

# Two Modes of Social Impact Assessments: Scientific vs. Empowerment-oriented Approach

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## 1. Introduction

This paper aims to describe some features of empowerment-oriented social impact assessments in comparison with the traditional, scientific mode of social impact assessments. Since the 1980s the empowerment-oriented approach has been growing as an alternative to the scientific approach in many areas of policy sciences. In this paper I will show not only that social impact assessments can be empowerment-oriented but also that such social impact assessments are effective tools with which people empower themselves.

The remainder of this paper is organized in five sections. Section 2 gives an analytical framework to describe planning processes. Three categories are identified; paradigm, methodology, and technique. Social impact assessment is a methodology in the planning process. Section 3 explores some features of the so-called scientific paradigm by using the categories developed in Section 2. Section 4 highlights the issue of "citizen participation" in the process of social impact assessments on the basis of the scientific paradigm. Section 5 reviews some works of the precursors conducting empowerment-oriented social impact assessments and examines some critical points in the procedure of empowerment-oriented social impact assessment.

## 2. Paradigm, Methodology, and Technique

Planning processes consist of an ensemble of social relations. People in a planning process communicate with each other and take collective actions in order to realize better situations. From an analytical point of view, it is beneficial to assume that planning processes as a social phenomenon have a structure. The social structure pertaining to a planning process includes not only formal institutions such as planning law systems and planning agencies at various levels of the government, which are most visible, but also a pattern of behaviors which planners are more likely to take unconsciously.

In this paper we will try to classify planning processes as a social structure into three layers: paradigm, methodology, and technique. These categories are loosely structured in a hierarchy. The planning efforts in a particular paradigm tend to use a particular set of methodologies. Each methodology is more likely to require the people in a planning process to choose specific kinds of techniques. People usually adopt a specific paradigm with little consciousness. The selection of methodologies and techniques are more conscious. A paradigm, however, establishes invisible boundaries in terms of a set of choices available to the people in a planning process; some methodologies and techniques are more likely to be chosen, or to be approved in a formal, institutional setting; but others are not, and are sometimes even denied.

Techniques are basic units that constitute a planning process. A technique is a considerably standardized procedure whereby planners transact information to solve a specific problem. Planners make use of a particular technique in obtaining some useful information for their planning processes. Quantitative surveys and statistical data analysis are a case in point. Techniques like these two are often used in combination. Some of them have a strong correlation, verify each other, and enhance the degree of "truthness" of knowledge for the procedures as a whole. Techniques, therefore, shape some clusters.

Methodology, the second level of planning structures, refers to a series of tasks in which planners transact information and make decision to achieve the goals of their plan. For each task, planners gather, analyze, and synthesize information by using several techniques. A planning process often means a methodology or the combination of methodologies. For instance, impact assessments as a methodology comprise several tasks: scoping, problem identification, alternative development, projection, evaluation of choices, mitigation and so forth. These tasks consist of techniques. Although a particular methodology does not always call for a specific set of techniques, in the course of planning planners are expected to use "proper" techniques in designing a methodology.

Paradigm is the meta-structure which regulates a collection of existing or possible methodologies. It includes the values which the behaviors of planners and people in a planning process are based on, implicit assumptions of methodologies which planners are most likely to prefer, and the institutional settings at which planners are educated and engage in planning jobs. A planner can choose and control the techniques and methodologies by which to achieve his/her mission, although his/her set of choices is limited by a paradigm he/she follows in most cases unconsciously. A paradigm consists mainly of hidden assumptions, preferences, and rules which the majority of planners are not necessarily aware of in their planning processes. When a planner

tries to choose some methodologies and techniques which mainstream paradigms usually do not allow for, he/she are likely to have strong difficulties; his/her efforts tend to be regarded as "anti-traditional," "out-of-standard," "troublesome," and even "abnormal," and are often opposed systematically.

### 3. The Scientific Paradigm

The dominant paradigm in the field of planning has long been the so-called scientific paradigm. The scientific paradigm developed and expanded in the 1950s and 1960s. Although some planners began to call its effectiveness into question and to seek an alternative path as early as the 1960s, the scientific paradigm still remains hegemonic in the planning world.

