

---

# Introduction

## *Symposium on Polycentric Systems in a Free Society*

---

◆

CHRISTOPHER J. COYNE

A polycentric system is one where there are numerous decision-making units, each with autonomy in action, operating within a shared set of rules. A polycentric order stands in contrast to a monocentric order, where there is a single centralized decision-making unit. A monocentric order relies on centralized mechanisms of cooperation and conflict resolution to function. A polycentric system does not because it includes noncentral mechanisms for coordinating and for resolving differences.

Comprehensive economic planning would be an example of a monocentric order where economic decision making is carried out by a single unit with monopoly control over the allocation of resources. Markets, in contrast, are examples of polycentric orders. Numerous decision makers—individuals acting as buyers and sellers—have the freedom to pursue their own goals within an overarching set of rules—the formal and informal rules governing market interactions. Moreover, markets operate by relying on non-central mechanisms of coordination, cooperation, and conflict resolution.

The concept of polycentricity was introduced by Michael Polanyi (1951), who argued that success in science required a certain organizational structure that allowed for the contestation of ideas through open inquiry and experimentation.<sup>1</sup> Within this

---

**Christopher J. Coyne** is professor of economics in the Department of Economics at George Mason University and co-editor of *The Independent Review*.

1. For a detailed treatment of the history of the concept of polycentricity, see Ostrom, Tiebout, and Warren 1961; Ostrom 1999, 2014; Aligica and Tarko 2012; Tarko 2017.

*The Independent Review*, v. 25, n. 2, Fall 2020, ISSN 1086-1653, Copyright © 2020, pp. 229-233.

polycentric system, individual scientists or teams of scientists are free to pursue ideas and research as they see fit within a shared set of rules. These rules include norms about respect for previous discoveries and a deep respect and reciprocity between scientists regarding the autonomy of others. They also entail the understanding that the merit of a new scientific conjecture is judged not on the personalities or characteristics of those who formulate it but rather on whether it can be publicly reproduced by other scientists. Finally, according to Polanyi, effective scientific inquiry requires a shared common goal among scientists—the pursuit of truth. These overarching rules are intended to encourage contestation and mutual learning while preventing efforts to silence certain people or groups of people by limiting their ability to participate in the scientific process. Beyond scientific inquiry, Polanyi’s notion of polycentricity has been applied to competitive market economies, competitive public economies, law and dispute-resolution arrangements, systems of governance, and international relations (see Ostrom 2014, 49–58; Tarko 2017, 58–64).

When Elinor Ostrom was awarded the Nobel Prize in economics in 2009, the idea of polycentricity received renewed attention. The distinction between monocentric and polycentric orders had been at the core of the Ostroms’—Elinor and her husband, Vincent—research for decades and is a defining feature of the “Bloomington School” of political economy—named after the location of Indiana University in Bloomington, Indiana, where Vincent and Elinor spent the majority of their academic careers and established the Workshop in Political Theory and Policy Analysis in 1973 (see Aligica and Boettke 2009; Aligica and Tarko 2012, 240–48; Tarko 2017). Their research program incorporated polycentricity at three levels: (1) the study of social institutions from an ethical perspective—that is, social philosophy; (2) the theoretical study of social organization; and (3) the applied, empirical study of real, existing social arrangements (Aligica and Boettke 2009, 2011; Aligica and Tarko 2012; Tarko 2017).

Relative to monocentricity, polycentricity offers several distinct benefits as a form of organization. First, the decision making associated with polycentricity allows people to take advantage of local knowledge. Under a monocentric system, decision making is concentrated in the hands of a single unit. Polycentricity involves many decision-making units, which allows participants better access to context-specific knowledge. Polycentric orders allow people to “select those strategies that are anticipated to enhance their net welfare potential” (Ostrom 1999, 57). By allowing for the dispersion of knowledge and the authority to act on that knowledge, polycentricity allows local decision makers to obtain and utilize the local knowledge of “time and place” that F. A. Hayek (1945) emphasized was crucial to value-added decision making.

Second, polycentric orders allow for a greater degree of contestation as compared to a monocentric system. The presence of numerous decision-making units, each with its own autonomy, allows for experimentation among the different units. This experimentation gives people the opportunity to engage in a discovery process to determine new and beneficial information across a range of issues—for example, resource allocations, scientific knowledge, opportunities to live a flourishing life.

