging Congress and DOT to require accessible kiosks).

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!⁸⁸

Lhare:

Currently the airlines have used kiosks to replace personnel. When I arrive at airports, I often have a great deal of difficulty, and waste a lot of time, finding a person to help me check in. Passengers who require assistance to get to the gate need to check in with a person who can arrange this help, not at a kiosk.⁸⁹

Aews175:

As a person with a mobility impairment, . . . I try to do as much as possible online, but once at the airport I still need to negotiate red caps, security personnel, gate check-in personnel, luggage handlers and flight attendants, many of whom still do not have a clear idea of how to interact with people with disabilities. The kiosks will make little impact on this.⁹⁰

In the EOBR rule, commenters insisted that the impact of the agency's proposal would be qualitatively different on small companies than on large carriers (many of whom already use automated fleet management devices and who, almost unanimously, supported an industry-wide mandate.) Some of these comments focused on ability to pass along new costs to customer:

Gordon:

Equipment costs for large fleets are obviously less of a concern than they are for us small fleet owners. We have eight trucks on the road. Keeping paper logs is a no brainer. What the regulators need to appreciate is that us smaller company have less flexibility in rates we charge. We, more than any other sector are subject to whims of the free market. . . . Hunt, CR England, ETC can more easily hide the device expenses in the cost of doing business. We small guys can not.⁹¹

88. Alposner, Comment to *Kiosks: Benefits & Cost of Accessibility*, REG. ROOM (Dec. 1, 2011, 12:45 AM), <http://regulationroom.org/air-travel-accessibility/issue-posts/benefits-costs-kiosk-accessibility/#comment-6-224>.

89. Lhare, Comment to *Kiosks: Which? When?*, REG. ROOM (Nov. 30, 2011, 10:10 PM), <http://regulationroom.org/air-travel-accessibility/issue-posts/kiosks-which-when/#comment-6-221>.

90. Aews175, Comment to *Websites: Benefits & Cost of Accessibility*, REG. ROOM (Nov. 29, 2011, 12:42 AM), <http://regulationroom.org/air-travel-accessibility/issue-posts/benefits-costs-web-accessibility/#comment-6-208>.

91. Gordon, Comment to *What Will This Cost?*, REG. ROOM (Apr. 26, 2011, 11:01 AM), <http://regulationroom.org/eobr/what-will-it-cost/#comment-5-378>.

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We provide income for eight families. These are eight families that might otherwise be on the dole. It is tough enough dealing with the avalanche of regulations without being saddled without one more expense.⁹²

aknapke1215:

These would only work in a perfect world where there isn't traffic or weather or breakdowns or anything else that a driver has to deal with on a daily basis. What if for instance you go to a shipper who screws you a round for 6 hours while they load you and then you can't make delivery you just lost a day of income who is going to make that up? Not the people who made the rule. What if that happens twice in one week there goes two days of income that you need to operate your business. How do you make that up, how can eobrs not have a severe economic effect on drivers livelihood. They may work for the big trucking companies who have thousands of trucks, but what about the guy with one or two or three trucks who is doing everything they can to compete. . . .⁹³

Others argued that inflexible automated hours-of-service rule enforcement would be disproportionately economically harmful to small companies because of the structure of the trucking business:

grldbarnes:

I drive for Wal Mart and use EOBR it is a wonderful tool for the type of driving I do. However I think it will put a lot of hard working drivers out of business. Unless some rules are changed and enforced, The wait time loading and unloading will kill them. Also the time waiting for dispatch to give them thier next load will be a problem. You [i.e., the agency] can not help with the latter but the loading and unloading is a major problem for drivers. I have sat a grocery store wharhouse for up to ten hours waiting to get unloaded, when I was on time and did my part. With EOBR this would kill my driving hours. Rules need to be put into force regulating the time they can hold the driver while loading and unloading. Thanks for listening to my 2cents, Gerald⁹⁴

Gordon:

In response to your [i.e., the moderator's] question about big truck companies: Here is the nature of the business today: The

92. Gordon, Comment to *What Will This Cost?*, REG. ROOM (Apr. 26, 2011, 11:50 AM), <http://regulationroom.org/eobr/what-will-it-cost/#comment-5-387>.

93. Aknapke1215, Comment to *Would Penalties/Enforcement Change?*, REG. ROOM (Feb. 10, 2011, 10:45 PM), <http://regulationroom.org/eobr/penalties/#comment-5-101>.

94. Grldbarnes, Comment to *Who Would Have to Use an EOBR?*, REG. ROOM (Feb. 24, 2011, 5:00 PM), <http://regulationroom.org/eobr/use/#comment-5-157>.

biggest companies control most of the freight. They don't haul the freight, but they book the freight, and haul it with their trucks, or rake some off the top and pass the loads down to smaller companies. The reality is that there is little connection between the company paying for the hauling and the company doing the driving. What this means, then, is that smaller companies struggle to make ends meet in several ways.

Smaller companies:

– Often must accept lower rates – the companies booking the freight take 25% off the top for the joy of passing paper around.

– Are often abused at shippers and receivers. Because there is little connection between trucker and shipper – truckers are often unable to demand payment for extended delays at the shipper or receiver. . . . Freight brokers have no incentive to pay truckers for delays – which often can amount to a day or a night – because they don't have a connection to the trucker. False If shippers take up 25% of a driver's available work time – the driver must make up for it by pushing the limits of his or her endurance False

[L]arger companies sign contracts with customers that spell out such things as loading/unloading times, tarping fees and other special charges. . . . However, contracts between drivers and brokerages that spell out delays and other assessorial charges generally does not exist. . . . In our small company I have dealt with this numerous times. The standard (if there is such a thing) in the industry is to give a shipper or receiver two hours of time to load and unload. But, if at the two hour mark I call the broker and complain, I usually hear something like: "I'll call the shipper and see about detention." This is a kiss-off. My choices are to wait or to pull the truck off the load and look for something else. If I choose the latter course, then I waste time looking for a well paying load and then fuel and time moving the truck to the new shipper and again, starting the clock. . . .⁹⁵

Other commenters focused on motivational differences between small operators and large companies—i.e., the personal stake in safe, legal operation:

Crusin:⁹⁶

what I'm saying is I'm an O/O [owner/operator]. . . I keep correct logs [. . .] safety is THE FIRST PRIORITY. . . I keep the

95. Gordon, Comment to *What Will This Cost?*, REG. ROOM (Apr. 27, 2011, 9:08 AM), <http://regulationroom.org/eobr/what-will-it-cost/#comment-5-398>.

96. In this comment, ellipses not in brackets are in the original comment.

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equipment in good order. . .repair just about everything on the rig's in order to keep the vehicles SAFE and mainly to avoid breakdowns [. . .]

The average O/O is probably the safest of all truck drivers out here .. they know the cost of what has to be completed on their trucks. . .the cheapest way is the most expensive. . .Their trucks are their livelihood. Most O/O's know that if in an accident running illegal logs just isn't worth it. Their truck should not have been on the road when it should have been shut down for a reset. [. . .]

BOTTOM LINE. . .

YOU GOTTA BE AN IDIOT TO RUN FALSIFIED LOGS. . .1 ACCIDENT AND 2-5 HEAVY TRUCK INVESTIGATORS + ILLEGAL LOGS+ SERIOUS PROBLEMS. . .

WHO WOULD BE THAT STUPID?

Me personally. . .I drive for my allotted time. . .11 hours. . .rest the correct amount of hours. . .then 'run the next day for 11. . .⁹⁷

Virgil tatro:

I for one have driven two million miles with out an accident or any kind of moving violation.. What is an eobr going to help me with? Besides costing me and my family money!! . . . I have been on the road all of my 37 years and have seen every scenario. . . . I have Twin four year old girls whom my wife and I adopted at birth and a 16 year old son I am all about Highway safety. I don't need to or want to run for any more than the 11 hours.⁹⁸

Finally, while the vast majority of commenters opposed the EOBR proposal, *okiemedic_66* (who self-identified as hazardous materials driver who has used EOBRs) relied on his experience in taking a decidedly minority point of view among small operators:

I have been behind the wheel for 23 years False [I]n this present age, I welcome EOBRs because they take the falsification argument out of trucking opponents hands. I would even welcome 24/hr surveillance cameras and a complete onboard recording set up. As long as I am in accordance with the law, it makes the job of some personal

97. Crusin, Comment to *Who Would Have to Use an EOBR?*, REG. ROOM (May 9, 2011, 3:00 PM), <http://regulationroom.org/eobr/use/#comment-5-430>.

98. Virgil tatro, Comment to *Who Would Have to Use an EOBR?*, REG. ROOM (Feb. 24, 2011, 11:34 PM), <http://regulationroom.org/eobr/use/#comment-5-171>.

injury lawyer that much harder. Remeber, people dont just go after companies anymore. They will go after we the drivers also. I for one do not want to owe the rest of my life to some other person because I could not prove my case. If we will accept and use the new regulations as a tool for our benefit, I belive that it will eventually make the best of us more valuable in the long term.⁹⁹

B. *Accounts of Contributory Context*

Comments in this category draw on the situated knowledge of personal experience to identify contributory causes of the problem the agency aims to solve. The factors they identify are not necessarily within the agency's regulatory authority but could affect the costs or efficacy of the proposed new regulatory measures.

For example, in the EOBR rule, many commenters argued that the root causes of unsafe driving practices and exceeding "legal" driving time include: (1) the industry practice among large carriers of paying by the mile rather than hourly; and (2) the behavior of third-party shippers (over whom small companies have little control) that cause drivers to lose hours waiting at the loading dock for cargo they are contractually obligated to transport. Here is a sampling:

flyinphil:

I am a company driver and I want to make a couple comments and hopefully you can publish them as nobody seems to want to talk about these points EOBR's track us by the minute, but carriers insist on paying via the antiquated method of mileage pay. This antiquated method is dangerous driving habit promoting because it rewards you for driving as fast as you can. Figure out your hourly pay next time you are stuck going through Chicago at rush hourFalse Now imagine no cheating on your logs, couple that with a record number of inexperienced drivers racing the unbeatable clock. You now have the most dangerous industry in the world!!! For the drivers and the general public.¹⁰⁰

Chele:

No matter what kind of freight you move there is alot of sitting time both at the shipper & receiver that is basically unpaid time. Now you tell me your time is free?? If your at work you expect to be paid right? We rarely get paid for our detention time. It also can greatly eat into our available time for working.

