Regulation & Governance

Call for Papers for a Special Issue on

Rules as Data.
How to gauge rules' content to shed light on its implications

Submissions on a rolling basis until November 30, 2022

Guest Editors

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Motivation

The long-honored neo-institutionalist tenet that 'rules matter' lies at the heart of a wide variety of research streams. Among many others, it has shaped hypotheses on regulation (e.g., Bazzan 2021, Thomann and Zhelyazkova 2017, Hanretty and Koop 2012, Jordana et al. 2011, Maggetti 2007), governance modes and regimes (e.g., Mizrahi-Borohovich and Levi-Faur 2020, Vogel 2018, Levi-Faur 2011, Jochim and May 2010), policy paradigms and instruments (e.g., Atkinson and Schubert 2021, Franchino 2020, Schaffrin et al. 2015, Rangone 2015, Damonte 2014, Lascoumes and Le Galès 2007), institutional design and democracy (e.g., Schlager et al. 2021, Siddiki 2020, Levi-Faur et al. 2018, Scott 2001, Schneider and Ingram 1997), and on phenomena such as diffusion and learning (e.g., Gilardi, Shipan, and Wüest 2021), implementation (e.g., Thomann 2018, May 1993), policy change (e.g., Hurka et al. 2016, Knill et al. 2012, Liefferink et al. 2009), conflict and compliance (e.g., Chen et al. 2022, van Rooij and Sokol 2021, Siddiki et al. 2018).

However, the empirical rendering of these many hypotheses largely depends on how rules are gauged. Indeed, gauging is vital to solid conceptualizations, broader comparisons, and accurate diagnoses of shortcomings (e.g., Short et al. 2021, Hirshl 2014, Voigt 2013, Coglianese 2002). Vice-versa, imprecise gauges can impart unexpected twists to analyses that undermine the credibility of findings and evaluations.

Background

The consolidated approaches to gauging rules can be reduced to two primary options, ideally corresponding to separate research interests in *de facto* rules 'in action' or *de jure* rules 'in books' (e.g., Ostrom et al. 1989).

- *Rules in action* are social meanings people enact, resist, and adapt in actual contexts. The 'psychometric' approach (e.g., Campbell 1990, Cronbach and Meehl 1955) captures these meanings as latent constructs beneath the diversity of individual judgments, opinions, or perceptions on some theoretically relevant aspects of a situation.
  Measurement consists of *eliciting* – i.e., collecting scores from selected classes of respondents about theoretically relevant features of rules through surveys and questionnaires. The gauge is deemed valid when it correlates 'as expected' with those constructs that the original theory establishes as cognate.
- *Rules in books* are discrete linguistic objects backed by public authorities. The 'representational' approach (e.g., Kholodilin and Pfeiffer 2021, Heilmann 2015, Sassoon 2010, Suppes 2002, Stevens 1946) captures their qualities directly, as the variation in selected content of theoretical interest.
  Measurement consists of *scaling* – that is, 'mapping' the variation onto numbers to render sameness, ranking, distance, proportion, or other relevant relationships between objects. As operational contributions make clear (e.g., Franceschini, Galetto, Maisano 2007), mapping requires functions and algorithms that embed normative, prescriptive, or pragmatic evaluations into scores. Nevertheless, the gauge is valid when the relationship between numbers preserves the relationship between objects faithfully.

The distinction draws attention to the implications of data generation strategies for validity (e.g., Voigt 2013, Angner 2011). Knowledge elicited from selected respondents through questionnaires and surveys inevitably includes contextual and informal considerations and exceeds the letter of a rule. Thus, it may seem wiser that questionnaires and surveys are deployed for gauging rules-in-action and researchers' direct mapping for gauging rules-in-book.

However, in actual practice, elicitation and mapping are intertwined and complementary strategies (e.g., Vessonen 2020). On the one hand, elicitation through surveys and questionnaires can seldom evade classification and scaling decisions when defining constructs. Psychometrics, too, needs a codebook – and, compellingly, a transparent one (e.g., Freese and King 2018). On the other hand, establishing the sameness, ranking, distance, or proportion of rules' content from large corpora spanning across times, contexts, and languages can require that diverse expert scores are gathered through questionnaires – which again raises validity issues (e.g., Petersen and Chatziathanasiou 2021, Kholodilin and Pfeiffer 2021, Buchanan, Chai, and Deakin 2014). Confronted with the problem of preserving the relevant relationships and meanings in the text, the growing interest in machine-learning classification algorithms (e.g., Gilardi, Shipan, and Wüest 2021, Anastasopoulos and Bertelli 2020, Chalkidis and Kampas 2019, Heikkila and Weible 2018) may or may not improve on human experts.

