
Choice, Rules and Collective Action

The Ostroms on the Study
of Institutions and Governance

Elinor Ostrom and Vincent Ostrom

Introduced and Edited by
Filippo Sabetti and Paul Dragos Aligica



© Elinor Ostrom and Vincent Ostrom 2014

Cover image – *Fotolia.com* © dedoma

Photographs courtesy of the Ostrom Workshop and Indiana University

Published by the ECPR Press in 2014

The ECPR Press is the publishing imprint of the European Consortium for Political Research (ECPR), a scholarly association, which supports and encourages the training, research and cross-national co-operation of political scientists in institutions throughout Europe and beyond.

ECPR Press
University of Essex
Wivenhoe Park
Colchester
CO4 3SQ
UK

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Typeset by ECPR Press

Printed and bound by Lightning Source

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

Paperback ISBN: 978-1-910-259-13-9
PDF ISBN: 978-1-910-259-15-3
Kindle ISBN: 978-1-910-259-16-0
ePub ISBN: 978-1-910-259-17-7

www.ecpr.eu/ecprpress

ECPR Press Series Editors:

Dario Castiglione (University of Exeter)
Peter Kennealy (European University Institute)
Alexandra Segerberg (Stockholm University)
Peter Triantafillou (Roskilde University)

ECPR Essays:

Croce, Gramsci, Bobbio and the Italian Political Tradition (ISBN: 9781907301995)
Richard Bellamy

From Deliberation to Demonstration: Political Rallies in France, 1868–1939 (ISBN: 9781907301469) Paula Cossart

Hans Kelsen and the Case for Democracy (ISBN: 9781907301247) Sandrine Baume
Is Democracy a Lost Cause? Paradoxes of an Imperfect Invention
(ISBN: 9781907301247) Alfio Mastropaoletti

Just Democracy (ISBN: 9781907301148) Philippe Van Parijs

Learning About Politics in Time and Space (ISBN: 9781907301476) Richard Rose
Maestri of Political Science (ISBN: 9781907301193) Donatella Campus,
Gianfranco Pasquino, and Martin Bull

Masters of Political Science (ISBN: 9780955820335) Donatella Campus, and
Gianfranco Pasquino

The Modern State Subverted (ISBN: 9781907301636) Giuseppe Di Palma

ECPR Classics:

Beyond the Nation State (ISBN: 9780955248870) Ernst Haas

Citizens, Elections, Parties: Approaches to the Comparative Study of the Processes of Development (ISBN: 9780955248887) Stein Rokkan

Comparative Politics The Problem of Equivalence (ISBN: 9781907301414) Jan Van Deth
Democracy Political Finance and state Funding for Parties (ISBN: 9780955248801)
Jack Lively

Electoral Change: Responses to Evolving Social and Attitudinal Structures in Western Countries (ISBN: 9780955820311) Mark Franklin, Thomas Mackie, and Henry Valen
Elite and Specialized Interviewing (ISBN: 9780954796679) Lewis Anthony Dexter

Identity, Competition and Electoral Availability: The Stabilisation of European Electorates 1885–1985 (ISBN: 9780955248832) Peter Mair and Stefano Bartolini
Individualism (ISBN: 9780954796662) Steven Lukes

Modern Social Policies in Britain and Sweden: From Relief to Income Maintenance
(ISBN: 9781907301001) Hugh Heclow

Parties and Party Systems: A Framework for Analysis (ISBN: 9780954796617)
Giovanni Sartori

Party Identification and Beyond: Representations of Voting and Party Competition
(ISBN: 9780955820342) Ian Budge, Ivor Crewe, and Dennis Farlie

People, States and Fear: An Agenda for International Security Studies in the Post-Cold War Era (ISBN: 9780955248818) Barry Buzan

Political Elites (ISBN: 9780954796600) Geraint Parry

Seats, Votes and the Spatial Organisation of Elections (ISBN: 9781907301353)
Graham Gudgin
State Formation, Parties and Democracy (ISBN: 9781907301179) Hans Daalder
System and Process in International Politics (ISBN: 9780954796624) Mortan Kaplan
Territory and Power in the UK (ISBN: 9780955248863) James Bulpitt
The State Tradition in Western Europe: A Study of an Idea and Institution (ISBN: 9780955820359) Kenneth Dyson

Please visit www.ecpr.eu/ecprpress for up-to-date information about new publications.

Contents

List of Figures and Tables	vii
Acknowledgements	ix
Foreword by Dario Castiglione	xi
Elinor and Vincent Ostrom and the Workshop	xix
Introduction: The Ostroms' Research Program for the Study of Institutions and Governance: Theoretical and Epistemic Foundations <i>Paul Dragos Aligica and Filippo Sabetti</i>	1
Part One: Public Choice and Political Economy	
Chapter One: Public Choice: A Different Approach to the Study of Public Administration <i>Vincent Ostrom and Elinor Ostrom</i>	23
Chapter Two: Polycentricity: The Structural Basis of Self-Governing Systems <i>Vincent Ostrom</i>	45
Chapter Three: The Quest for Meaning in Public Choice <i>Elinor Ostrom and Vincent Ostrom</i>	61
Part Two: Beyond Public Choice: Institutions, Rules and Governance Systems	
Chapter Four: An Agenda for the Study of Institutions <i>Elinor Ostrom</i>	97
Chapter Five: A Behavioural Approach to the Rational Choice Theory of Collective Action <i>Elinor Ostrom</i>	121
Chapter Six: Beyond Markets and States: Polycentric Governance of Complex Economic Systems <i>Elinor Ostrom</i>	167

Part Three: Epistemic and Social Philosophical Perspectives

Chapter Seven: Beyond Positivism <i>Elinor Ostrom</i>	213
Chapter Eight: A Conceptual-Computational Logic for Federal Systems of Governance <i>Vincent Ostrom</i>	227
Chapter Nine: Epistemic Choice and Public Choice <i>Vincent Ostrom</i>	243
Index	271

List of Figures and Tables*Figures*

Figure 3.1: A Framework for Institutional Analysis	68
Figure 3.2: Levels of Analysis and Outcomes	82
Figure 4.1: Predicted Equilibrium Budget/Output Combinations Under Different Rule Configurations	105
Figure 5.1: N-person Social Dilemma	125
Figure 5.2: The Core Relationship	144
Figure 5.3: A Simple Scenario	148
Figure 6.1: Four Types of Goods	172
Figure 6.2: A Framework for Institutional Analysis	174
Figure 6.3: The Internal Structure of an Action Situation	176
Figure 6.4: Rules as Exogenous Variables Directly Affecting the Elements of an Action Situation.	180
Figure 6.5: Microsituational and Broader Contexts of Social Dilemmas Affect Levels of Trust and Cooperation	191
Figure 6.6: Action Situations Embedded in Broader Social-Ecological Systems:	195
Figure 9.1: A Framework of Elements and Stages in Institutional Analysis and Development.	255

Tables

Table 9.1: Hobbes's Laws of Nature [The Way to Peace]	248
Table 9.2: Types of Goods	260

Chapter Nine

Epistemic Choice and Public Choice¹

Vincent Ostrom

At the intersections of anthropology, economics, law, political science, public administration, and sociology, a sufficient body of literature had accumulated from interdisciplinary research efforts by the mid-1960s to support a new approach to the study of public decision making. Those inquiries were stimulated by a growing awareness that problems of institutional weaknesses and failures in market arrangements could not be corrected simply by recourse to governmental decision processes that were themselves subject to serious limits. How did we develop a better understanding of the structure of decision making and performance in the 'public sector'? What were the limits applicable to collective choice and its relationship to collective action? Now, in the presence of three or four decades of cumulative efforts in the Public-Choice tradition, how does one assess the prospects for the next generation?

My conclusion is that the most important potentials have been associated with diverse thrusts on the peripheries of work in the Public-Choice tradition rather than with efforts at the core of the tradition to apply 'economic reasoning' to 'nonmarket decision making', as the Public-Choice approach has been conceptualized by the mainstream of Public-Choice scholars. The 'core' of the Public-Choice tradition involves economic reasoning that places primary emphasis on a *nontuistic, self-interested, rational actor* approach to *methodological individualism*. *Nontuism* implies *not* taking account of the interests of others; *self-interest* implies taking account of one's own preferences. *Rational actors* in economic theory seek to maximize their own net advantage. *Methodological individualism* involves taking the perspective of hypothetical individuals in choice situations. By 'thrusts on the peripheries', I refer, for example, to Gordon Tullock's (1965) focus on the way that bureaucracies filter and distort the transmission of information to create systemic propensities for deception and for error, to James Buchanan's (1979a) emphasis on the artifactual character of human individuality, to Douglass North's (1990) insistence that ideas and institutional arrangements are important, and to James Coleman's (1990) concern that norms are important sources of productive potentials.