99. Okiemedic_66, Comment to *Who Would Have to Use an EOBR?*, REG. ROOM (Mar. 18, 2011, 6:42 PM), <http://regulationroom.org/eobr/use/#comment-5-288>.

100. Flyinphil, Comment to *Who Would Have to Use an EOBR?*, REG. ROOM (Feb. 18, 2011, 9:48 PM), <http://regulationroom.org/eobr/use/#comment-5-134>.

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Thus making it so we have to break the rules to get the freight where it needs to be, and pushing a 14 hr day is tough!¹⁰¹

barney:

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. . . . So many times, receivers treat inbound truckers as an extension of their assembly line or freezer. . . I've sat in the dock in Georgia, stuck because they were running their operations from my truck. Consequentially, I was down for a full day. . . . The shippers and receivers are an integral part of the problem that can't seem to be addressed by FMCSA.¹⁰²

smallfamilyownedtrucking:

What our Gov. and Universities¹⁰³ do not understand is by imposing this it will put a majority of little companies that deliver the essentials that we americans buy everyday out of business False If we are going to enforce this EOBR we have to change the log rules yet again to let drivers adjust their logs for this as well as many other delays. If my driver starts his clock at 8am. sitting at a dock and doesn't get loaded till 1pm, and is supposed to be 500 miles overnight to deliver the next morning they have no time left to drive that. Causing the load to be delayed by a day and then the shipper cutting our rates for not delivering on time when it was their fault for not getting my driver out in a timely manner. without being able to adjust these times our country WILL come to a stop and as they say "then what" I can tell you but no one wants to say it.¹⁰⁴

101. Chele, Comment to *Who Would Have to Use an EOBR?*, REG. ROOM (May 11, 2011, 11:54 PM), <http://regulationroom.org/eobr/use/#comment-5-438>.

102. Barney, Comment to *Who Would Have to Use an EOBR?*, REG. ROOM (Apr. 14, 2011, 1:52 PM), <http://regulationroom.org/eobr/use/#comment-5-340>.

103. This is apparently a reference to Regulation Room's affiliation with Cornell University. Explanations of our independence of the agency, and our substantive neutrality, appear at several places on the site, but users still at times attribute the agency's proposals to us.

104. Smallfamilyownedtrucking, Comment to *Would Penalties/ Enforcement Change?*, REG. ROOM (Feb. 8, 2011, 5:21 AM), <http://regulationroom.org/eobr/penalties/#comment-5-78>.

C. *Accounts of Unintended Consequences*

Comments in this category draw on the situated knowledge of personal experience to identify possible outcomes and effects of the proposal other than those the agency is seeking to achieve.

For example, the Accessibility rule comment of *Alposner* predicting that automated kiosks would, on balance, hurt travelers with disabilities by reducing personal assistance (quoted above as an Account of Complexity) fits in this category as well.

In the EOBR rule, commenters argued that inflexible enforcement of hours-of-service rules through automated monitoring could result in absurd and even unsafe result:

virgil tatro:

I had this happen running elogs in bad weather i had to shut down 16 miles from home because my time was up.. i had to park in reed point montana i only live 16 miles from there, but due to weather conditions and the elog i could not drive home.¹⁰⁵

trucking:

A driver is going to be giving an ETA to the receiver that is going to be mathematically possible time wise with out much extra to spare, forcing a driver to be more aggressive in order to even have a chance of making it, and will constantly be [distracted] by stressing over time. . . . [W]hat is going to happen when a driver can not find a parking spot after searching for an hour for a spot and his eobr says you are now driving in violation what are you going todo park on a get on ramp and get a ticket.¹⁰⁶

alcanman:

i believe eobr's would be a disaster for the small business trucker.case in point,i had an 18:00 appt., my 14 hrs were up at 21:30,i thought that would be plenty of time to unload, at 01:30 they were done and told me i could not stay on the property, the nearest safe haven was 1hr. away. i would like to know how i would put that into an eobr? thank you for listening,alcanman¹⁰⁷

105. Virgil tatro, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Apr. 20, 2011, 12:24 AM), <http://regulationroom.org/eobr/what-about-privacy-concerns/#comment-5-352>.

106. Trucking, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Mar. 16, 2011, 4:37 PM), <http://regulationroom.org/eobr/what-about-supporting-documents/#comment-5-281>.

107. Alcanman, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Mar. 14, 2011, 12:26 AM), <http://regulationroom.org/eobr/what-about-privacy-concerns/#comment-5-274>.

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Others 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:

virgil tatro:

using a qualcomm system i have in the past been awakened at night only to have my dispatcher tell me my 10 hours is up and i need to get going. he has no idea how long i had been asleep or resting just that i had been sitting for 10 hours and woke me up at 2;30 am sayin i had to go ive sat my 10 hours.. now how will an eobr make this better.. as an owner operator using no qualcomm and paper logs i slept as long as i wanted and they didnt know the difference..¹⁰⁸

okcarhauler [replying to the previous comment]:

Very true! I had my dispatcher at Melton Truck Lines in Tulsa Oklahoma both send me a QualComm and Call me on the phone in the middle of my 10 hour break and wake me up to ask me how long before my break was over. I told here 10 hours from right now, because you just interrupted my 10 hour dot break. Then I hung up on her, turned off my phone and unplugged the QualComm! I quit that Sorry job 2 weeks later. They don't want drivers, they want robots!¹⁰⁹

Several commenters, who recounted their years of experience in the industry, warned that the increased expense and stress they associated with EOBRs would shift the composition of the workforce from seasoned small operators to inexperienced drivers for large companies. For example:

Gearjammer:

I have been an owner operator for over 12 years now and have seen my bottom line drop to almost nothing. the high costs of over regulation along with the facts that freight rates today are where they were 10 years ago add the fact that maintenance costs are outrageous is pretty much unbearable for the little guy to even come close to making a living. . . . [N]ot only do I resent being punished because of the few bad apples in this industry, I cannot bear the weekly cost of the monitoring but the cost of buying this monstrosity will take the money I have saved for a vacation for me and my wife, the first we have been able to plan in over 5 years because of the slim profits that have been able to generate.

108. Virgil tatro, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Apr. 20, 2011, 12:33 AM), <http://regulationroom.org/eobr/what-about-privacy-concerns/#comment-5-353>.

109. Okcarhauler, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Apr. 20, 2011, 9:52 PM), <http://regulationroom.org/eobr/what-about-privacy-concerns/#comment-5-355>.

I have about decided that the government could care less about the small business owner in trucking and have teamed up with the driver mill companies that hire new students that have no idea on how to be compliant and even worse are not safety first oriented so if they want to force me to come up with another 2 to 5 thousand a year to prove that I am following the rules then I will take the loss on my equipment and find some work that is less stressful more profitable in the process and watch the carnage that will surely happen as the proven safe drivers give up in frustration and the new breed of inexperienced super truckers take over from the proven safe old hands[.]¹¹⁰

Impact on the economy from increased operating costs was a predictable argument; less predictable was argument that literal compliance with hours of service rules would mean more trucks on the highways:

Okcarhauler:

the only way a driver makes any money is when the truck is moving. If the shipper or reciever holds you up, your not making a dime. So you either fix the logs, or go broke, Its that simple. The Federal goverment knows this, they just look the other way. If everyone had to log legal because of the eobr's, there would be a need for more trucks on the road, more drivers, improved freeways to handle the trucks just to keep up with whats being shipped now.¹¹¹

Finally, among general anxiousness about electronic recording and transmission of detailed information about individual drivers' movements, one commenter linked the concern to safety as well as privacy:

rdb:

110. Gearjammer, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Mar. 3, 2011, 2:31 AM), <http://regulationroom.org/eobr/use/#comment-5-221>.

111. Okcarhauler, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Apr. 24, 2011, 11:32 PM), <http://regulationroom.org/eobr/what-about-privacy-concerns/#comment-5-374>.

This same argument about counterproductive consequences of increasing number of trucks on the road, with attendant congestion and increased accidents, was made by large trucking companies -- but not in the EOBR rule. Rather, it was part of their reasons for opposing a roughly contemporaneous rulemaking proposing to decrease the hours of legal driving time for all carriers. See U.S. Xpress, Inc., Comment to *Electronic On-Board Recorders and Hours of Service Supporting Documents*, REGULATIONS.GOV (May 24, 2011, 12:00 AM), <http://www.regulations.gov/#!documentDetail;D=FMCSA-2010-0167-0355>

("... a subsidiary of U.S. Xpress Enterprises, Inc., the nation's second largest privately-owned truckload carrier."). In the EOBR rulemaking, large companies, many of which already had installed or were in the process of installing EOBRs as fleet management tools, almost universally supported the agency's proposal to require all (i.e., small) companies to install EOBRs, ostensibly on grounds of parity.

Since the EOBR regulation is being introduced as a safety initiative, it is appropriate to also consider driver safety. A wireless device that transmits driver stops is a truck hijackers dream come true. Even though the proposed EOBR does not record stops down to the GPS grid coordinate level, all a thief or theft ring needs to know is the city the truck stopped to have a good idea of what their cargo is. Shipping locations are well known within the trucking community. For example if a truck stops for more than a 1/2 hour and less than 10 hours in my home town there is a very high probability the truck is carrying bagged soil or bricks. The thieves know what towns the pharmaceuticals, electronics, precious metals (like copper, aluminum) and other high value loads are being shipped from.¹¹²

D. Reframing Accounts

Comments in this category draw on the situated knowledge of personal experience to reframe the regulatory issues, including the competing values at stake.

The EOBR discussion revealed that, for many small operators, concerns about expense, counterproductive inflexibility, and invasion of privacy were only part of the reason for strongly opposing the proposed rule. Equally important were: (1) the perception that the government was unfairly treating them as lawbreakers, a feeling heightened by a recently finalized rule that required flagrant HOS violators to install EOBRs; (2) a related perception that their professional competence was being impugned; and (3) the conviction that EOBRs would add pressure to what was already a high-stress occupation.