Goal

This Special Issue aims to give center stage, discuss, and advance rationale and tools for turning rules into data that preserve the relevant information from the text for faithful summaries, comparisons, analysis, and broader usage.

Scope

This Special Issue seeks meaningful contributions connecting their empirical analysis, conducted with any technique for any research purpose, to one or both of the following two themes:

(a) frameworks for gauging rules.

Any research strategy implies some ontological stipulations about rules to identify its analytic units (e.g., Little 2020, Searle 1995). For instance, research may build on a difference between rules that constitute new entities by assigning names, linking them to existing entities, endowing them with capacities, and defining their legitimate functions or missions (e.g., Feiock et al. 2016, Hanretty and Koop 2012, Scott 2001), and rules that regulate old and new entities by defining some of their possible courses of action as legitimate or ruling out some others as illegitimate, conditioning some actions to obligations and requirements, and anticipating some consequences (e.g., Atkinson and Schubert 2021, Damonte 2013). Besides, the purpose of analysis can better be served by a focus on selected parts of rules, such as their deontic elements, their target population, or some other crucial 'provisions' (e.g., Franchino 2007, Ostrom et al. 1989) instead of mechanisms arising from the logical interplay of rules (e.g., Frantz and Siddiki 2022, Schlager et al. 2021, Brady et al 2018).

Contributions to this theme take advantage of their empirical study to expose and discuss the stipulations about rules' kinds, contents, and connections that turn them into meaningful units of analysis.

(b) challenges of coding rules.

The meaningful units of analysis can be scattered through legal texts across lawmaking and rulemaking levels and jurisdictions. They can be shaped in different languages, each characterized by specific stylist conventions and contextual understanding of seemingly twin terms (e.g., Petersen and Chatziathanasiou 2021). Human-based strategies for coding rules overcome these complexities by resorting to human experts. Divergence in interpretation can be valued as the signal of a less-than-robust conceptualization and ontology (e.g., Melton et al. 2013). It may open to theoretical refinement or statistical fixings by increasing the number of sources up to 'crowdsourcing' practices – which, however, does not compensate for the risk of biases (e.g., van Atteveldt et al 2021, Horn 2019, Lodge and Wegrich 2015). The introduction of semi-supervised machine learning algorithms to classify text and recognize patterns comes with the promise that algorithms can scale up human expertise and improve the empirical basis for description, prediction, explanation, or intervention. Yet, every algorithm comes with assumptions about data structures that, when not met, degrade their performance (e.g., van Engelen and Hoos 2020, Zhu 2007).

Contributions to this theme take advantage of their empirical study to pinpoint the problems of capturing the intended meaning of the rules-in-book across jurisdictions, time windows, languages, and styles, and discuss selected methodological solutions to these problems.

Deadline and submission procedure

By November 30, 2022, interested scholars can submit their full manuscripts (of up to 8,500 words, prepared according to the Regulation and Governance's author guidelines

(onlinelibrary.wiley.com/page/journal/17485991/homepage/forauthors.html#preparing) through the journal's management system (wiley.atyponrex.com/dashboard?siteName=REGO).

In submitting their manuscripts, the Authors are kindly reminded to

(1) declare their contribution to this Special Issue in the Additional Information section of the submission procedure and

(2) recommend at least one reviewer for their submission that meets the requirements of expertise, active engagement, diversity, and integrity.

References

Anastasopoulos, L. Jason, and Anthony M. Bertelli. 2020. Understanding delegation through machine learning: a method and application to the European Union. *American Political Science Review* 114.1, 291–301. doi.org/10.1017/S0003055419000522

Angner, Erik. 2011. Current trends in welfare measurement. In *the Elgar Companion to Recent Economic Methodology*, edited by Davis, John B., Hands, D. Wade, 121-54. Northampton: Edward Elgar. doi.org/10.4337/9780857938077

Atkinson, Craig, and Nicolas Schubert. 2021. Augmenting MSME participation in trade with policy digitalisation efforts: Chile's contribution to 'An Internet of Rules'. *Trade Law & Development* 13.1: 80-111. heinonline.org/HOL/P?h=hein.journals/traladpt13&i=88

Bazzan, Giulia. 2021. *Effective Governance Designs of Food Safety Regulation in the EU: Do Rules Make the Difference?*. Springer Nature, Cham.