I. Initially published in Vincent Ostrom's *The Meaning of Democracy and the Vulnerability of Democracies: Response to Tocqueville's Challenge*, 89–116. Ann Arbor: The University of Michigan Press, 1997.

Work on the peripheries is where important advances at the frontier are most likely to occur. The leading contributors to the Public-Choice tradition have never confined themselves to a 'core' built on extreme rationality assumptions. A. K. Sen's article on 'Rational Fools' (1977), Karl Popper's essay on 'Rationality and the Status of the Rationality Principle' (1967) and Brian Barry and Russell Hardin's collection of essays on *Rational Man and Irrational Society?* (1982) are indicative of some of the social dilemmas and puzzles that pervade human societies. Perhaps the important challenge for Public-Choice scholars is to address how basic anomalies, social dilemmas, and puzzles can be resolved in human affairs, rather than to apply economic reasoning, narrowly construed, to nonmarket decision making.

A question of some importance is whether these efforts at the periphery of the Public-Choice approach are only miscellaneous idiosyncratic accretions. In that case, the literature will exceed human cognitive limits and become fleeting fads among Towers of Babel. Or are there ways that these cumulative inquiries can be ordered as contributions to diverse elements, foci, and levels of analysis that are complementary to one another and that meet standards of scientific warrantability? This, too, is a matter of 'public' choice at an epistemic level about what is worthy of inclusion in the corpus of knowledge. The attribute of publicness as applied to the corpus of knowledge is not confined to collective choice implicating institutions of government. Rather, the public-good character of knowledge evokes important potentials for economic and political development – in all aspects of market and nonmarket decision making. The public-good character of knowledge is not decided by Governments but by those who are artisans engaged in the creation and uses of knowledge. Public choice need not be decided by elections and coalitions claiming popular mandates. Furthermore, the principles of choice applicable to the warrantability of knowledge are different than the principles of choice applicable to a choice of goods in market and public economies. These are different than the principles of choice applicable to the constitution of rule-ordered relationships in accordance with standards of fairness. Principles of consensus among participants can apply to each, but the criteria of choice vary among different types of choice.

If an intellectual apparatus can be developed to give complementarity to the diverse thrusts in inquiries pursued over the last three or four decades, we might also expect to achieve a greater coherence among much longer traditions of inquiry in the social or cultural sciences. Edwin Haefele, for example, called attention to an assertion made by Aristotle – 'For that which is common to the greatest number has the least care bestowed upon it' (Aristotle 1942, bk. 2, chap. 3, sec. 3 – to reject Plato's argument about the ideal polity expounded by Socrates in *The Republic*, a title that is itself a misnomer drawn from the Latin language. Aristotle's assertion indicates a long-standing awareness of collective-action dilemmas. If a public facility or service were to be collectively provided, any narrowly rational actor would take advantage of what became freely available, while declining to bear responsibility for a proportionate share of the burdens and costs. Under these circumstances, levying a tax through some instrumentality of government would serve as a proxy for a market price. People could not be expected to pay taxes voluntarily.

A new approach not only opens potentials for future work but allows for a better appreciation of how to select from and build on prior achievements. Problems of epistemic choice – the choice of conceptualizations, assertions, and information to be used and acted on in problem-solving modes – must necessarily loom large. If the Public-Choice approach will continue to contribute to the advancement of knowledge, that future depends on meeting the requirements of epistemic choice. In this chapter, I first give attention to the problem of epistemic choice and then relate that problem to the arraying of elements in a framework implicit in the Public-Choice tradition.

The problem of epistemic choice

Fundaments of epistemic choice

Thomas Hobbes, David Hume, Adam Smith, and others give us foundations for dealing with language, learning, knowledge, communication, artisanship, and moral judgment in the exercise of choice. In considering the problem of epistemic choice, the contingencies of language and their relationships to knowledge, choice, and action are at the focus of attention. The conceptions formulated, the words used, and the assertions made are all significant because symbolic expressions stand for referents. Symbols used in interpersonal communication refer to events in the world: elements [things named] and relations [motions, action tendencies, transforms] functioning in subject-predicate-object relationships, in hypothetical if-then relationships, and in factor-function-product relationships. Distinctions relate to classificatory schema that identify sets and subsets in patterns of associated relationships.

Three criteria can be used for establishing the warrantability of assertions: (1) logical coherence among complementary assertions in bodies of knowledge presuming a unity of knowledge; (2) empirical warrantability – hypothetical assertions withstand critical scrutiny in light of experience – and (3) public reproducibility – empirical results, achieved by some, can also be replicated by others if assertions are appropriately formulated and acted on. The important associations between linguistic formulations and referent events are accompanied by parallel associations occurring in the patterns of thought characteristic of inferential [if-then] reasoning. This is complemented by thinking associated with the use of the imagination to array speculative what-if conjectures. Human thought may evoke fictions of the mind that differ substantially from those sets of assertions that withstand the tests of logical coherence, empirical warrantability, and public reproducibility.

In an epistemic context, I find Thomas Hobbes's analysis 'Of Man' ([1651] 1960: 7–108) to be far more helpful for establishing the conceptual foundations for human understanding than Jeremy Bentham's formulation, which emphasizes something Bentham called 'utility' ([1823] 1948). Hobbes argued that speech [language] is the factor that distinguishes *Homo sapiens* from other creatures, like

lions, bears, and wolves. Science is a ‘knowledge of consequences’ associated with hypothetical assertions. Thought permits the arraying of alternative possibilities. Choice involves a weighing of those alternatives in relation to internal indicators of individuals reflecting their appetites and aversions [preferences]. Hobbes asserted that ‘The POWER [action potentials] of a man, to take it universally, is his present means, to obtain some future apparent good’ ([1651] 1960: 56, Hobbes’s emphasis). I conceptualize Hobbes’s definition of power to equate purposive action with artisanship – the use of present means to obtain some future apparent good. His basic postulate is then formulated, ‘So that in the first place, I [Hobbes] put for a general inclination of all mankind, a perpetual and restless desire of power after power, that ceaseth only in death’ (Hobbes: 64). I interpret that assertion to indicate that the general inclination of all mankind is a continual striving to use present means to obtain some future apparent good, in successive efforts that cease only with death. Saints, for example, presumably strive through prayer and meditation to bring themselves closer to God, rather than maximizing their net assets in a system of financial accounts. Scholarship need not be concerned with maximizing wealth, even though scholars, like everyone else, need to meet the economic requirements of life. Languages, then, not only act as devices that enable human beings to convey signals to one another but are the means for constituting knowledge, organising thought, arraying alternatives, ordering choice, and taking actions in arranging present means in appropriate ways to realize future apparent goods. Choice is mediated by human cognition and action potentials articulated through language. But language can, unfortunately, also be used to fool oneself and others.

Hobbes’s Man in a State of Nature is, I believe, a hypothetical thought experiment of presuming human beings to be *devoid of speech* and, thus, comparable to animals like lions, bears, and wolves. In referring to the frailties of the mind in Chapter Thirteen of *Leviathan*, Hobbes proposed ‘setting aside the arts grounded upon words’ (Hobbes: 80). Individuals would seek their own good; but, in the absence of speech, in the presence of scarcity and the existence of others, they would end up fighting with one another. Fighting is a recurrent and persistent phenomenon among *Homo sapiens*.

The precariousness of conflict situations is indicated by Kenneth Boulding’s essay ‘Toward a Pure Theory of Threat Systems’ (1963). Boulding presumes speech; but an exchange of threats involves a form of speech in which someone demands, ‘*You do something good for me or I will do something bad to you*’. The person confronted with a threat is presented with a choice between two bads because doing something good for the other will require a cost to oneself. To defend oneself in such a circumstance, an even stronger counterthreat is easily made. Threats, as such, are mere words. The vulnerable point in an exchange of threats occurs when the credibility of a threat is made a matter of honour. One or the other is required to follow through and make his or her threat credible or to apologize for being offensive. Conflict involving an exchange of threats has a very strong tendency to escalate into violent confrontations yielding more destructive effects than were intended by those who initiated an exchange of threats. Destruction can easily escalate into uncontrolled violence.

Toward a lawful order and a culture of inquiry

In adopting a problem-solving mode as an alternative to fighting, Hobbes explored a set of principles that would be constitutive of Peace as an alternative to War. Achieving peace requires taking account of the interests of others; nontuism does not work in that context. Rather, Hobbes argued that a method of nonnative inquiry grounded in the rule ‘*Do not that to another, which thou wouldest not have done to thyself*’ ([1651] 1960: 103, Hobbes’s emphasis) is necessary to the achievement and maintenance of peace. As a method of inquiry, Hobbes suggested that such a rule can be made ‘intelligible even to the meanest capacity’ by using the following approach.