Chele:

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
False

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

112. Rdb, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Mar. 23, 2011, 8:19 AM), <http://regulationroom.org/eobr/what-about-privacy-concerns/#comment-5-293>.

keep, maintain our equipment, & relax, for we have a high stress job.¹¹³

Curious:

As I drive down the road, I am forced to try to understand my environment. But I think I would be better off to go home, sit down, and let the government take care of me because I am apparently not mentally competent to do so myself . . .¹¹⁴

Cost is only one of the factors I'm speaking about. Violations of our right to work without being harassed at every turn of our step is also taken into my consideration . . .¹¹⁵

trucking:

I guess the best thing to compare this to is somebody that breaks the law and gets put under house arrest and gets the ankle bracelet to make sure they do what they are told What is the difference. I broke no crimes but they want to watch to make sure I am being a good boy, and if their little black box tells them you did something wrong you have troubles, and this they say will make the roads safer. How I ask? by putting more stress on an already stressful job and making it more stressful having everything you do recorded. . .¹¹⁶ [H]ow would you like having government sitting in your office with you making sure that everything you are doing is legal, or make sure you are using the right garbage can for the right garbage or having Irs there watching every trans action. . .¹¹⁷

patrick:

113. Chele, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (May 11, 2011, 11:54 PM), <http://regulationroom.org/eobr/use/#comment-5-438>.

114. Curious, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Mar. 2, 2011, 4:43 PM), <http://regulationroom.org/eobr/use/#comment-5-219>.

115. Curious, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Mar. 3, 2011, 1:58 PM), <http://regulationroom.org/eobr/what-will-it-cost/#comment-5-231>.

116. Trucking, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Mar. 9, 2011, 2:08 PM), <http://regulationroom.org/eobr/use/#comment-5-264>.

117. Trucking, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Apr. 24, 2011, 8:23 PM), <http://regulationroom.org/eobr/what-will-it-cost/#comment-5-373>.

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[T]his regulation assumes that the driver and motor carrier is guilty of HOS violations unless they prove without a reasonable doubt they are innocent.¹¹⁸

J galligan:

I am a good example of what the administration refers to as a “small business” A one truck operation that seems to constantly on guard in order to comply with a myriad of govt regs in order to be compliant. . . . why should i, a compliant driver pay for the sins of a few, . . .¹¹⁹

virgil tatro:

Why can any body just get in there car, mini van, suv etc with there whole family on board drive cross country non stop.. But a professional driver has to have an EOBR to make sure they are in compliance? I have been on the road all of my 37 years and have seen every scenario. .¹²⁰ . . . I am also a professional i do not need an ELECTRONIC RECORDER telling me when to stop driving.. or to keep me in compliance, as I am also a grown man and have been on my own for many many years making responsible decisions! . . . i do not need an EOBR to keep track of me!! I would never put a life in jeopardy by driving tired, not mine or any one elses!¹²¹

Toolman:

I used to love this job/way of life. Not anymore. The government regs,fuel costs and greedy brokers have have done a great job of destroying the american truck driver. We sacrifice so much for this job, IE. Family,hometime,health. We used to be compensated for it Let us do are jobs. Most of [us] are professionals,we know are limitations Over regulating this industry is causing more and more good drivers

118. Patrick, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Apr. 4, 2011, 4:52 AM), <http://regulationroom.org/eobr/what-about-supporting-documents/#comment-5-323>.

119. J Galligan, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Mar. 28, 2011, 1:23 PM), <http://regulationroom.org/eobr/use/#comment-5-314>.

120. Virgil tatro, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Feb. 23, 2011, 11:29 PM), <http://regulationroom.org/eobr/use/#comment-5-153>.

121. Virgil tatro, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Feb. 25, 2011, 11:44 PM), <http://regulationroom.org/eobr/use/#comment-5-188>.

to seek employment outside of the trucking business, myself included.¹²²

* * *

In sum, rulemaking comments on Regulation Room reveal a pattern that has been observed in other policymaking contexts: The “natural” tendency of newcomers to public policymaking processes is to approach policy questions from a subjective and highly contextualized point of view. Their life experiences often give them relevant knowledge about facts, causes, interrelationships, and likely consequences. However, they do not share the participatory repertoire of sophisticated commenters—a repertoire characterized by objectively framed, logic-based argumentation, depersonalized hypotheticals, and formal empirical data. Rather, rulemaking newcomers offer the credentials and substantiation of personal experience and speak in the rhetoric of narrative.

III. LETTING OUTSIDERS IN

The non-standard nature and form of participation from rulemaking newcomers—comments that are subjective, highly contextualized, and anecdotal—obviously presents challenges for government decisionmakers. These challenges include questions of veracity, typicality, and interpretation. Yet, analogous challenges exist for the conventionally privileged types of rulemaking evidence and discourse. The difference lies in novelty and lack of shared repertoire: At this point, the rulemaking community of practice has access to generally accepted techniques for vetting and interpreting quantitative data and statistical modeling, for qualifying expertise, and for assessing legalistic, premise-argument-conclusion reasoning.

Does the value that might be gained from attending to the non-standard types of evidence and discourse of rulemaking newcomers justify the effort that will be required to develop analogous techniques and proficiency in appropriate use? This is the question we begin to address in the balance of our Essay.

A. *Expanding the Conventions of Relevant Evidence*

Today it is almost heresy to suggest that scientific knowledge is not the sum of all knowledge. But a little reflection will show that there is beyond question a body of very important but unorganized knowledge which cannot possibly be called scientific in the sense of knowledge of general rules: the knowledge of the particular circumstances of time and place It is a curious fact that this sort of knowledge

122. Toolman, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (Mar. 22, 2011, 10:21 PM), <http://regulationroom.org/eobr/use/#comment-5-290>.

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should today be generally regarded with a kind of contempt

~ Frederick Hayek¹²³

Not all research is evidence and not all evidence is research.

~ Richard Cookson, evidence-based policy analyst¹²⁴

Comments that offer individual experience as the basis for assertions about the present state of the world and predictions of future effects contrast sharply with the “objective” verifiability of empirical data and statistical modeling. Rulemakers who regard such comments with skepticism have ample company. “[T]erms such as ‘evidence-based’ and ‘data-driven’ are the coin of the policy world today.”¹²⁵ Initially most prominently associated with evidence-based medicine, the emphasis on setting and evaluating policy through the use of scientifically rigorous methods of data gathering and analysis now appears in most areas of policymaking, in most industrialized countries.¹²⁶

In particular, evidence-based policymaking has come to be associated with reformist governments,¹²⁷ and the Obama Administration has aggressively championed the use of “rigorous evidence” to shape and justify social, as well as economic, policy.¹²⁸ Yet, when the President’s Open Government Memorandum speaks of “[k]nowledge . . . widely dispersed in society” that participatory

123. F. A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519, 521–22 (1945).

124. Richard Cookson, *Evidence-based Policy Making in Health Care: What It Is and What It Isn’t*, 10 J. HEALTH SERVS. RES. & POL’Y 118, 119 (2005).

125. Fitzhugh Mullan, *Me and The System: The Personal Essay And Health Policy*, 18 HEALTH AFF. 118, 123 (1999).

126. See Cookson, *supra* note 125, at 118–19; Brian Head, *Evidence-Based Policy: Principles and Requirements*, 1 STRENGTHENING EVIDENCE-BASED POL’Y IN THE AUSTRAL. FED’N ROUNDTABLE PROC. 13, 16–17 (2009), available at http://www.pc.gov.au/__data/assets/pdf_file/0020/96203/roundtable-proceedings-volume1.pdf. See generally Cass R. Sunstein, *Empirically Informed Regulation*, 78 U. CHI. L. REV. 1349 (2011). For a broad collection of resources, see generally *Increasing Government Effectiveness Through Rigorous Evidence About “What Works”*, THE COALITION FOR EVIDENCE-BASED POL’Y, <http://coalition4evidence.org/wordpress/> (last visited Oct. 22, 2012).

127. Head, *supra* note 127, at 14.

128. See e.g., RON HASKINS & JON BARON, NESTA, BUILDING THE CONNECTION BETWEEN POLICY AND EVIDENCE: THE OBAMA EVIDENCE-BASED INITIATIVES 6–7 (2011), available at http://www.brookings.edu/~media/research/files/reports/2011/9/07%20evidence%20based%20policy%20haskins/0907_evidence_based_policy_haskins.pdf; Peter Orszag, *Building Rigorous Evidence to Drive Policy*, OMBLOG (June 8, 2009, 8:39 AM), <http://www.whitehouse.gov/omb/blog/09/06/08/BuildingRigorousEvidenceetoDrivePolicy>.

decisional processes should make available to government policymakers,¹²⁹ the kind of “knowledge” being referenced does not seem to be caches of quantitative data, unrevealed double-blind studies, or novel analytical models. Rather, the allusion is apparently to work in the tradition of Nobel Prize-winning economist Frederick Hayek.¹³⁰ Although Hayek’s discussion of dispersed knowledge does not translate directly to the context of public participation in rulemaking,¹³¹ parts of his analysis seem apt. We suggest that these elements, supported by more recent work in the nature and acquisition of expertise, justify reexamining the conventional devaluation of individual experience as evidence in policymaking.

Hayek took aim at the model of central economic planning as an expert, technocratic enterprise of gathering and analyzing relevant information in order to allocate a given set of resources based on a given set of preferences.¹³² Rather, he argued, the knowledge that enables coordinated economic action transcends “data,” as conventionally understood, to include “a body of very important but unorganized knowledge which cannot possibly be called scientific in the sense of knowledge of general rules: the knowledge of the particular circumstances of time and place.”¹³³ This knowledge resides in individual economic actors, and thus is broadly dispersed in society:

The peculiar character of the problem of a rational economic order is determined precisely by the fact that the knowledge of the circumstances of which we must make use never exists in concentrated or integrated form, but solely as the dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess. The economic problem of society is thus not merely a problem of how to allocate “given” resources—if “given” is taken to mean given to a single mind which deliberately solves the problem set by these “data.” It is rather a problem of how to secure the best use of resources known to any of the members of society, for ends whose relative importance only these individuals know. Or, to put it briefly, it is a problem of the utilization of knowledge which is not given to anyone in its totality.¹³⁴

129. See Memorandum on Transparency and Open Government, 74 Fed. Reg. 4685, **PINCITE** (Jan. 21, 2009).

130. Hayek, *supra* note 124, at 521. Hayek’s work has influenced the thinking of Cass Sunstein, Obama advisor and eventual head of OIRA. See CASS R. SUNSTEIN, *INFOTOPIA: HOW MANY MINDS PRODUCE KNOWLEDGE* (2006) (arguing, inter alia, that Hayek’s insights about markets can be applied to the Internet in certain circumstances).

131. See *infra* notes 157–58 and accompanying text.

132. See Hayek, *supra* note 124, at 524.

133. *Id.* at 521.