Brady, Ute, Xavier Basurto, Abigail Bennett, David P. Carter, Jeffrey Hanlon, Tanya Heikkila, Aaron. M. Lien, Sara Miller Chonaiew, Tomás Olivier, Edella C. Schlager, and Saba N. Siddiki, 2018. Institutional analysis of rules-in-form coding guidelines. *CBIE Working Paper Series* #CBIE-2018-006, Arizona State University. complexity.asu.edu/sites/default/files/papers/cbie_wp_2018-006_0.pdf

Buchanan, John, Chai, Dominic H. and Deakin, Simon. 2014. Empirical analysis of legal institutions and institutional change. *Journal of Institutional Economics* 10.1, 1–20. doi.org/10.1017/S1744137413000349

Campbell, Donald T. 1990. The Meehlian corroboration-verisimilitude theory of science. *Psychological Inquiry*, 1, 142–147. doi.org/10.1207/s15327965pli0102_2

Chalkidis, Ilias, and Dimitrios Kampas 2019. Deep learning in law: early adaptation and legal word embeddings trained on large corpora. *Artificial Intelligence and Law*, 27.2, 171-198. doi.org/10.1007/s10506-018-9238-9

Chen, Catherine, Tanya Heikkila, Christopher M. Weible, Jill Yordy, Hongtao Yi, Ramiro Berardo, and Jennifer Kagan. 2022. Policy composition and adoption duration: Capturing conflict in the legislative process. *Policy Studies Journal* 50.2: 407-31. doi.org/10.1111/psj.12457

Coglianese, Cary. 2002. Empirical analysis and administrative law. *University of Illinois Law Review* 2002(4): 1111-1138. doi.org/10.2139/ssrn.327520

Crawford, Sue ES, and Elinor Ostrom. 1995. A grammar of institutions. *American Political Science Review* 89.3: 582-600. doi.org/10.2307/2082975

Cronbach, Lee J., and Meehl, Paul E. 1955. Construct validity in psychological tests. *Psychological Bulletin* 52 (4): 281-302. doi.org/10.1037/h0040957

Damonte, Alessia. 2014. Policy tools for green growth in the EU15: a Qualitative Comparative Analysis. *Environmental Politics* 23.1: 18-40. doi.org/10.1080/09644016.2013.817759

Feiock, Richard C., Christopher M. Weible, David P. Carter, Cali Curley, Aaron Deslatte, and Tanya Heikkila. 2016. Capturing structural and functional diversity through institutional analysis: The mayor position in city charters. *Urban Affairs Review* 52.1: 129-150. doi.org/10.1177/1078087414555999

Franceschini, Fiorenzo, Maurizio Galetto, and Domenico Maisano. 2007. *Management By Measurement: Designing Key Indicators And Performance Measurement Systems*. Springer Science, Switzerland, Cham.

Franchino, Fabio. 2020. In search of the ideational foundations of EU fiscal governance:

standard ideas, imperfect rules. *Journal of European Integration*, 42.2, 179-194. doi.org/10.1080/07036337.2019.1657858

Franchino, Fabio. 2007. *The Powers of the Union: Delegation in the EU*. Cambridge University Press, Cambridge, UK.

Frantz, Christopher K., and Saba Siddiki. 2022. *Institutional Grammar*. Palgrave Macmillan, Cham.

Frantz, Christopher K., Martin K. Purvis, Mariusz Nowostawski, and Bastin Tony Roy Savarimuthu. 2013. Modelling institutions using dynamic deontics. In *International Workshop on Coordination, Organizations, Institutions, and Norms in Agent Systems*, pp. 211-233. Springer, Cham.

Freese, Jeremy, and Molly M. King. 2018 Institutionalizing transparency. *Socius* 4:1-7. doi.org/10.1177/2378023117739216

Gilardi, Fabrizio, Charles R. Shipan, and Bruno Wüest. 2021. Policy diffusion: The issue-definition stage. *American Journal of Political Science* 65.1: 21-35. doi.org/10.1111/ajps.12521

Hanretty, Chris, and Christel Koop. 2012. Measuring the formal independence of regulatory agencies. *Journal of European Public Policy*, 19.2: 198–216. doi.org/10.1080/13501763.2011.607357

Heikkila, Tanya, and Christopher M. Weible. 2018. A semiautomated approach to analyzing polycentricity. *Environmental Policy and Governance* 28. 4: 308-318.