[If,] when weighing the actions of other men with his own, they seem too heavy, [...] put them into the other part of the balance, and his own into their place, that his own passions, and self-love, may add nothing to the weight; and then there is none of these laws of nature [articles of peace] that will not appear unto him very reasonable. (*Ibid.*)

A method of normative inquiry grounded in the Golden Rule is available for reconsidering one’s own preferences in relation to the preferences of others when interdependent interests require *impartiality* in arriving at a judgment pertaining to joint interests. John Harsanyi (1977) and Reinhard Selten (1986) have adopted a similar approach as a broader foundation for evaluating rules of action and not simply action alone. I summarize the set of principles Hobbes derived from this method of normative inquiry in Table 9.1. These can be viewed as necessary conditions for the constitution and reform of human communities in accordance with basic normative precepts taught in the Jewish, Christian, and Islamic traditions. Similar precepts prevail in other civilizations. They are steps to be pursued in the resolution of conflict as a way of peacefully resolving problems in human relationships. Conflicts associated with interdependent individual interests suggest commonalities that require attention to how individual interests relate to communities of interdependent interests. A method of normative inquiry in a problem-solving mode is available among members of speech communities to explore options for resolving conflict in relation to all different forms of choice.

This method of normative inquiry is a way of making interpersonal comparisons and arriving at rules of reason. Hobbes viewed these rules of reason as accessible to anyone who draws on his or her fundamental resources as a human being, mediated through the use of language, to build shared communities of understanding. Mutual trust is established by performing covenants made. For Hobbes, a fool would deny such rules of reason without appreciating the destructive potentials involved. The terms *nature* and *natural* are associated with different meanings when referring to man in ‘a state of nature’ and to ‘the laws of nature’. This tension reflects puzzles about the place of language in ‘human nature’ and the place of culture in human societies. Rules of right reason are presumed to be expressive of human nature even though they accrue as human cultural achievements and are not evoked by genetic reproduction alone.

David Hume (1948) and Adam Smith ([1759] n.d.) relied on a sentiment of sympathy, modified by the generality of language in human communication, to arrive at a standard of justice for mediating human relationships. In 'An Enquiry concerning the Principles of Morals', Hume wrote:

The distinction, therefore, between the species of sentiment [i.e., sympathy or fellow feeling in contrast to those connected with any other emotion or passion] being so great and evident, language must soon be moulded upon it and must invent a peculiar set of terms in order to express those universal sentiments of censure and approbation which arise from humanity or from views of general usefulness and its contrary. Virtue and Vice become known; morals are recognized; certain general rules are framed of human conduct and behavior; such measures are expected of men in such situations. This action is conformable to an abstract rule; the other contrary. And by such universal principles are the particular sentiments of self-love frequently controlled and limited. (1948: 254)

Table 9.1: Hobbes's Laws of Nature [*The Way to Peace*]

1. That one seek peace and follow it, but be prepared to defend oneself.
2. That one be willing, in the quest for peace, when others are willing, to lay down one's right to all things and be content with so much liberty against others as one would allow others against oneself.
3. That individuals perform their covenants made.
4. That one act in relation to others so they will have no cause for regret.
5. That everyone strive to accommodate oneself to the rest.
6. That upon caution of future time, a person ought to pardon the offenses past of them that, repenting, desire it.
7. That in retribution of evil for evil, persons look not at the greatness of the evil past but at the greatness of the good to follow.
8. That no one by deed, word, countenance, or gesture declare hatred or contempt of others.
9. That everyone acknowledge another as one's equal by nature.
10. That at the entrance into the conditions of peace, no one reserve to oneself any right which one is not content should be reserved to every one of the rest.
11. That if one be trusted to judge between one person and another, one deals equally between them.

12. That such things as cannot be divided, be enjoyed in common, if it can be, and if the quantity of the thing permit, without stint, otherwise proportional to the number of them that have right.
13. That such things as cannot be divided or enjoyed in common require that the entire right to the whole thing, or else, making the use alternative, be determined by lot.
14. That distribution by lot be determined by an agreement among the competitors or by first seizure.
15. That all who mediate peace be allowed safe conduct.
16. That they that are at controversy submit their right to the judgment of an arbitrator.
17. That no one is a fit arbitrator of one's own cause in relation to the interest of another.
18. That no one in any cause ought to be received for arbitrator to whom greater profit or honour or pleasure apparently arises out of the victory of one party rather than another.
19. That in controversies of fact those who judge should give no more credit to one witness than to another but should call additional witnesses until the question is decided by the weight of evidence.

Summary Rule: *Do not that to another, which thou wouldest not have done to thyself.*

Source: Hobbes [1651, 1960, chaps. 14 and 15].

The moral quality arises from fellow feelings expressed as general rules: 'Virtue and Vice become known; morals are recognized; certain general rules are framed of human conduct [...]; such measures are expected of men in such situations. This action is conformable to an abstract rule; the other contrary'. Hume was emphasizing the *coevolutionary* and *configured* development of sentiments, languages, the foundation of morals, the articulation of meaning, and the basic foundations of law as these might apply to epistemic choice and other forms of choice.

Following his well-known passage about distinguishing 'is' and 'ought' statements, Hume indicated that it is necessary to 'look within' to find the standards for rendering moral judgment. Those standards are ascertainable by the use of methods of normative inquiry to make interpersonal comparisons mediated through speech. Without a background of common knowledge, a shared community of understanding about making appropriate normative distinctions, a system of social accountability for monitoring and enforcing rules, and a substantial degree of public trust that rule-ordered relationships will be adhered to, there is no basis

for assigning autonomy to individuals to exercise responsibility for the actions they take in the governance of their own affairs and in relating to others. The conditions stipulated in Hobbes's laws of nature are the foundations for both a lawful order and a culture of inquiry. The use of extreme rationality assumptions in economic theory runs the risk of stripping away and ignoring essential epistemic and moral considerations that are constitutive of human affairs.

The basic epistemological problem

Walter Eucken ([1940] 1951), the German economist associated with the development of *Ordnungstheorie* [theory of order], writing in the late 1930s, called attention to what I regard as the basic epistemological problem in the cultural and social sciences. Eucken asserted that economic theorists rely on a single, simple, general model that is presumed to have universal application in the conduct of economic analysis. By so doing, he argued that economists increasingly distanced themselves from economic 'reality'. Abstractions lose meaning, theory is confined to doctrine and lacks contact with 'reality'. Hans Albert (1984), a German philosopher concerned with problems of epistemology in the Popperian tradition as applied to economics and the social sciences, refers to this as a problem of model-thinking. A fully specified model bounded by limiting assumptions is presumed to have universal applications. Model thinking may serve the purposes of rigorous mathematical reasoning but neglects empirical 'realities' and problematics in human affairs. Eucken contrasted the empirical inquiries of economic historians of his time as heaping facts on facts without relevance to economic theory. The result was a 'great antinomy': abstract doctrine on the one hand, and the accumulation of facts, on the other, without critical attention to how theory and facts – ideas and deeds – relate to one another in establishing the warrantability of what was being asserted. Eucken's 'great antinomy' yields a basic incoherence in discourse about human affairs. Contemporary work by Douglass North (1990) and Harold Berman (1983) and a virtual flood of similar inquiries represent major advances in this regard. The ambiguous and pervasive uses of the term *model* among economists and among many social scientists, however, leave me grasping for words to gain understanding.

At this point, it is important to recall Hobbes's assertions about the use of language that might make one 'excellently wise' by acting on scientifically warranted conceptions in contrast to 'excellently foolish' when acting on absurd doctrine – 'senseless speech' ([1651] 1960: 22). In Hobbes's judgment, being excellently foolish was worse than simple ignorance. People of simple ignorance do not indulge in genocide and holocausts. Rather, those who engage in such conduct are presumably infected with some form of intellectual 'virus', so to speak. Prudence, which Hobbes associated with experience, is a way of distinguishing sensible from senseless uses of language. Absurd doctrines can meet standards of logical rigor and mathematical proof but yield disastrous consequences when used to inform actions. Human action needs to draw on general principles that can be applied to particular time and place exigencies that vary with ecological and cultural circumstances.

Eucken presumed that different systems of economic order exist in different times and places. His concern was how to identify and develop basic elements and relationships so that a commensurate framework could be used to specify structured variants – morphologies – to allow for comparative assessments of performance. He presumed that all systems of economic order require planning – the uses of knowledge and information. His concern was with the differences in planning processes that occurred, for example, in contemporary 'market' and 'command' economies, rather than with a presumption that there are some 'planned' and other 'unplanned' economies. He further presumed that all economic orders function in a context of political orders.

