Institutional Analysis and Praxis
The Social Fabric Matrix Approach
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The Social Fabric Matrix Approach
To Greg and Theresa Hayden
Foreword

There has never been a better time for the social fabric matrix. As this book is being published, the idea that unregulated market capitalism leads to the best of all possible worlds has been thoroughly discredited. A series of economic and social problems have come to the forefront of national discussion and policy debates. There is now widespread acceptance that human activity, particularly the consumption of nonrenewable energy resources, has contributed to global warming. The lack of oversight of the financial industry encouraged reckless practices that endangered the stability of the entire financial system, prompting bailout efforts based on the fragile interdependence of the financial and economic systems. The shortcomings of our health care system are increasingly evident, including the growing number of uninsured citizens, the difficulties for businesses in offering health insurance, and the effects of health and health care on the ability of individuals and families to maintain a decent standard of living. Perhaps the best illustration of a complex system that cries out for coordinated policy-making is in the critical area of energy, where public and private decisions on energy policy not only have direct effects on consumer costs, but also have effects on global warming, local ecosystems, international relations, the health of our citizens, and the sustainability of companies and communities.

In short, there is growing recognition of the interdependence of the economic system with the environment and the broader institutions of society. The social fabric matrix is a critical tool for understanding and mapping this interdependence, looking not only at direct effects but also at the many indirect effects and interactions that occur with almost every economic and policy decision. As the essays in this book make clear, it is highly versatile, with applications to a wide spectrum of public and private decision-making.

I first met Greg Hayden, who designed the social fabric matrix, when I was a college intern in the Nebraska legislature. I was working on a project on energy policy, for which he was an advisor. I was so impressed with Greg’s perspective that I chose to come to the University of Nebraska-Lincoln to study with him in graduate school. It was one of the best decisions of my life. He gave me a thorough grounding in institutional economics and excellent training in doing policy-relevant research. His intelligence, wit, and caring were an inspiration to me and many other young scholars. It was clear both then and now that he combines...
excellent analytical skills with a deep concern about real-world outcomes, reflecting his desire to ensure that social and economic institutions effectively serve society’s values.

Greg strongly impressed a candidate in the Nebraska Governor’s race, Bob Kerrey, so that when Kerrey was elected he asked Greg to be one of his top aides. I also joined state government at that time and helped Greg design and implement several task forces on economic development. All of our work was based on the principles that he developed in the social fabric matrix, examining the connections among economic activity, technology, public and private policy, social and physical infrastructure, and environmental and community health. Those principles have stayed with me and informed all of my research and policy work.

More than ever, the actions of individuals and organizations can have cascading effects throughout the economic, social, environmental, and political systems. This book will help to spread awareness of the social fabric matrix and show how it is an excellent tool for addressing our mounting economic and social problems in an intelligent and humane way.

Douglas Kruse
Rutgers University
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The Social Fabric Matrix Approach to Policy Analysis: An Introduction

Scott T. Fullwiler, Wolfram Elsner, and Tara Natarajan

Abstract The purpose of this chapter is to introduce the reader to the Social Fabric Matrix approach to policy analysis (SFM-A) as laid out in Hayden (2006). This chapter is better understood as a “how to” chapter rather than as a more traditional summary or discussion of the rest of the contributions in the volume. The chapter describes the foundations of the SFM-A approach in general systems theory and instrumentalist philosophy. It then describes the process of building an SFM, and presents extensions of the SFM-A to normative systems analysis, analysis of time and timeliness, quantitative modeling, and social indicators. The chapter concludes with a brief summary of the rest of the chapters.

Introduction

In Policymaking for a Good Society: The Social Fabric Matrix Approach to Policy Analysis and Program Evaluation (hereafter referred to as Policymaking), F. Gregory Hayden lays out a rigorous, comprehensive methodology for undertaking policy-relevant research on complex real-world problems. The Social Fabric Matrix Approach (hereafter, SFM-A) and methodology is philosophically and theoretically developed from, and consistent with, the original evolutionary-institutional economics (hereafter, OIE – “Original” Institutional Economics) and is one of the most comprehensive, empirical, and policy-relevant methodologies to come out of OIE.

The publication, subsequent discussion, and further applications of Policymaking provide an opportunity to further explore and demonstrate the potential for fruitful research, policy analysis, and policy recommendations in the context of the SFM methodology.

This volume is needed and presented because of the relevance of the SFM-A and its influence on scientific methodology and policy analysis. In short, the SFM-A is creating, if not a new school of thought, then a class of applied, empirical, and policy-relevant analyses of complex problems in networked configurations. We basically refer to complexity when there are direct interdependencies among many heterogenous agents. As one reviewer of Policymaking suggests, the SFM approach

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in fact may serve as the future methodology not only for complex heterodox economic analysis but also for policy evaluation in order to make policy more consistent with the complexity of reality” (Elsner 2007).

Modern society faces a number of already well-documented challenges from ecological destruction; globalization, uneven development, and economic inequality; un(der)employment; financial market shortcomings; power and hierarchical regulations; innovation vs. vested interests; the aging of populations in many societies, and so forth – with other yet unnamed challenges sure to be added. They all reflect, among other things, an increasing complexity (Elsner 2005). Addressing such challenges appropriately will require critical analysis of complex interrelations and incentive structures, ceremonial and instrumental institutional arrangements and values, ideologies and belief systems, (often faulty) public policies, actions, and nonactions – hence, the need for relevant research methodologies.