Heilmann, Conrad. 2015. A new interpretation of the Representational Theory of Measurement. *Philosophy of Science* 82(5), 787–797. doi.org/10.1086/683280

Hirschl, Ran. 2014. *Comparative Matters: The Renaissance of Comparative Constitutional Law*. Oxford University Press.

Horn, Alexander. 2019. Can the online crowd match real expert judgments? How task complexity and coder location affect the validity of crowd-coded data. *European Journal of Political Research* 58.1: 236-247. doi.org/10.1111/1475-6765.12278

Hurka, Steffen, Christian Adam, and Christopher Knill. 2017. Is morality policy different? Testing sectoral and institutional explanations of policy change. *Policy Studies Journal*, 45.4, 688-712. doi.org/10.1111/psj.12153

Jochim Ashley E, and Peter May. 2010. Beyond subsystems: policy regimes and governance. *Policy Studies Journal* 38.2: 303-27. doi.org/10.1111/j.1541-0072.2010.00363.x

Jordana, Jacint, Levi-Faur, David, and Xavier F i Marín. 2011. The global diffusion of regulatory agencies: Channels of transfer and stages of diffusion. *Comparative Political Studies*, 44.10: 1343-1369. doi.org/10.1177/0010414011407466

Kholodilin, Konstantin A., and Linus Pfeiffer. 2021. Measuring unmeasurable: How to map laws to numbers using leximetrics. *DIW Berlin Discussion Paper* No. 1933. Deutsches Institut für Wirtschaftsforschung (DIW), Berlin. doi.org/10.2139/ssrn.3810489

Lascoumes, Pierre, and Le Galès, Patrick. 2007. Introduction: Understanding public policy through its instruments – From the nature of instruments to the sociology of public policy instrumentation. *Governance*, 20.1: 1-21. doi.org/10.1111/j.1468-0491.2007.00342.x

Levi-Faur, David, Nir Kosti, and Frans van Waarden. 2018. Democratic empowerment in the European Union: an introduction. In Levi-Faur, David and Frans van Waarden (Eds). *Democratic Empowerment in the European Union*, pp. 1-14. Edward Elgar. doi.org/10.4337/9781788113564.00008

Levi-Faur, David. 2011. Regulation and regulatory governance. In Id. (Ed). *Handbook on the Politics of Regulation*, pp. 3-24. Edward Elgar, Cheltenham, UK. doi.org/10.4337/9780857936110

Liefferink, Duncan, Arts, Barts, Kamstra, Jelmer, and Ooijevaar, Jeroen. 2009. Leaders and laggards in environmental policy: a quantitative analysis of domestic policy outputs. *Journal of European Public Policy* 16.5, 677-700. doi.org/10.1080/13501760902983283

Little, Daniel. 2021. Social Ontology De-dramatized. *Philosophy of the Social Sciences* 51.1:13-23. doi.org/10.1177/0048393120916145

Lodge, Martin, and Kai Wegrich. 2015. Crowdsourcing and regulatory reviews: A new way of challenging red tape in British government?. *Regulation & Governance* 9.1: 30-46. doi.org/10.1111/rego.12048

Maggetti, Martino. 2007. De facto independence after delegation: A fuzzy-set analysis. *Regulation & Governance*, 1.4: 271–294. doi.org/10.1111/j.1748-5991.2007.00023 .

May, Peter J. 1993. Mandate design and implementation: Enhancing implementation efforts and shaping regulatory styles. *Journal of Policy Analysis and Management* 12.4, 634-663. doi.org/10.2307/3325344

Melton, James, Zachary Elkins, Tom Ginsburg, and Kalev Leetaru. 2013. On the interpretability of law: Lessons from the decoding of national constitutions. *British Journal of Political Science*

43.2: 399-423. doi.org/10.1017/S0007123412000361

Mizrahi-Borohovich, Inbar, and David Levi-Faur. 2020. Varieties of consumer credit data regimes: A regulatory governance approach. *Governance* 33.1: 109-134. doi.org/10.1111/gove.12473

Ostrom, Elinor, Arun Agrawal, William Blomquist, Edella Schlager, and Shui Yan Tang. 1989. CPR coding manual. *Ostrom Workshop in Political Theory and Policy Analysis*. Indiana University, Bloomington, Indiana. scholarworks.iupui.edu/bitstream/handle/1805/25603/Ostrom1998CPR.pdf

Petersen, Niels and Konstantin Chatziathanasiou. 2021. Empirical research in comparative constitutional law: The cool kid on the block or all smoke and mirrors?, *International Journal of Constitutional Law* 19.5, 1810–1834. https://doi.org/10.1093/icon/moab125