Eucken's presumption that planning takes place in all economic activities is commensurate with Hobbes's presumption that all action is grounded in thought. This poses an issue with regard to Friedrich von Hayek's use of the concept of 'spontaneity' (1973: 36–54) and Adam Smith's concept of the 'hidden hand' ([1776] n.d.), in the creation and maintenance of social orders. Are such terms to be applied to relationships viewed as 'brute facts' or 'institutional facts' that reflect self-organising and self-governing capabilities among knowledgeable and intelligible human beings? Can 'hidden hands' be expected to work spontaneously in the constitution of order in human societies viewed as systems of natural order – 'brute facts'? If Hayek's spontaneity and Smith's hidden hand depend on the intelligent use of the arts and sciences of association among the members of societies, we in the Public-Choice tradition bear a substantial burden in elucidating and making use of the sciences and arts of association. Coming to terms with problems of institutional weaknesses and failures depends on the development of analytical capabilities commensurate with the sciences and arts of human association.

Neoclassical economic theory relies on a 'model' presuming a perfectly competitive market economy in which fully informed actors participate as buyers and sellers when a price equilibrium is achieved at a point where demand at that price equals the supply offered at that price. With an indefinitely large number of market participants, the actions of particular buyers and sellers will not alter the price equilibrium. So price provides crucial information about economic opportunities. Market decisions about price are nonutilistic in the sense that a perfectly competitive market would determine price on an impartial basis without regard for others. A rational actor in such circumstances would act in a way that maximizes individual self-interest.

Social dilemmas arise, however, when individuals select strategies to maximize their own gains that diverge from the aggregate gain that might have been realized. Each individual acting on the basis of a best response without regard for others need not achieve the highest joint benefit (common good). Individual success in acquiring wealth is not the appropriate measure of a contribution to 'society', 'civilization', or 'human welfare'. Many human relationships are not monetized exchange relationships. Individual rationality in maximizing 'utility', as Bentham used that term, could yield Sen's 'Rational Fools' and Barry and Hardin's 'Irrational Society'.

As a purely abstract intellectual enterprise, neoclassical economic theory in the Anglo-American tradition has considerable merit; but it is bound up with seriously limiting assumptions. Among these are fully informed actors whose actions are governed by law and order. Ordinary theft, violence, and the expropriation and seizure of property are assumed away. The *necessary* conditions for the constitution and operation of a market economy depend on establishing conditions approximating these assumptions by reference to the proper operation and performance of a political system, an epistemic [knowledge and information] system, and a moral order. These patterns of order operate concurrently. Habituated patterns of conduct are not sufficient. Self-conscious awareness of the way that economic, political, epistemic, and moral contingencies may work in complementary ways is necessary to the sustainability and reformability of patterns of order in human societies.

The emphasis on maximizing ‘utility’ or ‘wealth’ means that primary attention is being given to preference orderings; other aspects of the political economy of life are excluded from the focal attention of inquiry and swept into the background. The principle of maximizing Utility, also referred to by Bentham as the ‘happiness principle’, presumably applies universally to people everywhere for choosing among bliss points without regard to language, culture, or the constitution of order in particular societies and ways of life. The place of knowledge and of information, the place of a moral order as constitutive of fiduciary relationships, the place of law and the requirements of justice, and the requirements of intelligibility in human artisanship are treated as outside the focus of inquiry. Such circumstances are susceptible to self-deception. If attention is given only to preferences, there is a danger that the ‘whole moral and intellectual condition of a people’ will be reduced to ‘intellectual dust’, as Tocqueville asserted ([1835–40] 1945, 1:299, 2:7).

Continuing to adhere to an orthodox way of applying ‘economic reasoning’ to nonmarket decision making does not allow for learning to occur. An openness to uncertainty, social dilemmas, anomalies, and puzzles as presenting problematics, allows for learning, innovation, and basic advances in knowledge to occur. This is why all scholarship in the social and cultural sciences needs to be sensitive to the artifactual character of language and the intellectual constructions that are used to frame inquiry. The existence of conflict should serve as a reminder that our intellectual constructions may be at fault. Recognizing different ways of conceptualizing problematics may be the key to the achievement of conflict resolution. Different ways of conceptualizing the intellectual enterprise within and among the social and cultural sciences is of basic importance in working out the essential relationships of ideas to deeds in human societies.

The problem of lawful order

If we recognize that Jeremy Bentham, the early exponent of the concept of Utility as a single, linear scale of values, was a philosopher with a strong interest in jurisprudence, we can begin to appreciate some of the difficulties that can arise in applying economic reasoning grounded only in Utility theory to nonmarket decision making. Bentham’s concept of Utility served as a single summary measure for preference orderings implying a single selection principle applicable to all human choices. Both Hume and Adam Smith used the term *utility* to mean ‘usefulness’ rather than a summary measure for all values. Maximizing Utility for Bentham also meant the achievement of the greatest good for the greatest number.

Bentham’s way of addressing the problem of rule-ordered relationships was to presume that men of goodwill could know what would provide the greatest good for the greatest number and, thus, what was good for others. Such men could be relied on to establish a rational code of law that would avoid the irrationalities of relying on the Common Law, an accretion of precedents derived from the accidents of historical decisions accumulated from the past. The problem of representative government could be resolved by the selection of an assembly of men of goodwill rather than of aspiring politicians seeking to win elections and form governing coalitions to enjoy the fruits of victory. The criminal law for Bentham was the core of the law because it established the bounds of lawful conduct and was, presumably, made effective by enforceable sanctions. A fear of punishment rather than a sense of justice motivates men to obey rules. Bentham’s solution to the problem of men governing men placed reliance on principles of command and control, in contrast to Madison’s solution of using power to check power in a search for conflict resolution in accordance with principles of freedom and justice. If potentials for deception and self-deception prevail in human societies, a way to cope with such ambiguities is to rely on principles of contestation among opposite and rival interests. Checks and balances are necessary to make such systems work. But then the question is how to achieve commonalities.

We face a puzzle posed by Hobbes of whether the unity of commonwealths turns on the unity of the Sovereign *representative* or the unity of the *represented*. Hobbes presumed that the unity of the commonwealth could only be achieved by the unity of the Sovereign representative. The American federalists, by contrast, presumed that the application of covenantal methods to conflict and conflict resolution was the appropriate way to create the conditions of common knowledge, shared understanding, social accountability, and mutual trust that were viewed as essential to self-governing communities of relationships and to the achievement of the conditions of peace and other public goods.

If command and control by a single power are not the key design principles, how do we devise the rules for a fair game? These rules require the experience of communicating and relating to others in the context of a prior background of common knowledge, shared understanding, social accountability, and mutual trust. Human beings are always drawing on prior experiences, but they need not be the slaves of precedents. Systems of rule-ordered relationships depend on change,

adaptability, and reformulation. What methods of normative inquiry should be applied to the construction and alteration of rule-ordered relationships?

Hobbes presumed that standards of fairness depend on informed consent: 'It is in the laws of a commonwealth, as in the laws of gaming: whatsoever the gamesters all agree on, is injustice to none of them' ([1651] 1960, 227). This assumption implies standards achieved through informed consent – general agreement, not majority rule. Hobbes warned that 'Unnecessary laws are not good laws; but traps for money' (*Ibid.*, 227–28). Adherence to the Golden Rule as a method of normative inquiry is an appropriate way to devise the rules of a fair game that are consistent with rules of equity and informed consent. If the Common Law of England had been constructed by relying on the principles of equity inherent in God's law, the Common Law might then be revised by relying on principles of equity appropriate to a search for equitable solutions. Covenantal methods are constitutive of covenantal societies. This would be an alternative to Hobbes's sovereign or to Bentham's reliance on men of goodwill to formulate a rational code of law presuming criminal law to be the core of positive law.

The cost calculus introduced by Buchanan and Tullock (1962), emphasizing expected decision costs as time and effort expended on the making of decisions and expected external costs as the deprivations likely to be suffered from adverse decisions – or the mutual advantage gained from favourable decisions – goes some distance in taking account of factors that would enter into a method of normative inquiry appropriate to the formulation of rules for a fair game. Their cost calculus is an effort to array expected costs consistent with Utility calculations. Estimating 'costs' applicable to both monetized and nonmonetized relationships does not provide the basis for formulating a fair set of rules as such. Jurisprudence still has its place. A cost calculus is a useful mode of computation in estimating what is worth doing, as a complement to other standards of performance.

