

## CHAPTER 2

### **POLICY PARADIGMS SHOULD BE CONSISTENT WITH THE COMPLEXITY OF REALITY**

There is a plethora of policy analysts, research consultants, professors, planners, and scientists with concomitant labs, bureaus, university research departments, policy institutes, survey centers, and so forth. Coincidentally, the world's problems continue to grow. Yet, the recommendation here is that more research is needed. E. F. Schumacher, on occasion, stated that a neurotic is one who, upon discovering that he is going in the wrong direction, doubles his speed. Is the thesis of this book based on such neurotic tendencies? No. Evidence abounds to demonstrate that some research has been going in the wrong direction. Arguments, however, do not follow that encourage a continuation of that journey. The argument is that a holistic, integrated, and systemic methodology is needed if we want to avoid wasting our research resources, or, worse, creating more serious problems. Research has been used as a powerful weapon to support policies that help create severe environmental and health problems.<sup>1</sup> Such research is not completed by analysts trying to improve the quality of life and the environment. The more serious problem is the case of researchers who are well meaning, yet have a very narrow or misguided concept of reality, and use scientific models consistent with that concept.

For example, some neoclassical economists occasionally startle the public by recommending the selling of babies, encouraging smoking because it kills people, approving the institution of women selling themselves into slavery, and similar kinds of policy conclusions. At a professional economics meeting I attended, a woman economist accused her male colleagues of being vicious because they approved of women selling themselves into slavery. That accusation, however, is a mischaracterization if one understands economics as it is often espoused and taught in university economics departments. A component of the model which commands the brain ware of many economists is an assumption that what people do in everyday life is determined by utility

maximization of the participating individuals. If that is the model in one's tool kit, then it follows from that model that women who sell themselves into slavery have rationally calculated their utility functions, and they are selling themselves because it gives them the greatest satisfaction. Using classical logic, this is an acceptable conclusion given the model. The gender and personality traits of economists are not the issue, however. The problem is with the utility maximization model of analysis.

First, utility does not exist in the real world; thus, people cannot calculate utils or maximize utility. The idea of utility was found to be invalid by social scientists in the 1800s. Second, extensive use of hedonistic pleasure seeking as a determinant of behavior is dangerous and has been rejected by all societies. Third, utilitarian theories, although verbally adopted by authoritarian collectives like the Nazi powers of the World War II era, cannot guide policy because they are neither internally consistent nor operational. Fourth, the idea of utility maximization is based on the idea of action and bargaining among atomistic individuals in the marketplace, while the real-world effort of policy needs to be based on how to reach a reasonable consensus among overlapping institutional organizations. The idea that consumption in the market could make social relationships transparent is an illusion, "an illusion of transparency, an illusion of readable social relations, behind which the real structure of production and real social relationships remain illegible."<sup>2</sup> Finally, the utility maximization which neoclassical economists claim is captured by market procedures emphasizes a given fixed procedure for decision making rather than a focus on outcomes and how to change procedures to achieve desired outcomes. Policymaking encompasses outcomes as well as procedures and societal as well as individual concerns. Ideas like utility maximization ignore culture, social beliefs, institutions, power relations, traditions, procedures, and so forth, and, therefore, are not useful with regard to real-world policy analysis and decision making. Changing rules and procedures to implement social beliefs about what will make for a good society is usually an important part of policymaking. "To realize justice in its fullest sense—as encompassing outcomes as well as procedures and societal as well as individual consideration—it seems that a shared conception of the good *is* necessary."<sup>3</sup> Iris Young found with regard to the controversy surrounding the siting of hazardous waste sites that much of the controversy revolved around fixed procedures. "The issue of justice raised by community residents in the

siting case, however, calls into question just those institutional structures that justify some decision making procedures.”<sup>4</sup> Consequently, utilitarian ideas for capturing and analyzing the real world are irrelevant to those who want reliable policy analysis.