134. *Id.* at 519–20.

Hayek concluded that free market economies overcome the “knowledge problem” (as it has come to be known in economics) through the system of prices and markets that register and aggregate large amounts of diffuse knowledge and make it available to economic actors.¹³⁵

The knowledge problem is a deep and far-reaching conception, the full implications of which are far beyond the scope of our discussion.¹³⁶ Prices and economic markets are spontaneous, uncoordinated, and decentralized mechanisms, and there has been considerable debate about whether and how Hayek’s insights translate to deliberate and structured mechanisms for explicit central aggregation of individual knowledge – whether through Internet phenomenon such as Wikipedia or civic processes such as public consultation.¹³⁷ Fortunately, this debate need not be definitively settled to recognize that parts of Hayek’s analysis help us think about the value of situated, experiential knowledge in rulemaking.

Central to Hayek’s conception of “dispersed knowledge” is the distinction between information and knowledge.¹³⁸ *Information* is data: observable and knowable facts about the world that can be acquired through research and collection.¹³⁹ For planners, the only obstacle to acquiring information is cost.¹⁴⁰ By contrast, *knowledge*

135. *Id.* at 525–28.

136. Contemporary anti-paternalism literature, see, *infra* note 176, links Hayek’s theories to the work of political philosophers Jeremy Bentham and John Stuart Mill. See, e.g., Mario J. Rizzo & Douglas Glen Whitman, *The Knowledge Problem of New Paternalism*, 2009 BYU L. REV. 905, 905, 909.

137. Compare, e.g., Todd Zywicki, *Sunstein on Hayek*, THE VOLOKH CONSPIRACY (July 22, 2005, 8:21 AM), <http://www.volokh.com/2005/07/22/sunstein-on-hayek/> (arguing that institutions like Wikipedia and open-source software creation are fundamentally different from Hayekian information-processing mechanisms), with SUNSTEIN, *supra* note 131 (arguing the reverse, in certain circumstances); compare JAMES SUROWIECKI, *THE WISDOM OF CROWDS: WHY THE MANY ARE SMARTER THAN THE FEW AND HOW COLLECTIVE WISDOM SHAPES BUSINESS, ECONOMIES, SOCIETIES AND NATIONS* (2004) (arguing the superiority of aggregated individual judgments under conditions of diversity, independence and decentralization), with JASON LANIER, *YOU ARE NOT A GADGET: A MANIFESTO* (2010) (criticizing crowd wisdom, as exemplified in Wikipedia and open source software development, for optimizing at the cost of innovation, expertise and creativity).

138. See Lynne Kiesling, *Knowledge Problem*, in OXFORD ENCYCLOPEDIA OF AUSTRIAN ECONOMICS (forthcoming 2012) (manuscript at 1–2), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2001633. This distinction has been made in other disciplines, including science technology studies. See, e.g., Tom Horlick-Jones et al., *Citizen Engagement Processes as Information Systems: The Role of Knowledge and the Concept of Translation Quality*, 16 PUB. UNDERSTANDING SCI. 259, 261 (2007).

139. Kiesling, *supra* note 139 (manuscript at 4–5).

140. In actuality, of course, cost may be a significant, indeed prohibitive, obstacle. See Maurice Lagueux, *Information Costs, Deliberation Costs, and Transaction Costs: A Parallel Treatment*, in IS THERE PROGRESS IN ECONOMICS?

is diffuse, private, and subjective: the knowledge of particular “circumstances of time and place” possessed by “the man on the spot.”¹⁴¹ These characteristics present the planner with significant technical problems of discovery and aggregation, but also with a more fundamental challenge: Knowledge is often complex, contingent and, at any given moment, inchoate. The plans, actions, and expectations of individuals are interdependent; the behavior of one person provides information for others, who will change their plans, actions and expectations based on this information, which will present new information for yet others, and so forth.¹⁴² Moreover, as economist Lynne Kiesling explains, “some knowledge relevant to [coordinating individuals’ actions] is either created in the process of market interaction, tacit knowledge that is not consciously known, or inarticulate knowledge that is difficult to express or aggregate.”¹⁴³ In sum, the knowledge that underlies coordinated social action is not a static body of identifiable material that could, even in theory, be mastered by the expert planner. Rather, it is dispersed in individual actors, is created by and continually changing in response to changed circumstances, and is often neither quantifiable nor even readily expressible.

These observations provide a starting point for conceptualizing the relationship between the objective “hard” data prized in rulemaking and the subjective, situated knowledge that can be brought to the table by rulemaking newcomers (the observations also illuminate the form problem—use of first-person narrative—that we consider in the next section). In the EOBR rulemaking, DOT could have perfect information about the direct and indirect costs of installing and using on-board monitoring equipment and about the percentage of CMV accidents attributable to driver fatigue, yet still have only a partial understanding of the likely operation and effects of the proposed rule. Without doubt, sound expert reasoning from good data matters to the quality of the regulatory outcome, but so do the actions and reactions of over eight million CMV drivers. The knowledge informing those actions and reactions is local and situated: individual perceptions of the environment; interpretations of the actions and motives of others; evaluations of tradeoffs of current and future decisions in light of individual preferences; judgments about satisficing. This diffuse private knowledge cannot be gathered, aggregated, and interpreted in any way that transforms it into “data” as conventionally understood. But rulemakers can access it through the kinds of

356, 357 (Stephan Boehm et al. eds., 2002) (explaining that the cost of acquisition of information may be so prohibitive in money and time that some may prefer to live with limited information than acquire more).

141. Hayek, *supra* note 124, at 524 (internal quotation marks omitted).

142. *Id.* at 522–26.

143. Kiesling, *supra* note 139 (manuscript at 2) (citation omitted).

comments we have called *accounts of complexity*, *contributory context*, and *unintended consequences*.

This access is concededly imperfect. Without a structural mechanism of broad-scale aggregation (like Hayek's prices), rulemakers will have to make judgments about typicality. In the EORB rulemaking, many of the experiential claims were repeated, or affirmed, by multiple commenters. Moreover, many of the accounts had both internal coherence (i.e., completeness and consistency) and external correspondence (i.e., plausibility given what we know about what typically happens in the world).¹⁴⁴ These are not the familiar criteria of sample representativeness and statistical significance used in evaluating the quantitative data. But acquiring alternate criteria for vetting and using the situated knowledge of rulemaking newcomers is precisely the project being proposed here.

Further justification for this project comes from research on the nature and practice of expertise. This work has deepened our understanding of both the strengths and the vulnerabilities of experts as complex problem solvers. Compared to non-experts, experts have qualitatively different conceptions of the problem; they perceive and process information more efficiently and are better at sorting the relevant from the irrelevant.¹⁴⁵ They recognize "deep" features of the problem (i.e., its underlying principles or characteristics) and are more able to select appropriate strategies.¹⁴⁶ They use available information more opportunistically, discern patterns within information that go unperceived by non-experts, and tend to break problems into manageable parts.¹⁴⁷ They are better at

144. See Rideout, *supra* note 72, at 60–69 (identifying these as characteristics for evaluating "narrative rationality," based on work of communications theorist Walter Fisher).

145. "It is well known by now that the quality of a problem representation influences the ease with which a problem can be solved." Michele T. H. Chi et al., *Categorization and Representation of Physics Problems by Experts and Novices*, 5 COGNITIVE SCI. 121, 122 (1981). See Paul J. Feltovich et al., *Studies of Expertise from Psychological Perspectives*, in THE CAMBRIDGE HANDBOOK OF EXPERTISE AND EXPERT PERFORMANCE 41, 49–55 (K.A. Ericsson et al. eds., 2006) [hereinafter Feltovich, *Studies of Expertise*]; James Shanteau, *Psychological Characteristics and Strategies of Expert Decision Makers*, 68 ACTA PSYCHOLOGICA 203, 209–10 (1988) [hereinafter Shanteau, *Psychological Characteristics and Strategies*].

146. Jennifer K. Phillips et al., *Expertise in Judgment and Decision Making: A Case for Training Intuitive Decision Skills*, in BLACKWELL HANDBOOK OF JUDGMENT AND DECISION MAKING 297, 300–01 (Derek Koehler & Nigel Harvey eds., 2004). Nonexperts tend to have more shallow representations that focus on the problem's literal features. Chi et al., *supra* note 146, at 121. This seems related to experts' ability to recognize commonalities among problems. See *infra* text accompanying note 153.

147. Feltovich, *Studies of Expertise*, *supra* note 146, at 49–53; Phillips et al., *supra* note 147, at 302; Shanteau, *Psychological Characteristics and Strategies*, *supra* note 146, at 208–10.

self-monitoring, more accurately assessing the difficulty of a problem, the quality of their own comprehension, and the existence of an error.¹⁴⁸ Experience alone does not produce expertise: both training and deliberate practice are required.¹⁴⁹ Training (through formal education, apprenticeship, or a combination) provides not only substantive domain knowledge but, equally important, decisional strategies and best-practice norms that help the expert overcome cognitive limitations that impair human judgment.¹⁵⁰ Practice most obviously provides the opportunity to learn from mistakes¹⁵¹ but also, more subtly, it enables experts to recognize commonalities across problems; this helps counteract various cognitive errors that can compromise judgment when a problem is seen as one-of-a-kind.¹⁵²

At the same time, expertise has weaknesses. Although they are better able to compensate in their domain of expertise,¹⁵³ experts are prey to the same emotional biases and judgment errors as lay people.¹⁵⁴ Other vulnerabilities are the dark side of expertise itself. Most notable is the problem of overconfidence.¹⁵⁵ The very training and practice that give experts an edge over laypeople in problem solving can trap them, making it difficult for them to recognize when a decision would benefit from accessing other bodies of knowledge or

148. Michele T. H. Chi, *Two Approaches to the Study of Experts' Characteristics*, in THE CAMBRIDGE HANDBOOK OF EXPERTISE AND EXPERT PERFORMANCE 21, 23–25 (K.A. Ericsson et al. eds., 2006); Feltovich, *Studies of Expertise*, *supra* note 146, at 55–57; Phillips et al., *supra* note 147, 302–03; James Shanteau, *Competence in Experts: The Role of Task Characteristics*, 53 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 252, 254–57 (1992) [hereinafter Shanteau, *Competence in Experts*].