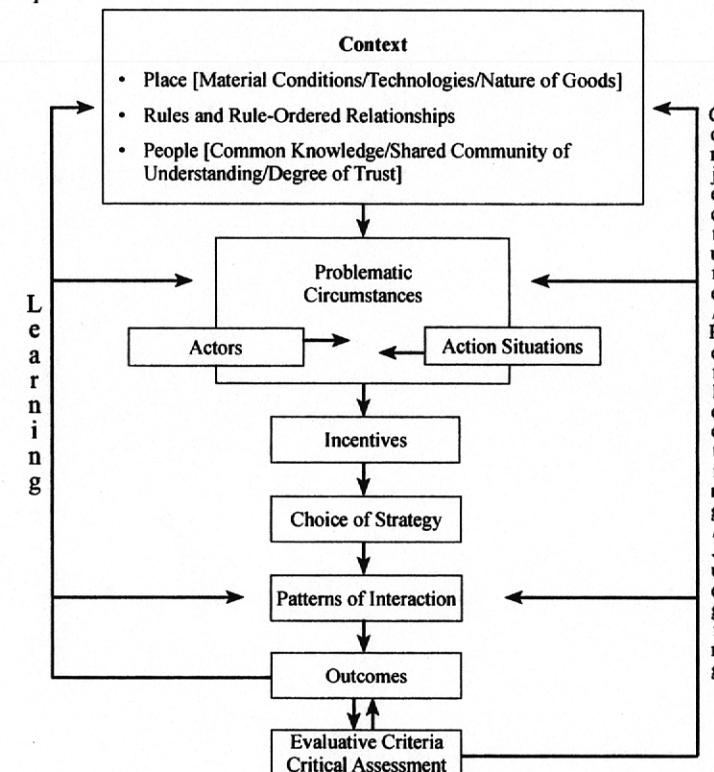
Human choice involves contingent relationships grounded in knowledge *plus* the capacity to weigh and choose among alternatives in relation to criteria of choice. The important contribution by Buchanan and Tullock was to recognize that the logic of choice applied to the choice of rules is different than the logic of choice applied to the selection of persons to serve in positions of political authority or the expenditure of money to buy vendible services and products. How to select 'men of goodwill' is always problematic. How to achieve equitable resolutions by using power to check power turns critically on the achievement of a culture of inquiry to pursue a problem-solving mode of inquiry applicable to conflict and conflict resolution.

Eucken's critique and the analyses offered by Hobbes, Montesquieu, Hume, Adam Smith, and others addressing similar questions in the seventeenth and eighteenth centuries have led me to conclude that the requirements of epistemic choice cannot be met by universal models alone. Differently conceptualized systems of order in human societies do exist. Such systems are constituted in different ways. Establishing commensurability for treating variable characteristics requires reference not to an infinite plenitude of 'facts' but to common elements in a framework that can take on variable characteristics.

Features of an Analytical Framework

In my judgment, the innovative thrust in early Public-Choice efforts was to bring together concerns about 'methodological individualism', 'the nature of goods', and 'decision-making arrangements' (institutions) as distinct elements to be taken into account in addressing market and non-market decision making (V. Ostrom [1973] 1989). These were elements of a general framework that could be used to specify the logic of prototypical situations in human societies. An epistemic element – the place of common knowledge and communities of shared understanding in decision situations – was neglected. The accompanying schematic in Figure 9.1 is a representation of such a framework.

Figure 9.1: A Framework of Elements and Stages in Institutional Analysis and Development



Actors perceive incentives (opportunities and constraints) in problematic circumstances in light of the structure of action situations set in a more general context. These incentives affect their choices of strategies in interactions affecting outcomes. These processes are evaluated through conjecturing, reflecting, and judging. Individuals in such situations learn to modify the structure of the situation or their strategies in an emerging or destabilizing system of order. (For similar frameworks, see Kiser and E. Ostrom 1982; E Ostrom 1990; and Oakerson 1992).

Unlike a universal model that is presumed to apply to human experience everywhere, a framework uses basic elements that can be brought together to conceptualize different patterns of order in human societies. By drawing on human agents to be the active elements that make the system work, it is possible to consider competing hypotheses about differently conceived systems of order, provided that people in human societies are willing to engage in the experiments. Criteria applicable to epistemic choice might then be applied to conjectures about different systems of political order. It would be appropriate to conjecture whether societies of men [and women] might constitute 'good governments' by reflection and choice, provided that they are willing to specify their standards of judgment. Under these circumstances, the 'political doctrine' used to formulate 'basic demands and expectations' typically set forth in constitutions, charters, and formal declarations, as expounded in Lasswell's formulation, might be treated as relevant hypothetical conjectures within 'political science' and the related cultural and social sciences.

Tocqueville used a similar framework for his study in *Democracy in America*. Before addressing himself to the institutional arrangements characteristic of the American system of governance, he explicitly considered the physical circumstances of the North American continent, where the Anglo-Americans had settled and lived in relation to the aboriginal population. The origins – historical background – of the Anglo-Americans and their general social condition were also considered as the context for specifying the institutional arrangements characteristic of their system of governance. His analysis of the particular factors that contributed to the maintenance of the American federal republic turned explicitly on the elements in his framework:

- I. The peculiar and accidental situation in which Providence has placed the Americans.
- II. The laws [rules and rule-ordered relationships].
- III. The manners and customs of the people. ([1835] 1945, 1:288)

The analytical problem, then, is how contextual elements fit together to create action situations that are relevant to the choices being made by actors who are acting with reference to that situation. The more fully the situation can be specified, the less burden needs to be placed on the particular rationality postulates being asserted for hypothetical actors. A postulate of complete or perfect information can be avoided if situational conditions pertaining to common knowledge and shared communities of understanding can be specified. Thus, Tocqueville presumed that manners and customs of the people apply to moral and intellectual conditions that are characteristic of those who are participants in action situations. The weaker form of such a postulate would be a combination of Hobbes's conception of power as the use of present means to obtain some future apparent good when combined with the assertion of 'a perpetual and restless' striving that persists so long as life endures. Active agents are motivated to act in ways that will leave them better off, rather than worse off, as they conceptualize the importance of fundamental values,

including peace, knowledge, freedom, justice, and well-being, but not necessarily limited to those values.

A framework is necessary in specifying the features that need identification in any analytical effort. Indicating how some activating factor can be used to drive transformations to be achieved is a way of specifying hypothetical if-then contingencies to account for cause and effect relationships. This is a way of formulating theoretical explanations. Moving toward a more precise specification of the necessary and sufficient conditions for achieving a transformation is the specification of a model. Working with frameworks, theories, and models is necessary for achieving general explanations in the cultural and social sciences and in such fields of study as history, journalism, jurisprudence, and public administration. Model thinking alone is not sufficient. The intellectual enterprise requires moving back and forth across frameworks, theories, and models so as to appropriately fit limiting conditions, opportunities, and hypothetical contingencies into the multidimensional facets characteristic of the artifactual nature of human habitation.

The rudiments for such a framework can be built by drawing on the early work of Public-Choice scholars. Methodological individualism is a way of postulating active agents. These agents act in light of knowledge and information and in relation to material conditions and technologies, to affect the nature of the goods that function in the economy of life. Relationships are mediated by decision-making arrangements set within the moral and intellectual conditions that affect how individuals relate to each other.

Methodological individualism

I use the term *methodological individualism* to presume, as Lasswell did, that the fundamental feature of human societies is 'acts performed by individuals who are not merely biological entities but persons who have an individual 'ego' and a social 'self' embedded in a cultural heritage (Lasswell and Kaplan 1950: 3). Individuals, as egos and social selves, function in the social and cultural context of normative processes with an autonomous sense of personal existence, without being confined to the extreme rationality assumptions of microeconomic theory. Self-interest considered in light of the interests of others is a way of reaching shared communities of understanding. Calculations pertaining to warrantable knowledge, standards of fairness, other normative considerations, and material well-being are deserving of complementary attention. Collectivities may act in concert and function as actors, but group actions are always to be understood as patterned forms of individual actions.

I presume that the perspective of methodological individualism is necessary in the cultural and social sciences, even for inquiries in societies that do not recognize the autonomous standing of individuals in the constitution of those societies. We, as individuals, use our own resources as human beings to attempt to understand others, presuming as Hobbes did that there is a basic similitude of thoughts and passions characteristic of all mankind. Confucian societies, for example, have not

traditionally recognized the standing of individuals apart from family units (Yang 1987). Any such conception has consequences that are important, as individuals act either with reference to family ties and the webs of obligation and opportunities among kin or as outcasts required to come to terms with radically different conditions of life. Outcasts, for example, can associate together in secret societies, organised as brotherhoods, and function at the margin of society, engaged in some combination of organised crime and as enforcers for those who cannot rely on the formal system of authority relationships. It is entirely possible for such outlaw societies to achieve an honourable place in societies with repressive regimes, as did Robin Hood and his men. Political realities include reference to Mafias of diverse nationalities, implying universal tendencies.