Third, polycentric orders are better able to meet and satisfy a diversity of preferences. A monocentric order necessarily offers a “one-size-fits-all” solution. Polycentricity, in contrast, allows for a range of different outcomes across decision-making units. And because polycentricity allows for the use of local knowledge and experimentation, there is a greater likelihood that diverse preferences will be satisfied. Moreover, the competition inherent in polycentric orders further incentivizes the satisfaction of diverse preferences because decision makers have an incentive to consider feedback because polycentric orders foster Tiebout-style competition, where people vote with their feet (Tiebout 1956; Ostrom, Tiebout, and Warren 1961).

This pressure gives service providers in a polycentric system an incentive to respond to consumer feedback. This feedback is especially important in a dynamic, open-ended system where conditions of taste, technology, and demographics change, resulting in the need for a new mix of goods and service provision. Feedback and the incentive to be responsive are weakened in a monocentric system, where there is typically an expansive bureaucratic hierarchy between service providers and consumers.

Finally, polycentricity disperses risk and produces a more reliable and robust system. Under a monocentric system, there is a single point of failure. If the central mechanisms of coordination and conflict resolution fail, then the system does not operate as intended. Under polycentricity, in contrast, there is no single point of failure because there is no single, central decision-making unit. Return to the example of a competitive market system. In this setting, the failure of one entrepreneurial venture does not threaten the viability of the overall system. The structure of a polycentric system, therefore, disperses risk and creates a more robust system in the face of human imperfection and error.

The papers in this symposium explore the importance of polycentric systems for a free society. The authors consider a wide range of issues and applications and in doing so illustrate the benefits of polycentricity for addressing some of the most pressing issues of the day. In the opening paper, Michael Strong explores whether the U.S. education system is sufficiently polycentric. Polycentric education is important for experimenting with different methods of delivery while also customizing educational content to a heterogeneous and diverse set of consumers. Strong finds that despite the existence of polycentricity at the district level, the benefits of this structure are weakened, if not altogether muted, by a range of factors, including federal legislation regarding collective bargaining and lock-in to obsolete technologies. A more polycentric system, Strong concludes, would move beyond a rigid, one-size-fits-all model of education focused on the transmission of knowledge to one that allows for a diversity of educational methods and technologies that appreciate things such as adolescent well-being in the form of healthy habits and attitudes about learning, social mobility, and adult well-being.

Next, Alexander Salter develops the idea of “malignant monetary monocentricity,” which holds that contemporary central banks are systematically unlikely to deliver macroeconomic stability due to institutionally entrenched information and incentive problems. He argues that polycentric monetary systems, best approximated by

historical free-banking systems, are information and incentive compatible in terms of delivering macroeconomic stability. Salter's paper demonstrates why monocentricity is incompatible with democratic self-governance and that the only way to cure the malignancy is to replace monetary monocentricity with monetary polycentricity.

Jayne Lemke analyzes the ways in which the set of institutional characteristics often grouped under the label *polycentricity* enable the consent of the governed. She argues that where the governed have choice, they have a defense against domination by the state. To illustrate, she draws on the case of women in American history to show how groups excluded from formal economic and political institution building can meaningfully offer or withdraw consent through the creation of or choice between alternative governance arrangements.

Focusing on the topic of defense, Nathan Goodman and I apply the concept of polycentricism to the provision of defense against internal and external threats. Orthodox economics models defense as a public good provided by a central nation-state. We argue that this approach abstracts away from the diverse institutions and processes that individuals use to provide defense in the actual world. As an alternative, we frame defense as a polycentric system whereby dispersed groups of people find context-specific solutions to collective-action problems. We explore what polycentric defense looks like, both in theory and through historical illustrations.

Finally, Tom Bell explores how social coordination systems have evolved from large, standardized institutions, such as nation-states or commercial corporations, to numerous heterogenous communities of governance. His paper introduces readers to these "distributed-protocol communities" and provides an analysis of ten of the most innovative communities. Bell develops the Distributed-Governance Index to define several measures of governance and provides a means of scoring distributed-protocol communities. This index provides insight into existing distributed-protocol communities while providing the foundation for future research on these self-governing groups.