The scientific paradigm has its root in the concept of rationalism, which has been a central theme of modern western philosophy since the Renaissance. The scientific paradigm, which is characterized by a rational model of human behaviors, belongs not only to the field of urban and regional planning but also, in a broad sense, to what is called management and policy science (Alexander, 1984). The scientific paradigm in many fields shows the following common features:

First of all, planning in the scientific paradigm is project-oriented. A project which planners (want to) undertake encompasses a set of goals and means. A planner considers his/her planning process as a project which should be accomplished within a certain time-frame. The planner is the owner of his/her project, has control over whole processes of the project, and has exclusive responsibility for the achievement for his/her goals. With a project, planners set a goal, select appropriate means, and implement it. In some cases goals may be given to planners in advance, but in others, they may not. Means may also be known or unknown by planners. Planners specify the goals and means in an appropriate manner. Put into other words, planning processes reduce systematically the degree of uncertainty which people encounter in their lives. When there are problems to be resolved, this means that people are facing a highly uncertain conditions which they cannot deal with in an existing, familiar manner (Christenson, 1985).

Davidoff and Reiner's "A Choice Theory of Planning" (1962) shows the idea of the scientific paradigm in a most distinct form. They say:

"We [Davidoff and Reiner] define planning as a process for determining appropriate future action through a sequence of choices. . . . . The choices which constitute the planning process are made at three levels: first, the selection of ends and

criteria; second, the identification of a set of alternatives consistent with these general prescriptives, and the selection of a desired alternative; and, the third, guidance of action toward determined ends. Each of these choices requires the exercise of judgment; judgment permeates planning.”

Second, the scientific paradigm requires planners to conduct rational decision-making at each phase of a planning process. The ideal type of rational decision-making process is the Homo Economicus model, on which neoclassical economics has long been established. A decision-maker (or an agent of human behaviors) is assumed to have perfect information on the issue which he/she should deal with. Options to be evaluated are comprehensive. A decision-maker chooses the best option according to rational criteria. This kind of rationality is subject to “the truth” which the academic guarantees to be “scientific” knowledge. The word “rational” means to be qualitatively measurable, or calculable, in the scientific paradigm. People are supposed to work out planning tasks as a computer would transact numbers according to pre-programmed formulas. It follows that judgments made in the planning process are expected to be the same no matter who makes the judgments.

Today, the major actors engaging in scientific planning are governments and private enterprises. These organizations are highly formal and bureaucratic. Decision-making processes are hierarchical and centralized in a bureaucratic organization. The lower-levels in an organization provide the upper-levels with information likely to be highly standardized in a pre-determined manner. Decision-makers at the upper level make a decision on the basis of the information from below and take command over lower-levels. There is no interactive, dialectical communication across levels. The planning processes in such an organization are highly institutionalized as well.

Fourth, in the rational planning planners usually play the role of technocrats and scientific researchers. When goals and means are known in a project, planners implement a plan in a patterned, predetermined way. Planners play the role of technocrats who have specialized knowledge and skills. When goals and/or means are unknown, planners conduct research to identify their goals and means. Planners as researchers are equipped with scientific knowledge, and what is more important, they are familiar with the manner in which they should conduct “scientific” research to resolve problems they are facing.

#### **4. Social Impact Assessments in Scientific Paradigm**

Social impact assessments (SIAs) have developed as a methodology in the scientific paradigm of planning. Particularly National Environment Policy Act (NEPA), which

was signed into law in 1970, has been driving SIA efforts in the United States (Burge, 1987).

The purpose of SIAs in rational planning includes analyzing collected data, providing decision-makers with information about the possible impact of projects and policies, and suggesting alternatives in order to mitigate undesirable impact on people's lives. In other words, SIA is a methodology to support general planning processes.