Whether 'lawful' or 'unlawful' regimes best serve the interests of 'people' is an open empirical question. Where indiscretions of speech are treated as high crimes, as in the characterization of imperial Russia by Marquis de Custine ([1839] 1989), standards of legality lose their relationship to standards of moral judgment. Former inhabitants of prison camps in the Soviet Union testify that professional criminals were treated as the elite among the prisoners and cooperated with camp authorities to maintain 'order' within the camps in return for opportunities to prey on political prisoners. Mafias were being nurtured in the confines of prison camps. State authorities who view 'private property' as an evil might also view ordinary theft with ambiguity about who is the offender – the 'thief' or the 'victim'. Under such circumstances, individual entrepreneurship would be difficult to distinguish from organised crime; and 'lawful' activity may be difficult to distinguish from theft. Those issues can only be resolved by determining who is preying on whom with reference to basic standards of moral judgment. *Who* has standing with regard to *what* is a critical question in establishing patterns of order in human societies. Economic orders turn on moral contingencies. A proper economic order would, presumably, be a moral economy (Scott 1976; Popkin 1979).

The place of moral contingencies in the constitution of a moral order needs to be understood in relation to the patterns of character structure that affect individual choice in the context of more extended patterns of human association. This is why Tocqueville identified religions as political institutions in American society even though religious institutions took no direct part in the function of governmental institutions as such. The question remains whether human beings can use their resources as human beings to understand how other human beings can be expected to draw on a cultural heritage, with its ontological, moral, and epistemological contingencies, to anticipate what choices actors would be prepared to make in hypothetically specified situations. We are still dealing with hypothetical actors confronted with the problem of making choices in hypothetical situations.

Knowledge and information

Factors pertaining to common knowledge and asymmetries of knowledge and information are among the reasons why 'applied theoretical' economists concerned with the empirical investigation of industry structures do not undertake studies of

markets in general but focus on particular markets involving closely substitutable goods in which commensurable bodies of knowledge and technologies occur in a nexus of market relationships. We are back to Eucken's problem of whether a single, simple, abstract, universal model of a perfectly competitive market allows comparisons to be made; again we must identify how exogenous parameters and endogenous variables function in establishing the empirical warrantability of theoretical conjectures.

Competitive markets are important 'public' institutions. They play a significant evolutionary role in generating common knowledge about the place of price as a measure of value, for equilibrating supply and demand [production and use] and for establishing conditions of individual rationality. The experience of buying and selling in competitive market economies evokes levels of information and common knowledge placed on a scale of value expressed in prices that is not only advantageous to buyers and sellers but informative to any entrepreneur who may seek to take advantage of opportunities that are available. Anglo-American economic theory emphasizes the equilibrating features of competitive market economies. Austrian economists emphasize the information-generating features and their role in entrepreneurship (Kirzner 1973). When the latter is combined with innovation and advances in knowledge and technologies, equilibrating tendencies are continuously being challenged by disequilibrating tendencies that are affected by advances in knowledge, skills, and technologies, including the institutional arrangements that serve as modes of production, exchange, and consumption or use (Dosi 1984).

The problem of common knowledge and asymmetries applicable to the generation and use of knowledge and information occur in the context of speech communities, in the crafts and professions, in the context of individual and collective choice, and generally in relation to whatever human beings do. The assertion of private property rights and their enforcement depend on communities of shared understanding. Common knowledge is of fundamental importance for coordinated activities in human societies. All knowledge conditions cannot be directly resolved by market exchange. Complementary criteria are required to supplement benefit-cost analysis. Presuppositions of methodological individualism need to be related to communities of shared understanding as fundamental elements in a framework for the analyses of decision situations (Kiser and E. Ostrom 1982; E. Ostrom 1990; Oakerson 1992).

Material conditions, technologies, and the nature of goods

Material conditions as they are transformed by technologies and institutional arrangements have a decisive effect on the conditions of life as these affect the nature of goods. Two sets of variables that pertain to exclusion and to subtractability or jointness of use can initially be used to construct a typology of goods as illustrated in Table 9.2. Other factors related to domain and scope add further dimensionality.

The *exclusion* principle has long been recognized as a criterion essential to the feasibility of market organisation. Two sets of criteria – difficulty of exclusion;

Table 9.2: Types of Goods

Jointness of Use		
Exclusion	Alternative Use	Joint Use
Low Cost	<i>Private Goods:</i> bread, shoes, automobiles, haircuts, books, etc.	<i>Toll [Club] Goods:</i> theatres, night-clubs, telephone service, toll roads, cable TV, libraries, etc.
High Cost	<i>Common-Pool Resources:</i> water pumped from a groundwater basin, fish taken from an ocean, crude oil extracted from an oil pool, etc.	<i>Public Goods:</i> peace and security of a community, national defence, mosquito abatement, air pollution control, fire protection, weather forecasts, etc.

Source: V. Ostrom and E. Ostrom 1977: 12.

jointness of use – have been variously used in efforts to conceptualize public or collective goods as distinguished from private goods (Head 1962; Olson 1965). I emphasize jointness or sub-tractability of use rather than rivalry or nonrivalrousness of Utility considerations. Treated as variables, these two sets could be conceived as independent of one another; and dichotomizing the sets with on yes or off [no] settings could be used to create a two-by-two matrix, including private goods, toll [club] goods, common-pool resources, and public goods.

This simple logical construction reflects abstractions put into dichotomized logical sets. The logical construction is used to clarify sets of distinctions. In practical circumstances, factors pertaining to potentials for exclusion and to use or consumption are likely to represent continua of more or less and in some combination. For example, excludable goods and services are amenable to market organisation, but competitive markets allow open access to buyers and sellers who make joint use of market arrangements. Open competitive markets themselves have the characteristics of public goods, while trading in markets applies to private goods. Discrete markets or shopping centres with assigned locations have the characteristics of common-pool resources. Money as a medium of exchange has the characteristic of a private good; money as a unit of account in a monetary system is a public good. The set of logical categories needs to be used with caution in addressing the exigencies of human experiences. These categories provide ways of addressing essential elements in an analytical schema available to scholars in the cultural and social sciences.

In addition to factors pertaining to exclusion and those pertaining to subtractability or jointness of use, other factors of basic importance pertain to domain and scope, implying multidimensional matrices. Domain bears on factors of territoriality [space], ranging from small third-party neighborhood effects to those of global proportions, as in the case of fallout from nuclear explosion or cumulative changes in the chemical composition of the atmosphere and

stratosphere. Scope pertains to the independence of one or another type of good or service so that units of a good or service are distinguishable from other goods and services. If the state of affairs subject to joint use and consumption implicates a domain of small magnitude, the relevant public – those affected – might be organised with regard to something appropriately called ‘neighbourhoods’. There is no necessary identity between the domain of Nation-States and the domain characteristics either of natural phenomena [e.g. watersheds] or of the way that human habitation is accompanied by neighbourhood effects.

Scope contingencies apply to functional specialization, leading to distinction among goods and services. Both water and electricity have the characteristics of common-pool, flow resources that must be kept isolable from one another. Electrical engineering requires careful attention to ‘insulation’. Flows of storm water, sewer water, and domestic water require separable consideration. Diverse opportunities exist in how enterprises associated with such services might be put together in ways that are accountable to the people being served, to develop a consciousness of the interdependencies among productive, distributive, and consumptive aspects of a public economy in contrast to a private market economy. Where considerable autonomy exists in the exercise of self-organising and self-governing capabilities, various combinations might be achieved in which the character of specialization is resolved by complementary sets of decisions worked out within particular collectivities and in the interrelationships among particular collectivities. Such arrangements are open to mutual accommodation depending on the problematics arising in discrete situations; we need not presume that uniform rules apply to Society as a Whole.

Critical problems arise for the organisation of joint consumption aspects among communities of users in public economies. Diverse opportunities available for organising production functions allow for the creation of quasi-market conditions in a public economy, depending on the alternatives that are available. Scholars with strong applied and theoretical interests in the Public-Choice tradition have faced many of the same problems as applied theoretical economists in industrial organisation. Problems confronting fishers are quite different than those confronting irrigators, even though fisheries and irrigation systems both have characteristics associated with common-pool resources (E. Ostrom 1990; Schlager and E. Ostrom 1992). Furthermore, the interface between the resource base and its use implies that common-property relationships are closely bound up with the ‘private’ property rights of individual users. Variations in the scope and domain of toll goods, common-pool resources, and public goods have substantial implications for how communities of relationships are affected and for what standing those communities have within systems of governance for exercising collective choice and taking collective action. We could expect to find multitudes of collectivities operating in systems of governance that simultaneously function as public economies (V. Ostrom, Tiebout, and Warren 1961; Bish 1971; Advisory Commission on Intergovernmental Relations 1987).