For readers unfamiliar with the concept of polycentricity, my hope is that this symposium will introduce them to the idea while making clear its importance for a range of issues central to individual freedom and flourishing. For those already familiar with the idea of polycentric systems, my hope is that these papers will encourage further research both on the topics considered here as well as on other issues of pressing relevance to a free and prosperous world.

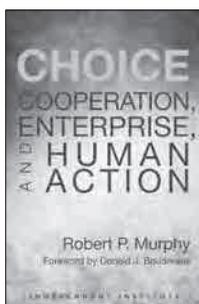
## References

- Aligica, Paul Dragos, and Peter J. Boettke. 2009. *Challenging Institutional Analysis and Development*. New York: Routledge.
- . 2011. The Two Social Philosophies of Ostroms' Institutionalism. *Policy Studies Journal* 39, no. 1: 29–49.
- Aligica, Paul D., and Vlad Tarko. 2012. Polycentricity: From Polanyi to Ostrom, and Beyond. *Governance* 25, no. 2: 237–62.

- Hayek, F. A. 1945. The Use of Knowledge in Society. *American Economic Review* 35, no. 4: 519–30.
- Ostrom, Vincent. 1999. Polycentricity (Part 1). In *Polycentricity and Local Public Economies*, edited by Michael D. McGinnis, 52–74. Ann Arbor: University of Michigan Press.
- . 2014. Polycentricity: The Structural Basis of Self-Governing Systems. In *Choice, Rules, and Collective Action: The Ostroms on the Study of Institutions and Governance*, edited by Filippo Sabetti and Paul Dragos Aligica, 45–60. Colchester, U.K.: ECPR Press.
- Ostrom, Vincent, Charles M. Tiebout, and Robert Warren. 1961. The Organization of Government in Metropolitan Areas: A Theoretical Inquiry. *American Political Science Review* 55: 831–42.
- Polanyi, Michael. 1951. *The Logic of Liberty*. Chicago: University of Chicago Press.
- Tarko, Vlad. 2017. *Elinor Ostrom: An Intellectual Biography*. Lanham, Md.: Rowman and Littlefield.
- Tiebout, Charles M. 1956. A Pure Theory of Local Expenditures. *Journal of Political Economy* 64:416–24.

“*Choice* is one of the best introductions to the foundations of modern Austrian School economics that I have ever read. With its clarity of writing and stress on the fundamentals differentiates, Murphy translates key ideas into terms that any intelligent layperson and student can follow. We owe Murphy a great debt for this book, and I highly recommend that anyone get a copy and read it.”

—**Robert D. Tollison**, J. Wilson Newman Professor of Economics, Clemson University



## Choice

**Cooperation, Enterprise, and Human Action**

By **Robert P. Murphy**, Foreword by **Donald J. Boudreaux**

336 Pages | Index | Hardcover: \$35.95 | Paperback: \$24.95

*Choice* is an engaging and intriguing book that is *quite* unique: a genuine treatise on economics that instructs *and* entertains. Creative, comprehensive, and lucid *Choice* teaches economic principles and exposes economic fallacies. Any reader will learn economic truths and the crucial value of individual choice, entrepreneurship, and free markets.

ORDER TOLL FREE  
800-927-8733



ORDER ONLINE  
[www.independent.org](http://www.independent.org)

# SUBSCRIBE NOW AND RECEIVE A FREE BOOK!



“*The Independent Review* does not accept pronouncements of government officials nor the conventional wisdom at face value.”

—**JOHN R. MACARTHUR**, Publisher, *Harper’s*

“*The Independent Review* is excellent.”

—**GARY BECKER**, Nobel Laureate in Economic Sciences

Subscribe to [The Independent Review](#) and receive a free book of your choice such as *Liberty in Peril: Democracy and Power in American History*, by Randall G. Holcombe.

Thought-provoking and educational, [The Independent Review](#) is blazing the way toward informed debate. This quarterly journal offers leading-edge insights on today’s most critical issues in economics, healthcare, education, the environment, energy, defense, law, history, political science, philosophy, and sociology.

Student? Educator? Journalist? Business or civic leader? Engaged citizen? This journal is for YOU!



Order today for more **FREE** book options

**SUBSCRIBE**

*The Independent Review* is now available digitally on mobile devices and tablets via the Apple/Android App Stores and Magzter. Subscriptions and single issues start at \$2.99. [Learn More.](#)