Rangone, Nicoletta. 2015. New frontiers for competition advocacy and the potential role of Competition Impact Assessment. In Drexel, Joseph, and Fabiana Di Porto (Eds). *Competition Law as Regulation*, pp.118-150. Edward Elgar. doi.org/10.4337/9781783472598.00013

Sassoon, Galit W. 2010. Measurement theory in linguistics. *Synthèse* 174:151-180. doi.org/10.1007/s11229-009-9687-5

Schaffrin, André, Sebastian Sewerin, and Sibylle Seubert. 2015. Toward a comparative measure of climate policy output. *Policy Studies Journal* 43.2, 257-282. doi.org/10.1111/psj.12095

Schlager, Edella C, Laura A Bakkensen,, Tomás Olivier, and Jeffrey Hanlon. 2021. Institutional design for a complex commons: Variations in the design of credible commitments and the provision of public goods. *Public Administration* 99:263–289. doi.org/10.1111/padm.12715

Schneider, Anne L., and Helen Ingram. 1997. *Policy Design for Democracy*. University Press of Kansas, Lawrence, KS.

Scott, Colin. 2001. Analysing regulatory space: fragmented resources and institutional design. *Public Law*, 283-305.

Searle 1995. *The Construction of Social Reality*. The Free Press, New York.

Short, Jodi, David Levi-Faur, Sally S. Simpson, Eva Thomann, and Benjamin Van Rooij. 2021. Editors' Introduction: Has Regulation & Governance made a difference? *Regulation & Governance* 15, S3–S7. doi.org/10.1111/rego.12446

Siddiki, Saba, Heikkila, Tanya, and Espinosa, Salvador. 2018. Building a framework for contextualizing compliance. In Siddiki, Saba, Espinosa, Salvador, and Heikkila, Tanya (Eds). *Contextualizing Compliance in the Public Sector: Individual Motivations, Social Processes, and Institutional Design*, pp. 1-21. Routledge, New York, NY. doi.org/10.4324/9781315148144-1

Siddiki, Saba. 2020. *Understanding and Analyzing Public Policy Design*. Cambridge University Press, Cambridge.

Stevens, Stanley S. 1946. On the theory of scales of measurement. *Science* 103.2684: 677–80. doi.org/10.1126/science.103.2684.677

Suppes, Patrick. 2002. *Representation and Invariance of Scientific Structures*. Stanford, CA: CSLI.

Thomann, Eva and Asya Zhelyazkova. 2017. Moving beyond (non-)compliance: the customization of European Union policies in 27 countries. *Journal of European Public Policy* 24.9, 1269-1288. doi.org/10.1080/13501763.2017.1314536

Thomann, Eva. 2018. *Customized implementation of European Union food safety policy: United in diversity?*. Springer, Cham.

Van Atteveldt, Wouter, Mariken ACG van der Velden, and Mark Boukes. 2021. The validity of sentiment analysis: Comparing manual annotation, crowd-coding, dictionary approaches, and machine learning algorithms. *Communication Methods and Measures* 15.2: 121-140. doi.org/10.1080/19312458.2020.1869198

van Engelen, Jesper E. and Holger H. Hoos. 2020. A survey on semi-supervised learning. Machine Learning, 109.2, 373-440. doi.org/10.1007/s10994-019-05855-6

van Rooij, Benjamin, and D. Daniel Sokol. 2021. Introduction: Compliance as the interaction between rules and behavior. In B. Van Rooij and D. Sokol (Eds.), *The Cambridge Handbook of Compliance* pp. 1-10. Cambridge University Press, Cambridge, UK. doi.org/10.1017/9781108759458.001

Vessonen, Elina. 2017. Psychometrics versus representational theory of measurement. *Philosophy of the Social Sciences* 47.4-5: 330–350. doi.org/10.1177/0048393117705299

Vogel, Steven K. 2018. *Freer Markets, More Rules. Regulatory Reform in Advanced Industrial Countries*. Cornell University Press, Ithaca and London.

Voigt, Stefan. 2013. How (not) to measure institutions. *Journal of Institutional Economics* 9.1, 1-26. doi.org/10.1017/S1744137412000148

Zhu, Xiaojin Jerry. 2007. Semi-supervised learning literature survey. *Computer Science Department Technical Reports* 1530, University of Wisconsin-Madison. digital.library.wisc.edu/1793/60444