Hayden (2006a, p. 1) writes that, unfortunately, “the understanding we have gained from science and from experiencing the technological society on a day-to-day basis has… yet to produce a good society.” Instead, people work more hours only to watch their wages and salaries fall; they support more environmental protection endeavors only to learn that pollution levels continue to grow and species continue to be lost; people gain higher levels of education and training only to remain underemployed. Government employees work hard, gather more data than ever, and access greater computer capability, yet productivity problems continue to abound; tax payments to governments and consumer payments to corporations continue to grow, but every day we see infrastructure deteriorating and consumer products becoming shoddier. Production has grown on a global scale and trade has increased among nations, while per capita income in over half of these nations is lower than a decade ago… the resource commitment to health care is massive yet the reality of the American health care system is that it is very sick; and billions of public dollars are poured into farm payments, while … family farms continue to fail. (p. 2)

Policymaking explains “an approach to policy analysis and planning that will allow us to capture the complexity of the world around us and be consistent with modern science” (p. 1; emphasis added). Thus, past and even current ongoing failures notwithstanding, the premise here is that we know enough, care enough, and have adequate resources and technology to solve our social, economic, and environmental problems. Or, stated differently, this book is optimistic by current standards of cynicism and pessimism. Our knowledge base is sufficient to do the research to understand our problems, our will is more than adequate, our work ethic is strong, our resources are abundant, and people are sufficiently educated to carry out the tasks in a technological society. (p. 2)

The shortcoming heretofore has been that “we have not had the analytical means necessary to meld our will, knowledge, and institutions into a policy paradigm that allows us to obtain success” (p. 2).

It is no small feat to design a method with such broad applicability as the SFM-A has already demonstrated, particularly since to do so also requires a significant break from previous dominant analytical paradigms that relied heavily upon reductionism and determinism (i.e., noncomplexity). Instead, Hayden argues that, a new approach, if it is to be successful, must integrate modern science with an instrumentalist philosophy:

because we no longer believe that life—as structured in an institutional and ecological milieu—is one dimensional, our measures and analytical tools cannot be one dimensional. Because we no longer think that beliefs and values can be ignored, if for example, we want
successful irrigation systems or health care plans, an approach is needed to integrate what sociologists and anthropologists know about beliefs and values with the expertise of engineers, ecologists, agronomists, economists, physicians, and other expertise as needed for the problem at hand. This integration can no longer be the kind that has persons working with different expertise working in isolation, and their independent work then placed under one cover. The analysts need to be guided by a common model, or, to use Einstein’s term, a common frame. The engineer’s work must be guided by belief criteria, the sociologists’ analysis should be consistent with the relevant technology, the economists’ models need to be non-equilibrium systems, policymakers’ actions are the results of integrated modeling, and so forth. (p. 1)

The editors and contributors to this volume suggest that the SFM-A provides not only a powerful framework for policy research but also a framework that is comprehensive and adaptable to a wide variety of socioeconomic and policy issues. Moreover, policy success obtained without such a complexity-reflecting analytical approach will be coincidental.

In this chapter, we introduce the SFM-A by first discussing its theoretical underpinnings, then the SFM itself, and finally its larger paradigm for policy analysis.

**Instrumentalist Philosophy and the SFM Methodology**

Marc Tool writes that “[v]alue premises permeate the whole of social inquiry. If inquiry is purposive—and it must be—it is value laden…. Value assumptions, premises, criteria, are involved in our perception of what is a proper object of inquiry” (1986, p. 57). Nobel Prize winning economist Gunnar Myrdal agreed that “valuations are always with us. Disinterested research there has never been and can never be… Our valuations determine our approach to a problem, the definition of the concepts, the selection of observations, and, … in fact, the whole pursuit of study from beginning to the end” (quoted in Hickerson 1988, p. 167). As mentioned, the SFM-A is based upon the instrumentalist approach to inquiry. The instrumentalist approach emphasizes the normative, embedded process of research and its influence on experience, the relationship of knowing to the purpose of solving problems, and the need for solutions to evolve with changing and evolving contexts.

Hayden (2006a, Chap. 3) lists three conceptual pillars for applying instrumentalist philosophy in the policy sciences: the transactional approach to science, a problem orientation, and judging actions by their consequences.

Regarding the first of these, Hayden writes, “‘trans’ means across, and the emphasis is on the reality that there are numerous rules, regulatory criteria, enforcement agencies, laws, institutions, and beliefs across any relationship or transaction; numerous overlapping forces guide the agents and their actions” (p. 25). The argument here is that traditional, interactional approaches – such as neoclassical economics’ supply and demand equilibrium analysis – are by themselves overly simplistic to serve as the foundation for real-world policy analysis. For instance, instead of the interactional forces of supply and demand in a mythical “loanable funds” market, the real world of borrowing and lending includes

the Federal Reserve System, the International Group of Seven (G-7), the International Monetary Fund, the World Bank, the international electronic currency system, the local