Neoclassical economists who assume that hedonism is an appropriate base for making decisions and that utility exists further assume that the pecuniary prices charged by corporations can serve as a reflective measure of utility maximization. Thus, they argue that corporate prices can be utilized as the measure of benefits and costs for the analysis of public programs and that monetary prices are to be the common denominator. This approach creates serious political problems for public policymaking because it enhances the measure used and control of analytical outcomes by those organizations whose interests, transactions, and decisions are expressed in monetary terms—that is, corporate organizations. This is true for most of the policymaking concepts recommended by the neoclassical paradigm such as cost-benefit analysis, the Coase theorem, and Pareto optimality.

The adoption of price as the measure of value endows corporations with exaggerated legitimacy and power in three ways. First, in a semiotic sense, corporate symbols are elevated to serve as the standard for policy analysis, and, therefore, the legitimacy of the corporate organization is elevated. To take the symbols of one institution as the measure and purported common denominator of a complex social process alienates and demotes other symbols in the minds of citizens and policymakers. If market prices are elevated to serve as the common denominator for everything, where does this kind of measure leave religious organizations, for example, who must determine the number of children who can be fed by a government program? Policymakers will inquire about the *dollar* value of feeding children. How do environmental organizations calculate the number of species that can be saved by a program that has been advocated? What is the dollar value of an endangered beetle in a South Dakota wetland? Emphasis on the monetary symbol of corporations as the correct measure shuts out the measures of other institutions such as family, religion, government, NGO, courts, science, and so forth. The other institutions are limited in making their case about concerns and criteria that are important to them. Second, in terms of political power, the selection of the corporation’s criterion of success—that is dollar flows—as the social criterion of success provides a definite advantage in terms of political legitimacy, standing, and power. Whatever increases dollar flows for

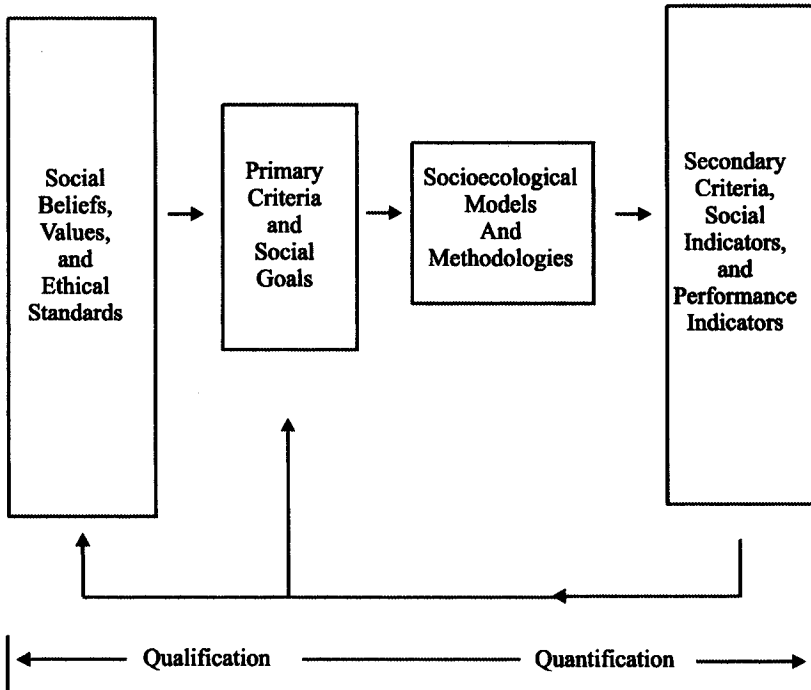
corporations is measured as an increase in social welfare. Third, the selection of corporate price as the appropriate measure means the analytical apparatus of the corporation becomes the dominant model for analysis. Financial accountants of corporations, for example, are experts on corporate dollar flow and, therefore, they possess the expertise to dominate analysis and discussion in the policymaking process. Religious leaders, welfare mothers, and ecologists, on the other hand, are not experts in financial discounting and cost accounting, and, thus, are at a disadvantage in the process. How is it possible to argue for clean air to prevent asthma in children when limited to market prices and dollars as the criteria?