Well-known scholars in the field of SIA defines SIA as follows:

"The primary goal of social impact assessment (SIA) and assessments generally is to facilitate decision making by determining the full range of costs and benefits of alternative proposed courses of action." (Finsterbush, 1981)

"SIA is the systematic advanced appraisal of the impacts on the day-to-day quality of life of persons and communities when the environment is affected by development or policy change." (Burdge)

"SIA is an application of social science methodology to assist in social planning" (Bowles)

In scientific paradigm, the relationship between planners and communities has long been problematized in the form of "public involvement" or "citizen participation." Public involvement means the participation of community members in decision-making processes. The very nature of rational planning is thought to lie in the human desire for choice. The discussions on participation, therefore, have been focusing mainly on the style and the extent of the involvement of lay persons, who are supposed to be unfamiliar with scientific knowledge and professional skills, in a formal decision-making process.

Arnstein's classical article, "A Ladder of Citizen Participation" (1969), presents this perspective. Arnstein categorized the forms of citizen participation into eight levels on the basis of the extent of power-sharing, i.e., to what extent citizens are involved into a decision-making process, thus determines the quality of the final product of their planning process. The rationale for citizen participation lies in increasing the efficiency and the accuracy of data collection as well as reducing the possible difficulties in policy implementation.

According to Armour et al. (1982), citizen participation is also critical and necessary in SIA because "From a practical point of view, obtaining a full understanding of

“impact” necessitates adding personal knowledge of community members to the technical knowledge of the study team.” With rational planning, citizen participation aims to enrich the information which decision-makers require to make their judgements more precise and effective.

As described by choice theory, however, citizen participation has little influence on the structure of rational planning processes. Rather the efforts to citizen participation may enhance the credibility of scientific paradigm in a society. No matter how far planners might aim for citizen participation in their projects, citizens and communities remain an object of planning processes conducted, managed and controlled by professional planners and bureaucrats. They do not transform that power structure of planning processes as a whole which determines “the truth” in our society.

## 5. SIAs in Empowerment Paradigm

Empowerment approaches are an alternative to the scientific paradigm. It should be emphasized that empowerment is not a type of citizen participation. Empowerment is a paradigm because it focuses on the capacity of people and communities to transform themselves, their environment, and the relationship between them and their environment. In empowerment paradigm, the planning process aims at what people will eventually be able to do rather than what people will have accomplished.

According to Kieffer (1984), empowerment includes four aspects as follows:

- A personal attitude, or sense of self, that promote active social involvement
- The capacity for critical analysis of the social and political systems that define one’s environment
- An ability to develop action strategies and cultivate resources for attainment of one’s goals
- An ability to act in an efficacious manner in connect with others to define and attain collective goals

The empowerment paradigm places human behaviors in a broader perspective than the scientific paradigm is most likely to do.

The idea of empowerment has been developed in several fields of study: psychology, education, social work, public health, planning, etc. As in other fields, in the field of planning the empowerment-oriented approach developed from the experience of planning for and by the disadvantaged, the marginalized, and the oppressed. Under existing conditions, the people tend to be systematically excluded from the formalized

process of citizen participation. They are deprived of the power by which they determine their own future. In a sense, empowerment is the counter culture in a modernist, formalized, technocratic society.

Empowerment as an alternative paradigm in the field of planning has the following characteristics:

#### *Structure of Procedures*

Empowerment-oriented planning is process-driven. It emphasizes the transformative process of those who are involved in a planning effort rather than the end-state which a planning process gives rise to.

In scientific paradigm, the outcomes of planning are evaluated in such a way that an evaluator measures the deviation of an achieved outcome from an anticipated outcome. The closer the achieved is to the expected, the better the plan is regarded to have performed. The effectiveness of the means which planners have selected are measured by the results of their planning efforts.

A serious problem of scientific paradigm lies in at which point in time we should evaluate the results of a planning process. Natural and social systems are highly complex. Our environment is full of multiple feedback loops. An intervention caused by a planning effort results in chain-reactions in various time-frames, which are called cumulative effects. In this situation, we cannot decide either which intervention in the past has caused the situation we are observing nor what will be the result of this intervention. Planners in scientific paradigm are unlikely to take into account cumulative effects; in evaluating the performance of their planning process, they tend to limit arbitrarily their scope of observation in terms of time-frame and variables to be measured. The time span of the observation is shorter and the variables difficult to assess in such an "objective" manner that concerns quantification and calculableness are more likely to be neglected consciously.