The relationships of private property to public thoroughfares, such as sidewalks, streets, and highways, are closely correlated. How the interests of

diverse publics are to be taken into account is of substantial importance. Collective organisation on a small scale is essential to the interest of smallholders because collective organisation enables them to better articulate their joint interests rather than acting as isolated individuals in relation to State authorities. The relationship of the property rights of individuals to complementary forms of social ownership, including various forms of cooperative associations and private, municipal, and public corporations, is of substantial proportions in all human societies (Grossi [1977] 1981; Netting 1993; E. Ostrom 1990).

Decision-making arrangements

The great diversity of potential public goods and common-pool resources, where exclusion of individuals may be difficult to achieve and where variable patterns in jointness of use may prevail, implies many communities of interests of varying scope and domain. Efforts to escape these complexities by reference to the concept of 'the State' are inevitably confounded by the diversity of decision-making arrangements applicable to choice in human societies. The specter of simplified allusions to 'the Market' and 'the Government' [State] haunts a large proportion of the work in Public-Choice theory. Such uses of language evoke allusions to 'Capitalism' and 'Socialism' under circumstances in which I cannot understand whether the term capitalism refers to what Adam Smith meant by free trade or mercantilism or both. An allusion to something called 'the Government' does not clarify what the term refers to. If the reference implies that the instrumentalities of collective action are organised as a single firm – the Government – occupying a monopoly position with regard to (1) authority relationships and (2) the legal instruments of coercion, we are conceptualizing Public Choice as occurring under conditions specified in Hobbes's theory of sovereignty. Eucken's conjectures about different ways of conceptualizing systems of order would suggest that alternatives of economic, epistemic, and political significance may exist. Concepts of 'States' and 'Markets' are not effective ways of articulating the intellectual revolution that is stirring in our midst. As intellectual constructs, they are too gross to be useful; they run the risk of being misleading and are the source of serious forms of deception and misconceptions.

To make rules binding, criteria grounded in moral distinctions must be enforceable, and enforcement may depend on imposing deprivations [punishment] for failure to conform to rules. There are thresholds of choice where coercion is a necessity for the maintenance of order in human societies. As a consequence, I expect no human society to exist without coercive capabilities. Should the exercise of coercive capability be based solely on a power of command without contestability or on some other way of constituting authority relationships?

One way of coping with a theory of sovereignty is to sort out diverse levels of choice. Buchanan and Tullock's *Calculus of Consent* (1962) began that important task by distinguishing between constitutional choice and collective choice. They argued that a base rule of *conceptual unanimity* is important in establishing consensus about the terms and conditions applicable to the exercise

of collective choice. There are situations where a rule of unanimity might be relaxed by unanimous agreement to prefer other, less encompassing decision rules in light of the time and effort required to achieve unanimity and the strategic opportunities available to holdouts. The operational significance of coerced choice can be subject to levels of mutual understanding and public scrutiny that achieve informed consent or voluntary agreement in establishing standards of legitimacy. Distinctions can be made among constitutional, collective, and operational choices as the necessary and continuing complements to one another if standards of legitimacy are to prevail. Standards of legitimacy, conceptual unanimity, and informed consent mirror one another, but they need not function through single collectivities applicable to whole societies. If constitutional choice is exercised by military coups or revolutionary struggles and if collective decisions are made by ruling elites engaged in predatory exploitation of others, we would expect very limited opportunities to be available for choice in organising ways of life. A unitary power of command implies servitude for subjects, not choice for persons and citizens.

Efforts to achieve binding effects by putting words on paper take us back to conceptual-epistemic problems. Words by themselves do not convey meaning but depend on communities of shared understanding among members of speech communities. The language of the Constitution of the United States has been used to draft constitutions in other parts of the world but without much effect. This has led many scholars to conclude that constitutions are meaningless fictions or, at most, positive morality, not positive law. The problem cannot, however, be resolved at that level. Statutory enactments and administrative rules and regulations are also words on paper. What are the grounds for legitimacy? Officials can command; but individuals do not necessarily obey. Patterns of deception and self-deception may pervade human relationships. We are back to problems of publicness in language, communication, meaning, common knowledge, consensus about basic norms or criteria of choice, and social accountability. In the absence of consensus, conflict is possible. In the presence of conflict, a problematic situation may exist requiring the adoption of a problem-solving mode of inquiry to reestablish shared communities of understanding. Such circumstances suggest that epistemic difficulties exist and that problems of epistemic inquiry about the relationship of concepts and information to problematic situations have priority in deciding what is to be done. A single, universal, comprehensive, and workable code of law applicable to all mankind is an empirical impossibility. So is a single, simple, universal 'model' of 'economic' reasoning applied to 'nonmarket' decision making.

Back to epistemic and cultural factors

Words in the realm of science and technology do not convey meaning apart from knowledgeable, skilled, and intelligible individuals who know how to act with reference to the meaning assigned to words. No experiment can be appropriately conducted by uninformed experimenters or 'strategic opportunists' who wish to rig the results to their own advantage. The conduct of any viable enterprise depends

on knowledge, skill, and intelligibility among those who constitute the enterprise. Any viable enterprise, public as well as private, turns on the use of knowledge in whatever gets done, set in a context of economic potentials mediated by patterns of rule-ordered relationships as essential complements to one another.

The importance of epistemic and cultural factors in the constitution of different patterns of order can be illustrated by contrasting the republican character of covenanting [federal] societies with despotic systems of order. The concept of *res publica* – the public thing – implies an open public realm in which public affairs are openly considered and decisions are reached through open public deliberation. Cooperative activities depend on undertaking contingent agreements subject to plausible commitments. The promises made need to become binding commitments consistent with contingent agreements. If some participants are played for suckers, trust is broken and a moral offense has been committed. Openness of deliberation in processes for mediating conflict and achieving conflict resolution need to be designed to elucidate information, articulate arguments bearing on contending interests, and reach resolutions in light of mutual and public consideration of complementarities. Individual interests need to be understood as having commonalities bearing on shared communities of interest.

How individual interests relate to common interests needs to be clarified through processes of conflict and conflict resolution that serve the correlative purposes of generating common knowledge and shared communities of understanding that create a consciousness of complementary social identities. The structure of incentives needs to be such that the quest for cooperative endeavours is reinforced in ways that are compatible with fundamental values, such as peace, enlightenment, liberty, justice, or wellbeing; such values should have the potential for becoming universal public goods. Incentives compatible with ‘republican virtues’ need to be the basis for the design of decision structures that give expression to decision processes consistent with the enlightenment of the open public realm.

In autocratic systems of order, which are constituted with reference to a single centre of Supreme Authority and which rely on law as command uniformly applicable to people under diverse ecological conditions, the pursuit of cooperative endeavours runs the risk of violating the letter of some legal formulation having the proclaimed force of law. Instead of plausible commitments to be resolved by commonly accepted standards of enlightenment and justice, advantage is likely to accrue by pursuing a strategy of plausible ignorance. Resolutions are sought through secret accommodation. These circumstances occur where regulatory prohibitions are subject to granting conditional licenses and permits by administrative methods. The confidential character of administrative methods encourages favouritism. Regulatory measures become potential sources of corruption and traps for money. Administrative methods that focus on legalities become destructive of a rule of law. Under such circumstances, each individual’s task becomes a lifelong endeavour of achieving special connections to cope with the problems of life. The standard response is to plead ignorance rather than trying to be helpful to others and acquiring a public reputation for being helpful to others.

What Tocqueville refers to as ‘the whole moral and intellectual tradition of a people’ accrues in the course of living a life. Problems are worked out through time, in structures mediated by processes at work in everyday life. In this way, people form habits of the heart and mind with less than conscious awareness of the changes that transpire in the course of time. Yet the viability of democratic societies depends on continuing the function of the *res publica* conditions, while maintaining the continuities of a rule of law that is itself subject to change through time, and while meeting the requirements of freedom and justice. Incentives to seek special advantage through the art of manipulation always exist. Random solutions will not suffice. Instead, knowledgeable, skilled, and intelligible creatures confront the challenge of learning how to correct errors and how to respond to problematic situations in constructive ways.

Viable democracies are neither created nor destroyed overnight. Emphasis on form of government and the binding character of legal formulations are not sufficient conditions to meet the requirements of democratic societies. The moral and intellectual conditions of those who constitute democratic societies are of essential importance. This is why building common knowledge, shared communities of understanding, patterns of accountability, and mutual trust is as essential as producing stocks and flows of material goods and services. The epistemic and cultural contingencies of life are at least as important as the economic and political conditions narrowly construed.

My sense is that the more innovative contributions to the Public-Choice tradition of research have come from contributors who were concerned with a better understanding of basic anomalies, social dilemmas, or paradoxes, rather than with applying a single abstract model of economic reasoning to nonmarket decision making. The latter concern becomes an exercise in the application of an orthodox mode of analysis in price theory; the former opens important new frontiers of inquiry.