In terms of a policymaking paradigm, the argument that price is a measure of social value is what logicians term a “category mistake.” A category mistake is the treatment of a concept as if it really belongs to one logical type of category, when it belongs to another. For example, to say that the square root of four is white makes no sense because it is impossible meaningfully to predicate the color of a number. When an economist argues that the price an individual is willing to pay a corporation is the criterion for judging value, a category mistake is made. The willingness to pay for a good or service is a subjective want. That is inconsistent with the purpose of public policy. The purpose of public policy is to provide for social beliefs through political association and public processes. When asking for public programs to submit to the criterion of market price, “the economist asks of objective beliefs a question that is appropriate only to subjective wants. . . . One cannot establish the validity of these beliefs by pricing them, nor can that mechanism measure their importance to society as a whole.”<sup>5</sup>

### **Approach to Policy Analysis and Evaluation**

Figure 2-1 can be used to assist in understanding a more realistic approach to policy analysis and evaluation—one might say, an approach cluttered with the complexity of reality. Figure 2-1 is a schematic representation of a policy analysis paradigm that follows the lead of the policy scientist Yehezkel Dror<sup>6</sup> for designing indicators intended to serve the purposes of public policy. Figure 2-1 indicates, starting on the left, that social beliefs, values, and ethical standards are prerequisites for determining social goals and establishing primary criteria. Pri-

**Figure 2-1. Policy Analysis**



primary criteria are put into operation and monitored through the development of secondary criteria. Secondary criteria are the social and performance indicators or measures. Consistent with Instrumentalism, Figure 2-1 reflects John Dewey's concept of social measurement as a spectrum from qualification to quantification.<sup>7</sup> It includes a "feedback loop" from the secondary indicators back to social beliefs, ethical standards, and primary criteria in order to reflect that in public policy-making, the secondary indicators will provide negative or positive information feedback to those entities.

Secondary criteria, or measurement indicators, are found through the application of socioecological models and methodologies. The adequacy of the modeling will determine whether the indicators and measures have any meaning and relevance to societal goals. The examples above about slavery and selling babies are cases where societal beliefs and goals are not being integrated with secondary criteria, modeling, and indicator creation.

## Design and Application of Socioecological Models

The design and application of socioecological models should be completed in a manner to demonstrate and explain the relationships among the components relevant to the problem being studied. As outlined in Chapter 1, the components to be integrated in order to understand a system are: (1) cultural values, (2) social beliefs, (3) personal attitudes, (4) social institutions, (5) technology, and (6) the ecological system. All these components should be integrated to understand a problem area or to plan policy to solve a problem because they are not separated in reality. Figure 2-2 is an illustration of the relationships among the components that will be explained more fully below in Chapter 6. As is apparent, the components function together as a system because of the deliveries and flows among the components.