On the contrary, an evaluator in empowerment paradigm evaluates a planning process in terms of how people have changed through the planning process. Impacts of a planning process include not only the interventions conducted by planners but the actions of people mediated by planners' actions as well.

#### *Value Based*

Empowerment-oriented planning is not necessarily driven by scientific values. Instead, empowerment is often based on indigenous cultures which scientists tend to exclude from their formal research agendas on the ground that the principles of such cultures

are "neither scientific nor objective."

In empowerment-oriented planning, values on which participants and their project are based can be transformed through the planning process. Whereas in scientific approach a value is given to a project, in an empowerment process values are evolutionary.

### *Organizational Structure*

Efforts to empower people and communities are often undertaken in an informal, deinstitutionalized setting. One of the aims of an empowerment project is to strengthen the social networks of people as an informal mutual-support system of their community. It is hardly possible that a planning agency intervenes in the social networks of a community to systematically change the structure of the social networks in a more desirable direction. Only personal communication between planners and people based on mutual understanding and trust can affect people's attitudes and perspectives of their community and result in collaborative actions to enhance their social networks.

Citizen participation changes its meaning in empowerment-oriented paradigm. Because empowerment does not make a clear difference between planners and plannees, the concept of participation as such is transformed fundamentally. Empowerment-oriented planning without participation makes no sense. For citizen participation becomes problematic only when the planning process of a proposed project affects people who cannot participate in the decision-making process.

Whereas planners play the role of a technocrat or a researcher in scientific paradigm, planners in the empowerment-oriented paradigm take the role of a facilitator or a mediator in the group dynamics of empowerment processes. Cox and Parsons (1994) say "empowerment-oriented practice is that in which both client(s) and worker are involved in mutual assessment on behalf of the client group and society in general" (p. 37). In a planning process a planner provides clients with technical assistance at the first stage of empowerment. Through communication, however, the planner tries to share knowledge and skills with the clients and to decrease their dependency on the planners. A planner as a facilitator encourages clients to develop their own knowledge and skills which are relevant to their natural and social environment. The planner comes to learn the condition and problems the clients face as well as the planner's position in the clients' community. Power relations between a planner and clients grow more balanced and mutual.

### *Empowerment-Oriented SIA*

Empowerment-oriented SIA is possible. Planners can empower people through



modified SIA processes. Several attempts towards an empowerment-oriented SIA have already been conducted. They are usually recognized as irregular, non-NEPA approaches.

Whereas scientific SIAs assume that people are able to make the best choice in policy implementation by using objective or scientific methods, empowerment-oriented SIAs do not necessarily pursue such "a" best choice. The mission of empowerment-oriented SIAs lies in consensus building for people and their community and, more precisely, the enhancement of the capacity to reach consensus on community issues.

Cox and Parsons (1994) propose ten principles of empowerment-oriented practice.

- Basing the helping relationship on collaboration, trust, and shared power
- Utilizing collective action
- Accepting the client's definition of the problem
- Identification and building upon the client's strengths
- Raising the client's consciousness of issues concerning class and power
- Involving the client in the change process
- Teaching specific skills
- Utilizing mutual support and self-help networks or groups
- Experiencing a sense of personal power within the empowerment-oriented relationship
- Mobilizing resources or advocating for clients

These principles are applicable to empowerment-oriented SIAs as well. In fact the precursors of empowerment-oriented SIAs have reported that in their SIA processes they pursued some of those principles with high priority. In the following, I identify some elements that constitute empowerment-oriented SIAs

#### *Community-Initiated SIA*

Empowerment-oriented SIAs may be initiated by a group of lay persons highly concerned about community issues. The scientific mode of SIAs divides participants of a SIA into assessors and assessees. It keeps most community members, who are most likely to be an assessee, out of most stages of a SIA process. On the contrary, in empowerment-oriented SIAs community groups are most likely to take over and control SIA processes with the technical, professional assistance of experts.