Conclusions

Language and its place in the articulation of knowledge is the most fundamental source of productive potentials in human societies. No human mortal can be presumed to know the Truth. The conditions for establishing the warrantability of what we presume to know are the foundations for developing a culture of inquiry appropriate to addressing ambiguities and unknowns in efforts to identify and resolve that which is problematic. The future of Public Choice will be determined by its contributions to the epistemic level of choice in the cultural and social sciences and to the constitution of the epistemic order with which we live and work. Increments to knowledge in research programs require conceptual ordering for what is to be taught. All processes of choice are mediated by languages that enable human beings to acquire capabilities not achieved by lions, bears, and wolves.

Rationality is affected by access to knowledge and communities of shared understanding; every individual is fallible; and everyone endures the costs of choices made under ignorance, misconceptions, deceptions, and strategic manipulations.

Both the systems for making epistemic choices and those for making market choices contribute to the elucidation of knowledge and information essential to systems for making public choices. I cannot imagine a modern society without some form of exchange arrangements characteristic of market organisation. A key question is how variable structures among market arrangements affect conduct and performance. If the range of inquiry is extended to the epistemic realm, our concern is with how variable conceptions [ideas] affect the design of structures, the organisation of processes, patterns of conduct, and performance. The concept of a perfectly competitive market can serve as an important conceptual yardstick and an initial point of departure. Whether such a conceptualization serves as an adequate basis for discriminating observation about different types of market structures is questionable.

That problem is made more difficult by the potentials for strategic collusion between economic entrepreneurs and political entrepreneurs in setting the rules of the political and economic games to facilitate the dominance of the few in relation to the many. Potentials for collusion and intrigue are greatly enhanced when political orders are constituted as monopolies in the exercise of rulership prerogatives and in control over the instruments of coercion in societies. The application of economic reasoning to public choices cannot be advanced very far using the postulates of perfectly informed actors participating in competitive markets operating in unitary States directed by a single centre of Supreme Authority. Equilibrating tendencies under those circumstances are likely to sacrifice market rationality to bureaucratic rationality and both market rationality and bureaucratic rationality to corruption. We need to go back to basics to reconsider the human condition and what it means to be a human being relating to other human beings in the world in which they live.

References

- Advisory Commission on Intergovernmental Relations [Ronald J. Oakerson] (1987) *The Organization of Local Public Economies*, Washington, D.C.
- Albert, H. (1984) 'Modell-Denken und historische Wirklichkeit', in H. Albert (ed.), *Oekonomisches Denken und sociale Ordnung*, Tübingen: J. C. B. Mohr (Paul Siebeck).
- Aristotle (1942) *Politics*, trans. Benjamin Jowett, New York: Modern Library.
- Barry, B. and Hardin, R. (eds) (1982) *Rational Man and Irrational Society?: An Introduction and Sourcebook*, Beverly Hills: Sage.
- Bentham, J. (1823; 2nd edn 1948) *An Introduction to the Principles of Morals and Legislation*, New York: Hafner.
- Berman, H. (1983) *Law and Revolution: The Formation of the Western Legal Tradition*, Cambridge, Mass.: Harvard University Press.
- Bish, R. L. (1971) *The Public Economy of Metropolitan Areas*, Chicago: Markham.
- Boulding, K. E. (1963) 'Toward a Pure Theory of Threat Systems', *American Economic Review* 53 (May): 424–34.
- Buchanan, J. M. (1979a) 'Natural and Artifactual Man' in *What Should Economists Do?* Indianapolis: Liberty, pp. 93–112.
- Buchanan, James M. and Tullock, Gordon (1962) *The Calculus of Consent: Logical Foundations of Constitutional Democracy*, Ann Arbor: University of Michigan Press.
- Coleman, J. S. (1990) *The Foundations of Social Theory*, Cambridge: Harvard University Press.
- Custine, M. de (1839; 2nd edn 1989) *Empire of the Czar: A Journey through Eternal Russia*, New York: Doubleday.
- Dosi, G. (1984) *Technical Change and Industrial Transformation*, New York: St. Martin's.
- Eucken, W. (1940; 2nd edn 1951) *The Foundations of Economics*, Chicago: University of Chicago Press.
- Grossi, P. (1977; 2nd edn 1981) *An Alternative to Private Property: Collective Property in the Juridical Consciousness of the Nineteenth Century*, trans. Lydia G. Cochrane, Chicago: University of Chicago Press.
- Harsanyi, J. C. (1977) 'Rule Utilitarianism and Decision Theory', *Erkenntnis* 11 (1) (May): 25–53.
- Hayek, F. von (1973) *Rules and Order*, vol. 1 of *Law, Legislation and Liberty*, Chicago: University of Chicago Press.
- Head, J. G. (1962) 'Public Goods and Public Policy', *Public Finance* 17(3): 197–219.
- Hobbes, T. (1651; 2nd edn 1960) *Leviathan or the Matter, Forme and Power of a Commonwealth Ecclesiasticall and Civil*, Oxford: Basil Blackwell.
- Hume, D. (1948) *Hume's Moral and Political Philosophy*, New York: Hafner.
- Kirzner, I. M. (1973) *Competition and Entrepreneurship*, Chicago: University of Chicago Press.

- Kiser, L. L. and Ostrom, E. (1982) 'The Three Worlds of Action: A Metatheoretical Synthesis of Institutional Approaches', in E. Ostrom (ed.) *Strategies of Political Inquiry*, Beverly Hills: Sage, pp. 179–222.
- Lasswell, H. D. and Kaplan, A. (1950) *Power and Society: A Framework for Political Inquiry*, New Haven: Yale University Press.
- Netting, R. McC. (1993) *Smallholders, Householders: Farm Families and the Ecology of Intensive, Sustainable Agriculture*, Stanford: Stanford University Press.
- North, D. C. (1990) *Institutions, Institutional Change, and Economic Performance*, New York: Cambridge University Press.
- Oakerson, R. J. (1992) 'Analyzing the Commons: A Framework' in D. W. Bromley et al. (eds) *Making the Commons Work: Theory, Practice, and Policy*, San Francisco: Institute for Contemporary Studies Press, pp. 41–59.
- Olson, M. (1965) *The Logic of Collective Action: Public Goods and the Theory of Groups*, Cambridge: Harvard University Press.
- Ostrom, E. (1989) 'Microconstitutional Change in Multiconstitutional Political Systems', *Rationality and Society* 1 (1): 11–50.
- (1990) *Governing the Commons: The Evolution of Institutions for Collective Action*, New York: Cambridge University Press.
- Ostrom, V. (1973; 2nd edn 1989) *The Intellectual Crisis in American Public Administration*, Tuscaloosa: University of Alabama Press.
- Ostrom, V. and Ostrom, E. (1977) 'Public Goods and Public Choices' in E. S. Savas (ed.) *Alternatives for Delivering Public Services: Toward Improved Performance*, Boulder, Colo.: Westview, pp. 7–49.
- Ostrom, V., Tiebout, C. M. and Warren, R. (1961) 'The Organization of Government in Metropolitan Areas: A Theoretical Inquiry', *American Political Science Review* 55 (Dec.): 831–42.
- Popkin, S. (1979) *The Rational Peasant*, Berkeley and Los Angeles: University of California Press.
- Popper, K. (1967) 'Rationality and the Status of the Rationality Principle' in E. M. Classen (ed.) *Le fondements philosophiques des systèmes économiques: Textes de Jacques Rueff et essais redigés en son honneur*, Paris: Payot pp. 145–50.
- Schlager, E. and Ostrom, E. (1992) 'Property-Rights Regimes and Natural Resources: A Conceptual Analysis', *Land Economics* 68 (3) (August): 249–62.
- Scott, J. C. (1976) *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*, New Haven: Yale University Press.
- Selten, R. (1986) 'Institutional Utilitarianism', in F. X. Kaufmann, G. Majone, and V. Ostrom (eds), *Guidance, Control, and Evaluation in the Public Sector*, Berlin and New York: W. de Gruyter, pp. 251–63.
- Sen, A. K. (1977) 'Rational Fools: A Critique of the Behavioral Foundations of Economic Theory', *Philosophy and Public Affairs* 6 (summer): 317–44.
- Smith, A. (1759) *The Theory of Moral Sentiments*, Indianapolis: Liberty.
- (1776) *The Wealth of Nations*, London: Ward, Lock, and Tyler.

- Tocqueville, A. de (1835; 1840; 3rd edn 1945) *Democracy in America*, New York: Knopf.
- Tullock, G. (1965) *The Politics of Bureaucracy*, Washington, D.C.: Public Affairs Press.
- Yang, T.-S. (1987) *Property Rights and Constitutional Order in Imperial China*, PhD diss., Indiana University, Bloomington.