149. Feltovich, *Studies of Expertise*, *supra* note 146, at 60; Phillips et al., *supra* note 147, at 306–09.

150. Phillips et al., *supra* note 147, at 298; Shanteau, *Psychological Characteristics and Strategies*, *supra* note 146, at 209.

151. Experts are more likely to take advantage of feedback, making adjustments in their initial approach and learning from mistakes. Shanteau, *Psychological Characteristics and Strategies*, *supra* note 146, at 207–08.

152. Phillips et al., *supra* note 147, at 301–02; Shanteau, *supra* note 146, at 207–11. On one-of-a-kind decision making, see Daniel Kahneman & Dan Lovallo, *Timid Choices and Bold Forecasts: A Cognitive Perspective on Risk Taking*, 39 MGMT. SCI. 17, 23 (1993).

153. Shanteau, *Psychological Characteristics and Strategies*, *supra* note 146, at 208.

154. Chi, *supra* note 148, at 26–27; Daniel Kahneman, *Judgment and Decision Making: A Personal View*, 2 PSYCHOL. SCI. 142, 144 (1991); Shanteau, *Psychological Characteristics and Strategies*, *supra* note 146, at 204–05. For an effort to explain the predominance of expert strengths versus weaknesses with different types of decisional tasks, see Shanteau, *Competence in Experts*, *supra* note 149, at 257–60.

155. Chi, *supra* note 149, at 25; Dale Griffin & Amos Tversky, *The Weighing of Evidence and the Determinants of Confidence*, 24 COGNITIVE PSYCHOL. 411, 412 (1992).

ways of thinking.¹⁵⁶ Experts tend not to look beyond the factors that their training and practice predispose them to consider; they may fail to test their assumptions thoroughly.¹⁵⁷ Their ability to recognize deep features and commonalities of problems within their domain may cause them to gloss over details and to be inflexible in adapting to problems that deviate in some way from the deep structures to which they are accustomed.¹⁵⁸

Hence, optimal regulatory policymaking design would rely on agency experts for their substantive understanding and practiced methods of problem solving—while at the same time providing opportunities to counteract their overconfidence and challenge them on the sufficiency of their knowledge schema and decisionmaking strategies.¹⁵⁹ In their study of Spanish forestry policy, policy science researchers José López Cerezo and Marta González García describe the challenge for regulatory planners in a way that usefully frames the dilemma of expertise in the face of complexity:

The introduction of a new technology or a new form of environmental intervention within a given social system changes its former equilibrium, developing new interdependent links with other technologies and with a variety of social, cultural and other parameters. As we see it the main purpose of policy is to maximize positive impacts and to minimize negative ones To this end, the significant changes with the social system which can be brought about by such an innovation or intervention must be anticipated [T]he main purpose of expert advice is precisely to forecast these possible changes But the complexity of the social systems in which innovation and intervention takes place usually reaches such a magnitude that expert knowledge must necessarily reduce this complexity (e.g., by selecting relevant dimension and parameters along with their variability ranges) and must introduce a number of suppositions (e.g., concerning

156. Paul Slovic et al., *Facts Versus Fears: Understanding Perceived Risk*, in JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES 463, 477 (D. Kahneman et al. eds., 1982). One of the most robust findings in expertise research is that superior performance is domain-specific: “There is little transfer from high-level proficiency in one domain to proficiency in other domains—even when the domains seem, intuitively, very similar.” Feltovich, *Studies of Expertise*, *supra* note 146, at 47.

157. Jeffrey J. Rachlinski & Cynthia R. Farina, *Cognitive Psychology & Optimal Government Design*, 87 CORNELL L. REV. 549, 560–61, 579–80 (2002). Moreover, because of self-selection, career experts in agencies are unlikely to mirror the range of values and priorities of the larger society. *Id.* This is the concern of agency “tunnelvision.”

158. Chi, *supra* note 149, at 25–26.

159. Rachlinski & Farina, *supra* note 158, at 593–603.

initial probability distributions) in order to satisfactorily anticipate the evolution of the social system¹⁶⁰

Given that reductionism is essential—and that we rely on experts precisely for the purpose of recognizing where and how to make the simplifying assumptions that permit prediction of policy impacts—how can we mitigate the potential negative effects of this response to complexity?

Studies of distributed problem solving (i.e., using a loosely connected network of problem solvers to generate solutions beyond the ability of any one individual) suggest the value of: (1) transcending disciplinary boundaries by involving different kinds of experts; (2) involving individuals with varying kinds of skills and levels of expertise; and (3) using open, participatory structures in which expert claims can be questioned.¹⁶¹ In rulemaking, the regulatory review provided by OIRA for executive agencies is, at least in theory, an application of the first strategy.¹⁶² A notice-and-comment process that facilitates informed participation by those affected by the proposed rule can help accomplish the second and third.¹⁶³ Commenters with situated knowledge can provide useful information about relevant factors and the relative significance of those factors in the system's equilibrium.¹⁶⁴ Although experts have significant advantages in characterizing problems and framing issues, experientially informed commenters can identify aspects that require further attention and raise fact questions that may not have been adequately explored.¹⁶⁵ Knowledge grounded in lived context can help experts fine tune the assumptions of their analyses and reach better interpretations of the data they have gathered.¹⁶⁶ Information about the social, cultural, and physical environment in which new policy will be deployed can increase the practicability of

160. José A. López Cerezo & Marta González García, *Lay Knowledge and Public Participation in Technological and Environmental Policy*, 2 PHIL. & TECH. 53, 56 (1996).

161. E.g., Ilias Karasavvidis, *Rethinking Expertise in the Web 2.0 Era: Lessons from Project Durian*, in SOCIAL SOFTWARE AND THE EVOLUTION OF USER EXPERTISE: FUTURE TRENDS IN KNOWLEDGE CREATION AND DISSEMINATION 330, 342–46 (T. Takseva ed., 2012), available at <http://uth.academia.edu/IliasKarasavvidis/Papers>.

162. Rachlinski & Farina, *supra* note 158, at 596–98 (expressing concern that this function can be diluted if OIRA's job is also defined as enforcing presidential policy preferences).

163. *Id.* at 588–89.

164. López Cerezo & González García, *supra* note 161, at 59.

165. *Id.* at 64–65. See generally FRANK FISCHER, REFRAMING PUBLIC POLICY: DISCURSIVE POLITICS AND DELIBERATIVE PRACTICES 205–20 (2003).

166. Greg Hampton, *Narrative Policy Analysis and the Integration of Public Involvement in Decision Making*, 42 POL'Y SCI. 227, 237–38 (2009) (collecting literature).

solutions and decrease unexpected social and environmental impacts.¹⁶⁷

The kinds of experience-based comments we have called *accounts of contributory context* and *unintended consequences* offer such information. For example, Regulation Room EOBR commenters revealed the profound impact of brokers' and shippers' behavior on hours-of-service compliance, particularly for small CVM operators. These factors were not discussed in the Notice of Proposed Rulemaking (they are largely outside the agency's regulatory mandate); when they were mentioned by sophisticated, large-carrier commenters, they were glossed over with cursory assurances that the market would sort out such problems, as in the following section from the comment of J.B. Hunt, one of the top ten North American freight shippers:¹⁶⁸

Lengthy delays at shippers and receivers result in a loss of income for the driver, due to a reduction of available hours in which to drive, when the time is logged accurately. EOBRs will better document these situations so that they can be dealt with by making adjustments in the supply chain so that the driver's time is appropriately valued. EOBRs will help solve this problem, not add to it.¹⁶⁹

Similarly, although the agency focused (as required¹⁷⁰) on particular impacts on small businesses, Regulation Room commenters predicted a kind of impact—a shift the proportion of experienced to novice drivers as the former exited a higher-stress, less economically viable occupation—that the agency did not discuss (and that sophisticated large-company commenters who employ these new drivers would not be expected to).

Additionally, commenters with situated knowledge can reveal perspectives that have been omitted so far from expert assessments.¹⁷¹ Researchers in health and environmental policymaking repeatedly find that laypeople typically include a wider range of considerations in thinking about policy issues than do experts.¹⁷² This, of course, is another way of expressing the expert's advantage in triaging for relevance and efficiently

167. *Id.*; Horlick-Jones et al., *supra* note 139, at 260–61.

168. *J.B. Hunt Transport Services (JBHT)*, WIKINVEST, [http://www.wikinvest.com/stock/J.B._Hunt_Transport_Services_\(JBHT\)](http://www.wikinvest.com/stock/J.B._Hunt_Transport_Services_(JBHT)) (last visited Oct. 22, 2012).

169. Letter from Ron Griffin, Senior Compliance Manager, J.B. Hunt Transport, Inc., to Anne Ferro, Adm'r, U.S. Dep't of Transp. 4 (May 20, 2011), available at <http://www.regulations.gov/#!documentDetail;D=FMCSA-2010-0167-0331>.

170. See *supra* note 29 and accompanying text.

171. Horlick-Jones et al., *supra* note 139, at 260; López Cerezo & González García, *supra* note 161, at 65.

172. Horlick-Jones et al., *supra* note 139, at 260.

processing information. But this strength can become weakness if policymakers do not recognize and take account of culture and traditions, local economic practice, or social, ethical, or political values that individuals affected by the policy perceive as relevant to their daily life.¹⁷³

This observation has implications for democratic legitimacy that we consider below; here, we emphasize the implications for quality and legality of rulemaking outcomes. The experience-based comments we have called *reframing accounts* and *accounts of complexity* may serve this function. Executive agencies are required to take “soft” (i.e., not easily quantified) values into their assessment of regulatory benefits and costs.¹⁷⁴ When CMV drivers insist that compulsory electronic monitoring implicates their quality of life as well as their finances, or some disabled travelers prize the efficacy of personalized human assistance over the autonomy of less effective mechanization, rulemakers should be taking this information into account.

We emphasize that our initial efforts to conceptualize the value that experiential situated knowledge of rulemaking newcomers might add to the process are *not* aligned with recent “anti-paternalist” challenges to the motivation and capacity of expert policymaking.¹⁷⁵ As López Cerezo and González García explain, attending to the situated knowledge of ordinary people on the ground is justified “not because lay knowledge constitutes better knowledge” but because it “can provide the expert and the policymaker with information and judgments which they may need in order to reduce *appropriately* the complexity of a given social system and to deal with uncertainties and indeterminacies so as to *effectively* anticipate the eventual consequences of technological innovation or environmental intervention.”¹⁷⁶ One of us has argued elsewhere that the balancing of expert and lay decisionmaking may be the most crucial institutional design decision to be made in a democratic government engaged in extensive social and economic

173. *Id.* See generally, FISCHER, *supra* note 166, at, 205–20; López Cerezo & González García, *supra* note 161, at 59–60, 64–65.