Community-initiated SIAs are a self-observation process of the community. Through such an SIA process the community comes not only to recognize better itself but also to expand its capability of assessing, visioning, and creating its future.

Another advantage of community initiatives concerns a sense of the ownership of SIA. Community-initiated SIAs provide community members with familiarity with the products of SIA conducted in their community in terms both of technical understanding and of emotional attachment. This improves the reliability and the effectiveness of policies which the SIA statement recommends implementing in order to deal with community issues (Gondolf and Wells, 1986)

#### *Emphasis on Community Values and Perspectives*

Empowerment-oriented SIAs do not necessarily mean the application of social sciences which the scientific paradigm dominates. In many cases, empowerment-oriented SIAs begin with identifying local values. The values should be described in the vocabulary of the community, but not of science or outsiders of the community (Gondolf and Wells, 1986; Jobes, 1990). It is necessary to recognize that the scientific interpretation of local thoughts is a process defining a particular type of power relationship between an assessor and the community.

#### *Looking at Cultural Assets*

Scientific SIAs tend to ignore or to be reluctant to address impacts on cultural factors and events because they are difficult to measure in a quantitative manner. In the community, however, cultural events are an important means to convey values which the community members share. They include not only annual festivals and gatherings but also traditional work groups and even leisure habits. Because cultural events are deeply embedded in the people's lifestyle, SIA assessors can use cultural factors as a strategic indicator to represent the condition of the community (Gondolf and Wells, 1986; Jobes, 1990; Hughes, 1986).

#### *Local Methods*

The uniqueness of the local environment to be assessed may not allow standardized SIA procedures to function effectively and efficiently. In the case of the United States the standard methodologies and techniques of SIAs tend to be biased toward the male WASP culture. Empowerment-oriented SIAs encourage a community group to develop its own customized methods. Local methods enable participants to understand the processes of a SIA and enable the output to effectively describe local perspectives.

Local surveys should be conducted in collaboration with local people. Statistical data which federal and state governments provide is sometimes irrelevant to local concerns, particularly cultural factors, because the questions on national surveys are so standardized or biased toward the dominant population that they cannot depict local conditions (Jobes, 1986).

Localization and culturalization, which emphasize local values and perspectives and develop locally appropriate methods, are a key factor to a successful empowerment-oriented approach.

#### *SIA as a Method for Conflict Mitigation*

The communities which try to carry out SIA do not always have a monolithic, integrated, social structure. There are many sub-groups which have different perspectives and interests in a community, which may be divided on the basis of race, ethnicity, gender, age, occupational status, and so forth. The relationships among sub-groups are dynamic. Because development projects and policies to be implemented in a community have impacts on different groups to different extents, the process of SIA may become a highly political issue in the community. Nonetheless a carefully conducted empowerment-oriented SIA encourages dialogue and mutual understanding within a community. As a result, it may give rise to the mitigation of community conflicts. Empowerment-oriented SIA is a dialectical process (Gondolf and Wells, 1986).

## **6. Conclusion**

Empowerment-oriented SIAs are a real challenge for planners as well as societies. The paradigm shift from scientific to empowerment-oriented calls for a fundamental transformation at both levels. Professional planners are usually educated, trained, and engaged in the scientific paradigm. Empowerment approaches demand planners to change their mentality, their way of thinking. Planners are expected to play different roles in empowerment-oriented SIAs: as a facilitator and a mediator.

Empowerment-oriented SIAs are also more likely to explore those implicit/hidden values and behavioral assumptions in a society. In this sense, empowerment-oriented SIAs are a critical practice. Reflective actions of people become the cause of change in a community. Therefore, empowerment-oriented SIA is not a sociological apparatus by which observers assess the impact of an intervention in order to change the situation, but a transformative process of a society. The implementation of empowerment-oriented SIA has influence on the institutional settings and organizations to which planners belong. Sooner or later empowerment-oriented planners bring about the paradigm shift in their organizations because they are aware of the fact that the scientific, technocratic attitudes of their organizations affect the performance of the empowerment-oriented SIAs in the community.

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