**Figure 2-2. Integrated Systems**

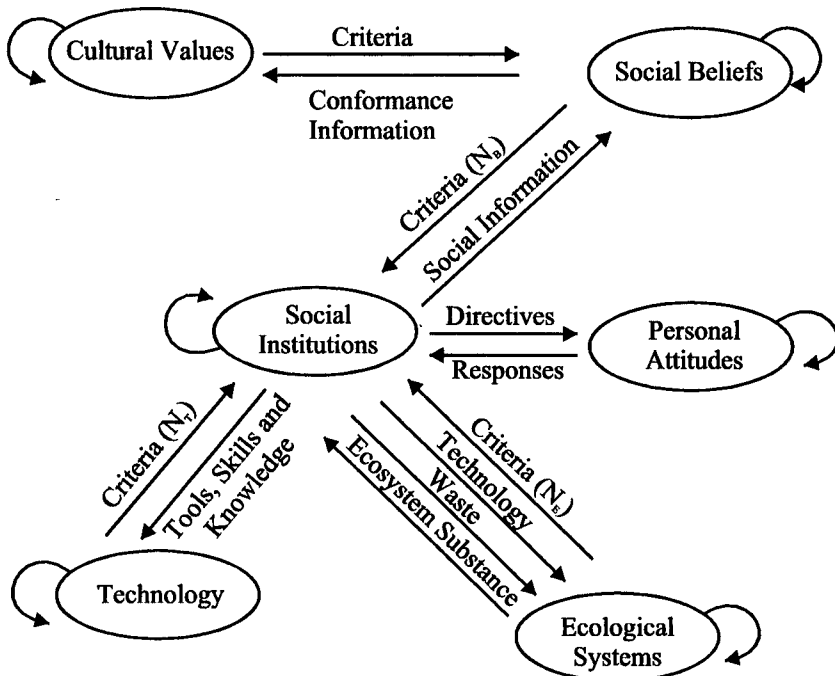


Figure 2-2 is in marked contrast with much of the modeling used in policymaking. Ecological system models which contain no social institutions or technology and only a measure of one flow within the system are common in ecology literature. Examples are models for wetlands located in rural areas that do not include the institutions and technology of agriculture and that include only energy measures among components in the wetlands. However, it is the practices of agriculture that set in motion the sociotechnical processes that deliver eroded soil to the wetlands, soil that fills the wetlands and carries pesticides and herbicides that kill species in the wetlands. The literature in economics regarding economic production models are often equally naïve. Such models usually are based on the Cobb-Douglas production function. On the input side, Cobb-Douglas does not include natural resources from an ecological system, entrepreneurial ability, energy, social beliefs, technology, financial capital, and so forth. On the output side, the production function does not include pollution, although the production of goods and services is not possible without pollution. Such ecological and economic modeling is not useful for policy analysis to solve problems of degraded ecological systems.

The normative criteria illustrated in Figure 2-2 are most important entities for understanding and analyzing any policy concern. The three normative sets of criteria are social belief criteria ( $N_B$ ), technological criteria ( $N_T$ ), and ecological system criteria ( $N_E$ ). All three are criteria for the judgment of social institutions. Social beliefs are expressed in legal statutes, contracts, agency rules, regulations, operating procedures, and legislation.

$N_T$  and  $N_E$  are not defined in an anthropocentric sense. Technology does not think about and decide upon normative criteria. Technology is the combination of tools, skills, and knowledge that is employed by social institutions such as corporations. The technological norms are the criteria conveyed to society as a result of the combination selected by particular societal units. Once selected and adopted, technology becomes woven into the social fabric "in such a fashion as to build its own necessity."<sup>8</sup> Likewise, no assumption is being made that an ecological system designs beliefs from mental reflection. Instead,  $N_E$  represents the normative criteria consistent with the maintenance of a particular kind of ecological system as institutions apply technology to the ecosystem in order to extract resources and dispose of waste. To change institutionalized waste disposal systems, for example,

policymakers need to change the set of criteria,  $N_E$ , used to judge the systems.

It is through institutional structures and patterns that the various normative criteria are expressed. Likewise, institutions are the battleground for the clash among various criteria. For example, there is a traditional social belief ( $N_B$ ) that workers' health should be protected, yet a new technology may be implemented that requires a new technological norm ( $N_T$ ) which produces a certain level of cancer among the workers. Environmental impact analysis submitted by corporations as part of a licensing process for a particular technological design for waste disposal is required to include projections for the expected level of cancer. The policy process will decide which set of criteria is to be applied to evaluate the institutional and technological structure. Or, as a different example, people may decide they would like to alter the current ecosystem by implementing new criteria for less hazardous waste to be delivered from corporations to groundwater. This would initiate a conflict between the new criteria and current technological criteria ( $N_T$ ).

The normative criteria are necessary for a social system to establish efficiency.  $N_B$ ,  $N_E$ , and  $N_T$  deliver sets of subcriteria to authority institutions such as courts. The designated subcriteria become the standards to be applied by the institutional authority to determine efficiency. Efficiency means the ability to produce or achieve a desired effect. For society, the desired effects are determined by the normative criteria which are utilized to evaluate and judge efficiency. For example, courts deliver authoritative codes and regulations to corporations in order to establish the obligations of corporations with regard to requirements to protect the ecosystem. In turn, the corporations that are given authoritative power deliver requirements to processing units such as factories. Such requirements, for example, deal with supervising, auditing, monitoring, producing, storing, loading, transporting, and disposing of hazardous waste. For efficiency, the requirements must be enforced consistent with normative criteria.

Given the importance of instrumental philosophy and normative criteria in policymaking, the next chapter is devoted to explaining their relationship to the policy context.