174. See Exec. Order No. 12,866, *supra* note 30, at **PINCITE** (“Costs and benefits shall be understood to include both quantifiable measures to the fullest extent that these can be usefully estimated and *qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider.*”) (emphasis added).

175. See, e.g., Edward L. Glaeser, *Paternalism and Psychology*, 73 U. CHI. L. REV. 133 (2006); Claire A. Hill, *Anti-Anti-Anti-Paternalism*, 2 N.Y.U. J.L. & LIBERTY 444 (2007); Jonathan Klick & Gregory Mitchell, *Government Regulation of Irrationality: Moral and Cognitive Hazards*, 90 MINN. L. REV. 1620, 1620–23 (2006); Rizzo & Whitman, *Little Brother is Watching You*, *supra* note 137, at 685–86.

176. López Cerezo & González García, *supra* note 161, at 60 (emphasis added).

regulation.¹⁷⁷ In seeking the right balance in rulemaking, we propose to reject a hard, adversarial dichotomy between expert and lay knowledge in favor of a more negotiable gradient, in which complementarity is acknowledged and pursued.¹⁷⁸

Similarly, the appropriate incorporation of the situated knowledge of rulemaking newcomers is not antithetical to the reformist emphasis on data-driven regulation. Indeed, some of the strongest proponents of evidenced-based policymaking are also most insistent on the use of “[m]ixed methods . . . to explain complex problems and assess complex interventions”—methods that include tapping “the experiential knowledge of service users and stakeholders.”¹⁷⁹ Precisely because policy outcomes depend crucially on people’s decisionmaking behavior, “a broad range of theoretical and empirical evidence about human behavior may be relevant to predicting policy outcomes, including stakeholder opinions and other sources of intelligence that might not qualify as scientific research.”¹⁸⁰

B. *Accepting the Narrative Form*

What I find in my analysis . . . is simply stated: when deliberating, participants in small group forums tell stories. They tell stories about themselves, their family, and their friends. They tell stories about events in the news, people at work, and casual acquaintances. Sometimes, they use other modes of talk: they argue, debate, or lecture. But the clear pattern is that they prefer to tell stories.

~ David Ryfe¹⁸¹

No matter how strictly a case is argued—scientifically, philosophically, or legally—it will always be a story, an interpretation of some aspect of the world that is historically and culturally grounded and shaped by human personality.

~ Walter Fisher¹⁸²

Even if experiential situated knowledge is recognized as a different but potentially valuable form of evidence in rulemaking, another challenge remains—a kind of challenge so vexing that it can

177. Rachlinski & Farina, *supra* note 158, at 593–606.

178. See HARRY COLLINS & ROBERT EVANS, *RETHINKING EXPERTISE* 13–14 (2007) (offering a “periodic table of expertises”).

179. Head, *supra* note 127, at 17, 19 (emphasis omitted).

180. Cookson, *supra* note 125, at 119.

181. David M. Ryfe, *Narrative and Deliberation in Small Group Forums*, 34 J. APPLIED COMM. RES. 72, 73 (2006).

182. WALTER R. FISHER, *HUMAN COMMUNICATION AS NARRATION: TOWARD A PHILOSOPHY OF REASON, VALUE, AND ACTION* 49 (1987).

impede the integration of even conventionally recognized bodies of expertise into policy decisions. This is the challenge of communication across knowledge boundaries.¹⁸³ One defining characteristic of a community of practice is common rhetoric—that is, shared styles of presentation, argumentation, and reasoning that both convey and embody the knowledge of how (in this instance) to “do” rulemaking. The highly personalized, sometimes emotional narrative form of many rulemaking newcomers stands in stark rhetorical contrast, which immediately marks them as outside the group of those who understand how rulemaking is done. In the “grammars of worth” that structure evaluation of communication in policy debates, personal narrative tends to be devalued.¹⁸⁴

To be sure, there is good reason for wariness about storytelling as a medium of information in policymaking. Too many compelling personal stories recounted during political or advocacy campaigns have been revealed as distorted or manufactured. Too often we have seen individual tragedies become the irresistible force driving ill-considered or extreme legislative mandates.¹⁸⁵ Indeed, part of the impetus for evidence-based policymaking is a desire to temper the psychological and political impact of high-salience stories of tragedy or heroism. Narratives are powerful and, hence, dangerous. Deliberative democracy theorists have intensely debated the legitimacy of offering personal stories in public debate, with a group of highly respected thinkers insisting that true civic deliberation must involve rational argument from abstract principles.¹⁸⁶ Participants, they argue, must give reasons and justify their

183. See Paul R. Carlile, *A Pragmatic View of Knowledge and Boundaries: Boundary Objects in New Product Development*, 13 *ORGAN. SCI.* 442, 446 (2002); Susan Leigh Star & James R. Griesemer, *Institutional Ecology, ‘Translations’ and Boundary Objects: Amateurs and Professionals in Berkeley’s Museum of Vertebrate Zoology, 1907–39*, 19 *SOC. STUD. SCI.* 387, 388 (1989).

184. Polletta & Lee, *supra* note 80, at 700. See generally STEPHEN COLEMAN & JOHN GÖTZE, *BOWLING TOGETHER: ONLINE PUBLIC ENGAGEMENT IN POLICY DELIBERATION* (2001); SHEILA JASANOFF, *THE FIFTH BRANCH: SCIENCE ADVISERS AS POLICYMAKERS* (1990). See also Jones & McBeth, *supra* note 79, at 331–39 (reprising debate on value and appropriate use of narrative within the policy science community).

185. See, e.g., Elizabeth Garfinkle, *Coming of Age in America: The Misapplication of Sex-Offender Registration and Community-Notification Laws to Juveniles*, 91 *CAL. L. REV.* 163, 168–70 (2003); John E. McDonough, *Using and Misusing Anecdote in Policy Making*, 20 *HEALTH AFF.* 207 (2001), available at <http://content.healthaffairs.org/content/20/1/207.long>; Sheryl Gay Stolberg, *Washington Talk; From CNN to Congress, Legislation by Anecdote*, *N.Y. TIMES*, May 8, 2003, at A26, available at <http://www.nytimes.com/2003/05/08/us/washington-talk-from-cnn-to-congress-legislation-by-anecdote.html>.

186. See, e.g., AMY GUTMANN & DENNIS THOMPSON, *DEMOCRACY AND DISAGREEMENT* 1–9 (1996); Joshua Cohen, *Deliberation and Democratic Legitimacy*, in *DELIBERATIVE DEMOCRACY: ESSAYS ON REASON AND POLITICS* 67, 67 (James Bohman & William Rehg eds., 1997).

preferences by argument from widely-shared values and universal principles that others can accept as persuasive. On this view, personal and passionate forms of talk impede, rather than advance, public deliberation on contested policy questions.¹⁸⁷

Yet, in weighing the case against personal narrative as a communicative form in public policymaking, it seems only fair to be comparative. Poor policy outcomes also result from bad data, or data badly interpreted. As “evidence-based” increasingly becomes the gold-standard of policymaking, researchers can be lured into the “overadvocacy trap”—responding to calls on their knowledge by making “premature and/or exaggerated claims regarding the significance and utility of scientific evidence for informing public policy.”¹⁸⁸ Equally problematic, researchers lose control over their work once it enters the policy arena; their findings can be “mobilized as arrows in the battle of ideas” in ways that the authors themselves find objectionable.¹⁸⁹ Statistics also are powerful and, hence, dangerous. Indeed, some of the strongest proponents of evidenced-based policymaking are the most candid about the probability that scientific evidence will be manipulated in the public policy arena.¹⁹⁰ And, as the other side of the deliberative democracy debate has pointed out, logic-based argumentation and reasoning from abstract principles do not in fact make public deliberation accessible to all; the ability to engage effectively in this kind of policy discourse divides citizens along the familiar demographic faultlines—gender, race, education, and other forms of cultural capital.¹⁹¹ What are denominated widely shared values and universal principles often exclude the experience of less powerful citizens and groups.

As with the knowledge problem, we need not extensively engage this debate here. Our goal is neither an exhaustive defense of what

187. E.g., JOHN S. DRYZEK, *DELIBERATIVE DEMOCRACY AND BEYOND: LIBERALS, CRITICS, CONTESTATIONS* 69 (2000); David Miller, *Is Deliberative Democracy Unfair to Disadvantaged Groups?*, in *DEMOCRACY AS PUBLIC DELIBERATION: NEW PERSPECTIVES* 201, 221 (Maurizio Passerin d'Entrèves ed., 2002); see also Black, *supra* note 74, at 96–97 (describing this argument further).

188. Katherine M. McKnight et al., *Psychology, Psychologists, and Public Policy*, 1 ANN. REV. CLINICAL PSYCHOL. 557, 567 (2005).

189. Head, *supra* note 127, at 21.

190. E.g., Cookson, *supra* note 125, at 119; Head, *supra* note 127, at 21.

191. E.g., Jane Mansbridge, *Everyday Talk in the Deliberative System*, in *DELIBERATIVE POLITICS: ESSAYS ON DEMOCRACY AND DISAGREEMENT* 211 (Stephen Macedo ed., 1999); Lynn M. Sanders, *Against Deliberation*, 25 POL. THEORY 347, 348–50 (1997); Iris Marion Young, *Communication and the Other: Beyond Deliberative Democracy*, in *DEMOCRACY AND DIFFERENCE: CONTESTING THE BOUNDARIES OF THE POLITICAL* 120 (S. Benhabib ed., 1996). See also THOMAS TALHELM ET AL., *LIBERALS THINK MORE ANALYTICALLY (MORE "WEIRD") THAN CONSERVATIVES* 3 (2012), available at <http://ssrn.com/abstract=2111700> (extending research findings that analytical thinking is a human cognitive outlier, as compared with holistic, intuitive thinking).

has been called "thinking *with* stories,"¹⁹² nor a definitive set of guidelines for the responsible use of narrative by agency decisionmakers. Rather, we seek to *begin* the discussion, within the rulemaking community of practice, about valuing the narratives of situated knowledge told by rulemaking newcomers. And so we simply offer some observations.

First, the narrative form may be especially suited to the revelation of situated knowledge. Recall economist Lynne Kiesling's observation that the knowledge of time and circumstance known by Hayek's "man on the spot" is often "tacit knowledge that is not consciously known . . . or inarticulate knowledge that is difficult to express or aggregate."¹⁹³ A significant challenge to bringing situated knowledge into decisionmaking is its invisibility: Those outside the situated context are often unaware of the existence or nature of such knowledge, while those within the context may take it for granted.¹⁹⁴ Knowledge that cannot be parsed into a series of propositions, or that the holder cannot readily separate from the personal experiences that embody it, may nevertheless be conveyed through a story. Polletta and Lee, for example, found that one important function of some stories told during the online discussion about post-9/11 development policy was to invite "commentary on, and, indeed, collaboration in drawing lessons from [the narrators'] experiences."¹⁹⁵ Stories, in other words, can spark and fuel deliberation about what on-the-ground experience means for policy choices.

Moreover, narrative may be an especially effective form of expressing and concretizing values that are at stake for situated commenters but have not been recognized by policymakers. Personal storytelling conveys the particularities of the commenter's experience; this matters not because the details themselves are important to the policy outcome, but because the narrative form primes us to anticipate that the narrator is making some larger point that is indeed relevant.¹⁹⁶ To understand the story is to grasp this larger point. As Polletta and Lee put it, "[T]he values are built in to the story itself."¹⁹⁷ Consider, for example, the comments of

¹⁹² E.g., David B. Morris, *Narrative, Ethics, and Pain: Thinking with Stories*, 9 NARRATIVE 55, 55 (2001)(distinguishing "thinking *with* stories" from "thinking *about* stories," and arguing that "the ancient Western binary habit that requires us to put reason and emotion into separate words and unconnected categories is . . . a neurological mistake").

¹⁹³ Kiesling, *supra* note 139, at 2.

¹⁹⁴ Deborah Sole & Amy Edmondson, *Situated Knowledge and Learning in Dispersed Teams*, 13 BRIT. J. MGMT. S17, S30 (2002), available at <http://onlinelibrary.wiley.com/doi/10.1111/1467-8.551.13.s2.3/pdf>.

¹⁹⁵ Polletta & Lee, *supra* note 80, at 712.

¹⁹⁶ See, e.g., AMSTERDAM & BRUNER, *supra* note 75, at 114–15 (discussing why "there appears to be something surreptitiously value-laden or value-promoting about storytelling").

¹⁹⁷ Polletta & Lee, *supra* note 80, at 703.

virgiltatro, *toolman*, and others (collected above) expressing their perception that the proposed EOBR mandate impugns their professionalism and unjustifiably treats them as wrongdoers. Comparable points made in more conventional form by sophisticated commenters can far more easily be dismissed as rhetorical make-weights. For example, here is how the National Association of Chemical Distributors raised this issue:

NACD did not oppose the 20101 rule requiring carriers with serious patterns of HOS violation to install EOBRs in all of their vehicles. [H]owever, there is no reason to impose this costly new requirement on those who have exemplary safety records. It does not make sense to place those who have complied with the HOS regulations in the same category as those who have violated the rules.¹⁹⁸

Additionally, greater openness to narrative as a form of participation may have positive legitimating affects. Broader civic engagement in public policymaking is generally defended not only because government might get better information but also because engagement can increase trust in political institutions and acceptance of policy outcomes. Just as laypeople tend to include a wider range of considerations in thinking about policy issues than do experts,¹⁹⁹ so “narrative rationality” is more comprehensive than technical logic and rhetorical argumentation.²⁰⁰ Stories from personal experience can embody practical judgment (what Robert Burns calls “nonformal intelligence”²⁰¹) and express important values that ordinary citizens, outside the rulemaking community of practice, may find missing from data-based analysis and logic-based argumentation.²⁰² Hence, trust in regulatory decisionmaking may actually be increased by a process that allows expert knowledge and analytical justification to be supplemented by, and aligned with, the stories told by those whom the rule will affect.²⁰³ Moreover, although a badly told story can widen perception of differences,²⁰⁴ stories can function in public deliberation to help people

198. Letter from Jennifer Gibson, Vice President, Gov’t Affairs, Nat’l Ass’n of Chemical Distribs., to U.S. Dep’t of Transp. 2 (May 23, 2011), *available at* <http://www.regulations.gov/#!documentDetail;D=FMCSA-2010-0167-0357>.

199. See Horlick-Jones et al., *supra* note 139, at 260.

200. See Rideout, *supra* note 72, at 60–63 (discussing work of Walter Fisher); see also LEDERACH, *supra* note 6, at 81 (discussing elicitive-oriented approaches and differences between analytical and holistic thinking).

201. Burns, *supra* note 74, at 209.

202. Horlick-Jones et al., *supra* note 139, at 260 (“[T]he rationality associated with technical expertise may be seen as narrowly defined, and indeed alienating in terms of its apparent disregard for issues about which people may have strong value-commitments” and for “matters that are of relevance to their everyday life”).

203. López Cerezo & Gonzales Garcia, *supra* note 161, at 59.

204. See Miller, *supra* note 188, at 219.

comprehend very different experiences and perspectives, and to signal understanding of a different view even while disagreeing.²⁰⁵

Finally, it turns out that narrative already plays an important, though stealth, role in rulemaking. Consider the comment submitted in the EORB rule by Werner Enterprises, self-identified as “one of the five largest truckload carriers in the United States (based on total operating revenues.)”²⁰⁶ Its eleven-page, single-spaced comment opens with this section:

MANDATORY EOBR USE

In 1998, Werner began a pilot program with the FHWA which allowed Werner to begin using its proprietary paperless logging system throughout its entire fleet. [The comment gives details about system design and implementation] As a result, Werner has a significant amount of experience in designing, installing, maintaining and managing the equivalent of an electronic on-board recorder (EOBR) system, as well as designing and implementing a training program for drivers. The costs, complexities and outcomes associated with using an EOBR system are well known to us.

Based upon our experience over the past nearly 13 years, we have formed certain conclusions concerning the viability and effectiveness of paperless logging systems that lead us to support the mandatory use of EOBRs by all motor carriers.

Although there are a number of factors which lead us to this conclusion, we have never claimed a significant reduction in accident frequency or severity as a result of our use of a paperless logging system. [These include difficulty in “isolat[ing] hours of service compliance as the only variable factor impacting safety” and “the relatively small percentage of accidents in which fatigue is the precipitating factor and the fact that even 100% compliance with HOS regulations will not totally eliminate fatigue.”]

Yet we support mandatory EOBR use for a number of reasons. The lack of enforcement of the HOS regulations has engendered widespread disregard of the regulations by some

205. *E.g.*, Black, *supra* note 74, at 101; Martha S. Feldman et al., *Making Sense Of Stories: A Rhetorical Approach To Narrative Analysis*, 14 J. PUB. ADMIN. RES. & THEORY 147, 148 (2004); Poletta & Lee, *supra* note 80, at 702–03, 712–13; Ryfe, *supra* note 182, at 73.

206. WERNER ENTER., INC., RESPONSE TO NOTICE OF PROPOSED RULEMAKING: ELECTRONIC ON-BOARD RECORDERS AND HOURS OF SERVICE SUPPORTING DOCUMENTS 1 (2011), *available at* <http://www.regulations.gov/#!documentDetail;D=FMCSA-2010-0167-0353>.

carriers. The use of EOBRs across the entire industry will achieve much better compliance with HOS regulations by the industry as a whole. While we do not know of specific carriers who disregard the rules in this area, we have in the past been unwilling to bid for certain lanes which could not legally be run under the HOS, only to see those lanes accepted by other carriers. Granted that while it will still require serious enforcement efforts after the implementation of the EOBR regulations, the carriers and the enforcement community will both be in a position where there is no place to hide. That fact should go far in solving the problem.

Secondly, we are hopeful that broader compliance will result in closure on the [hours-of-service] rule making process which has been ongoing for over 12 years

Third, the public perception of our industry is unfairly distorted by unusual, random examples of violations of the HOS regulations usually in connection with motor vehicle accidents. Unfortunately, frequent reports in the media of a driver referring to log books as “comic books” leaves a negative impression of widespread disregard for the law which ultimately discredits a fine industry. Too often the offending driver when finally caught has simply moved on to another company and never suffered the ramifications of his log book violations. EOBRs should by and large eliminate negative public relations based on driving hours.²⁰⁷

This is the sophisticated-commenter version of storytelling. After opening with corporate-personal information, Werner recounts a significant corporate-personal experience and proffers that experience (notably without “hard” data) as the basis for claims about the current state of the world and predictions about future impacts of DOT’s proposal. And, in the final paragraph, it introduces a new, noneconomic value—counteracting unfair public perception of the industry—that it “subjectively” perceives to be implicated by the rule.

Like Werner, U.S. Xpress (“the nation’s 3rd largest privately-owned truckload carrier”²⁰⁸) also began its EOBR comment with its story:

U.S. Xpress is proud to be one of the founding members of the Alliance for Driver Safety and Security, and U.S. Xpress applauds the FMCSA for its proposed rulemaking on EOBRs. In addition to participating in and supporting the work of the Safety Alliance and the efforts to move EOBR legislation

207. *Id.* at 1–3.

208. *Fast Facts*, U.S. Xpress Enterprises, <http://www.usxpress.com/en/About-Us/Fast-Facts.aspx> (last visited Oct. 22, 2012).

through Congress, U.S. Xpress has made a serious commitment to implementing the use of EOBRs within our fleet. By the end of 2011, U.S. Xpress plans to have all of our company trucks as well as our independent contractors using e-logs.

From our testing and implementation of the system thus far, the e-log system has eased the burden of daily paperwork for our drivers and it has also made them and our operations personnel more accountable. Because they have to keep a keen eye on their “work clock,” our drivers have found that e-logs make them more productive. Most importantly, it demands that they make entries throughout their day. It serves as an independent third party for verifying their hours, and it reduces the possibility for errors – both mistakes that are unintended or intended.²⁰⁹

After insisting that an industry-wide EOBR mandate, rather than the agency’s contemporaneous proposal to reduce legal driving time, “will achieve the gains in safety that both the FMCSA and our industry are seeking,”²¹⁰ and that a company that couldn’t afford EOBRs probably shouldn’t be in the business,²¹¹ U.S. Xpress returned to its own story:

We have seen first hand how EOBRs not only reduce the frequency of HOS violations, but greatly reduce the duration of violations when they occur. We firmly believe that EOBRs will improve the overall safety equation on our nation’s highways by lowering the crash risk. We also believe it will provide an added benefit for motor carriers nationwide by limiting liability exposure for drivers and carriers. Meanwhile, we believe those who oppose EOBRs mandates of any kind should expect a negative impact to utilization as they are the drivers and carriers that are most often not currently complying with the HOS regulations while using paper logs.

The greatest endorsement of EOBRs has come from our end users, our drivers and contractors. While there was naturally some hesitancy at first because of the new technology and resistance to change, the EOBR system used by U.S. Xpress has been widely embraced by company drivers and independent contractors alike.

“I have been driving for over 20 years and I never want to go back to paper logs again. The electronic logging system that

209. Letter from Robert Viso, Vice President of Safety, U.S. Xpress Enter., to Anne Ferro, Adm’r, Fed. Motor Carrier Safety Admin. 1 (May 23, 2011), available at <http://www.regulations.gov/#!documentDetail;D=FMCSA-2010-0167-0355>.

210. *Id.* at 2.

211. *Id.*

U.S. Xpress uses has made my job much easier, because it has eliminated much of the paperwork and provided us with a way to independently verify that we are working within the time allowed under the Hours of Service,” said Randy Earl, a member of the Company’s Million Miler Safe Driving Club. “I have found that electronic logging eliminates any possibility for confusion on where you are in your day. It has become a clock that I can see as a driver and so can my fleet manager. Electronic logging promotes the best use of time and it holds everyone properly accountable.”

“As an independent contractor, I am a small businessman and I have to look at what seems to be hundreds of details during every working week. Anything that is going to help reduce paperwork and enhance a more efficient operation gets a thumbs up from me, and that’s what I found when I went on electronic logs at U.S. Xpress,” said Wayne Wilson, one of the first contractors to begin using electronic logging about a year ago. “You only have so many hours that you are allowed to work in a day, and I have found that electronic logging helps me and the fleet management supporting me get the most out of every day. When it comes to time, we know where we stand at all times.”²¹²

The strategy of personalizing its corporate story with accounts of individual drivers was also used by J.B. Hunt. The section of its seven-page single-spaced comment arguing “EOBRs are good for drivers” recounted:

J.B. Hunt Transport currently has 984 drivers using an EOBR. When first informed that we were going to deploy the units we received a lot of skeptical feedback from many of the drivers. Within days the attitude usually shifts from skepticism to optimism to acceptance. It is our experience when drivers must be reassigned to another truck after having had an EOBR they do not want a truck that does not have an EOBR.²¹³

The comment then quotes “some of the thoughts from a few of [the] drivers” who participated in a DOT listening session on Hours of Service.²¹⁴ Arguing that “EOBRs will lower the stress for the driver and reduce conflicts between driver and others (manager, shippers, broker, etc.),”²¹⁵ it returns to its corporate story:

At J.B. Hunt drivers see the basic information about preplanned loads before dispatch. Some of the information

212. *Id.* at 2–3.

213. Letter from Ron Griffin, Senior Compliance Manager, J.B. Hunt Transp., Inc., to Anne Ferro, Adm’r, U.S. Dep’t of Transp., *supra* note 170 at 3.

214. *Id.*

215. *Id.*

they see is the date, time, and location of the pickup and destination as well as the loaded and empty miles. If the driver has any concerns or reasons why a load cannot safely be picked up or delivered on time they have the opportunity and the responsibility to inform their manager as soon as possible. With that reply the driver is also asked when he/she can make safe pickup and delivery of the load. If a problem should arise a decision would be made by operation to reschedule the load, have the driver pick it up and relay it to another driver in route, or pull the load and look for another load for the driver. Safety is the first priority and with our onboard communications we are able to increase safety and efficiency²¹⁶

In their study of the online deliberation on post-9/11 redevelopment policy, Polletta and Lee observe that the valuation of stories is culturally contingent: “[W]hen disadvantaged groups use narrative to challenge the status quo, they may be especially vulnerable to skepticism about the veracity, authority, or generalizability of the form. When advantaged groups use narrative, *they may be less likely even to be heard as telling stories.*”²¹⁷ In the EOBR rule, Werner, U.S. Xpress, and J.B. Hunt clearly qualify as sophisticated commenters. Their comments were carefully formatted, multi-page documents that conspicuously quoted the correct docket number. They cited other relevant regulations and pending rulemakings, indicated familiarity with the process (often by noting their prior participation), discussed the Notice of Proposed Rulemaking and suggested specific changes in the proposed rule, and crafted arguments based on the agency’s statutory mandates. They also relied heavily on storytelling. There is, of course, no *a priori* reason why the narratives of only sophisticated commenters should be treated as legitimate rulemaking comment: The stories told by Werner, U.S. Xpress and J.B. Hunt are no less self-interested and no more self-evidently representative, authoritative, or true than the stories of *virgil tatro*, *cruisin*, or *Gordon*. They are simply more cleverly camouflaged.

Conclusion: Proving the Commitment to Broader Public Participation in Regulatory Decisionmaking

Mahomet called the hill to come to him, again and again; and when the hill stood still, he was never a whit abashed, but said, If the hill will not come to Mahomet, Mahomet will go to the hill.

216. *Id.* at 4–5.

217. Polletta & Lee, *supra* note 80, at 705 (emphasis added).

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~ Sir Francis Bacon, “Of Boldness”²¹⁸

Researchers do what we do so that we might extend (or revise) what we think we know—and the recent movement to restyle “human subjects research” as “human *participant* research” is a subtle reminder that those whom we “study” can be active contributors in the enterprise of knowledge creation. Still, it is rare for a single participant to precipitate an “aha moment” for researchers in the way that this Regulation Room comment did for us:

vganster:

Moderator,

... You ask people to provide hard data to back up their opinions on EOBRs. That’s brilliant because when this is all said and done, the FMCSA will be able to say that no one could provide such data. Of course they can’t! They’re truck drivers not statisticians.

They know that EOBRs will affect their livelihoods negatively, but cannot show you in your “hard data” terms why that is. All they can do is tell you, and keep telling you, that they don’t want the darned things in their trucks. Part of that is because the results may[] not be measurable in dollars and cents, or even in safety statistics. Rather, the effect of EOBRs and other “safety” regulations can be measured mainly by the quality of life of the driver who has already seen their standard of living and their quality of life decline significantly over the last few decades.²¹⁹

Much of the Regulation Room research is about how to help rulemaking newcomers acquire both substantive knowledge and process literacy in rulemakings that directly affect them. We continue to believe that this kind of work is crucial to broadening the scope of informed and effective participation in regulatory decisions: If “public” rulemaking comment is to mean more than the “click-through democracy” of thousands of advocacy-group generated e-messages,²²⁰ then better tools and techniques must be found for enabling new participants to apprehend what is at stake in proposed rules and bring what they know to bear on complex problems for which there exist better and worse, but rarely ideal, solutions.

218. FRANCIS BACON, *Of Boldness*, in *ESSAYS* 35, 36 (J.M. Dent & Sons, 1946) (1906).

219. Vganster, Comment to *Agency Proposal of Electric On-Board Recorders*, REG. ROOM (May 10, 2011, 10:20 AM), <http://regulationroom.org/eobr/use/#comment-5-434>.

220. The phrase comes from political scientist Stuart Shulman, who is perhaps the leading expert on the mass comment phenomenon. See Farina et al., *Rulemaking vs. Democracy*, *supra* note 10, at 15

Yet, there is no sound basis for predicting that new rulemaking participants can become adept, in significant numbers or degree, in the norms and forms of sophisticated rulemaking practitioners. In a recent analysis of civic deliberation in nine National Issue Forums,²²¹ political scientist Brian Adam concluded that even when participants formally observed the convention of reason-giving, the quality of the discourse was poor based on standard metrics of analytical reasoning:

For the most part, participants did not present logically coherent arguments, instead offering a hodgepodge of conclusions and evidence that were only loosely tied together, with key points often assumed away. The raw materials for building coherent arguments were present – deliberators defined problems, made proposals and offered a wide range of relevant evidence – but they did not use these materials in an effective manner, leading to shoddily constructed and unstable edifices.²²²

Adams' results are consistent with our presentation of rulemaking as a community of practice in which the tools and skills of successful participation are a form of craft knowledge that outsiders possess only rudimentarily, if at all. Moreover, Adams' negativity in reporting his findings is itself illuminating. One of the tasks at which experts do *not* excel is predicting the performance of novices; so pronounced is the problem that psychologist Pamela Hinds suggests "experts may have a cognitive handicap that leads to underestimating the difficulty novices face."²²³ In other words, those of us who *have* the tools and the skills have largely forgotten how painstaking and difficult was the process of their acquisition.

A genuine commitment to broader public participation in rulemaking thus entails modifying implicit but powerful assumptions about the kind of participation that has value. The rulemaking community of practice must be willing to adapt to what rulemaking newcomers can provide—not by devaluing the kind of evidence and argument that sophisticated practitioners are accustomed to deploying, but by discovering the value added by experiential accounts of situated knowledge.

This adaptation may in fact be far more difficult to accomplish than the Regulation Room goals of alerting and meaningfully

221. These moderated, structured forums are sponsored by the Kettering Foundation. See NAT'L ISSUES FORUMS, <http://www.nifi.org/> (last visited Oct. 22, 2012).

222. Brian E. Adams, Conversational Dynamics in Deliberative Forums: The Use of Evidence and Logic 24, APSA 2012 Annual Meeting Paper (Aug. 30, 2012), available at <http://ssrn.com/abstract=2108281>.

223. Pamela J. Hinds, *The Curse of Expertise: The Effects of Expertise and Debiasing Methods on Predictions of Novice Performance*, 5 J. EXPERIMENTAL PSYCHOL. APPLIED 205, 205 (1999).

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engaging new participants. A community of practice tends to become "invested in the methods, ways of doing things, and successes that demonstrate the value of the knowledge developed."²²⁴ As a result, members become "less able and willing to change their knowledge to accommodate the knowledge developed by another group."²²⁵

If this is true of the rulemaking community of practice—if it lacks the capacity, or the will, to (1) recognize the different knowledge that rulemaking newcomers can bring to the process and (2) discover how to make appropriate use of this knowledge in regulatory decisionmaking—then it's time to stop saying that more public participation in rulemaking matters, and move on to other open government challenges.

²²⁴ Carlile, *supra* note 184, at 446.

²²⁵ *Id.*