A Global Strategy for Human Development: An Example of Second Order Science

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ABSTRACT

In the 1960s the Institute of Cultural Affairs, based in Chicago, Illinois, started working with poor communities, helping people work together to achieve positive change. They developed some very useful methods for facilitating group conversations. They then used these methods in poor communities around the world. They returned each summer to Chicago to discuss what worked and what did not. They would modify their methods, plan the next year's activities, implement the activities, then come together the following summer to discuss successes and learnings. Academics do something similar with annual conferences, but they focus on publishing academic articles rather than on improving the lives of real people in real communities. Part of the motivation for defining and creating second order science is to increase attention to innovative, problem-solving social actions, often conducted by Non-Governmental Organizations. Currently universities have large numbers of students and faculty members seeking to advance knowledge in the social sciences, using a conception of science taken from the physical sciences. But social systems are composed of thinking participants, not inanimate objects. In addition to searching for reliable cause and effect relationships, part of social science research could be devoted to developing conversational methods that aid joint action toward shared goals. If this goal were accepted within the social sciences in universities, there would be a large increase in the number of people working to improve social systems and developing more effective conversational methods.

Keywords: Group Facilitation, Participatory Methods, Institute of Cultural Affairs, Second Order Science

INTRODUCTION

My goal is to explain a way of doing social science research that is compatible with an expanded conception of science. First, I shall describe the work of the Institute of Cultural Affairs. Second, I shall describe a widely held view of social science research. Third, I shall compare the two approaches. Fourth, I shall place the comparison in the context of an expanded conception of science.

In the 1950s and 1960s a group of people trained in the ministry had been working with people in suburbs on "church renewal," trying to persuade people to become more involved in improving their communities. After a few years they decided to work themselves with people in poor communities. They moved from Evanston, IL, to Fifth City, a poor neighborhood on the west side of Chicago. Most of their funds came from Head Start, a federal government program that prepared poor children for first grade. One member of a couple would work for Head Start, the other person would work full time as a community organizer. After Martin Luther King, Jr. was assassinated in 1968, their building was burned down. They had to decide whether to give up or try again. They decided to start again. A week long planning conference was held with people in the community and a few people from business and government. They developed plans for how to work together to renew the community. The efforts were very successful. Indeed the methods were so successful, they wondered whether the methods would work in a Third World country.

Using contacts from the World Council of Churches, they decided to create a project in the Marshall Islands, a U.S. protectorate in the Pacific Ocean. Again the project was very successful. So, they decided to create 24 demonstration projects, approximately one in each time zone around the world. Model villages would serve as examples of what could be achieved when local people worked together and established connections with nearby people from business and government. The first 24 projects were established in the 1960s and early 1970s. The projects were located in Chicago, IL; Marshall Islands; northern Australia; India; Indonesia; Washington, DC; Venezuela; Kenya; Zambia; London, UK; Egypt; North Dakota, USA; Mississippi, USA; Taiwan; Nigeria; Berlin, Germany; South Korea; eastern Canada; Hong Kong; Japan; the Philippines; Malaysia; Italy; and central Canada.

A HUMAN DEVELOPMENT PROJECT IN JAMAICA

I shall show some slides from the conference that started the project in Jamaica in 1978. The village of Woburn Lawn is located in the Blue Mountains north of the capital city of Kingston. The land is very hilly, and the climate is tropical. There are mango trees and banana trees (Figure 1). The farmers grow vegetables such as carrots. Houses are made of wood with metal roofs (Figure 2). Each house has a faucet in front of it with fresh water from the mountains. A few buildings were painted before the beginning of the conference. The residents of Woburn Lawn are the descendants of slaves who were brought to Jamaica to grow coffee. The former home of the plantation owner was used to house the visitors working on the community development project (Figure 3).

The meetings were held in the local church (Figure 4). Meals were prepared in a kitchen outside the church (Figure 5). The residents of the community and the consultants met each day for three meals. This community was lucky to have a good school with a dedicated teacher. The school children even had uniforms (Figure 6). Each morning after breakfast there would be a conversation where the consultants would lead the people

through a conversation. On the first day the topic was the Operating Vision. The residents were asked, What would you like to see in your community in five years? People would write their answers on cards (Figure 7). These would be posted on a board and then clustered to put similar ideas together. On the second day the topic was Contradictions or obstacles to achieving the vision (Figure 8). The residents were asked, "Given your shared vision, why does it not already exist? What is standing in the way of achieving the vision?" Again, people would write their ideas on cards. These would be discussed and clustered on the board. On the third day the topic was Strategies. What strategies would remove the obstacles to achieving the vision? On the fourth day the topic was Tactics (Figure 9). What tactics are needed to implement the strategies? On the fifth day the topic was Actions. Who will do what, when and how to implement the tactics? Teams were formed.

The actions resulted in the formation of local institutions. For example, a farmer's cooperative was created that would bring agricultural experts from a nearby university to explain new crops and agricultural methods. A business cooperative would work with shop keepers and teach them basic accounting, marketing, and inventory methods. A preschool, similar to Head Start, was organized to prepare children for first grade and give the mothers release time to work on operating small businesses (Figure 10). A parent teacher association might be organized where teachers could explain to parents how to help the children with homework. A health care worker would come to the village regularly to teach basic nutrition, weigh and examine the young children and check on seniors. Sports teams might be organized for teenagers and weekend card games for seniors. A weekly farmer's market would be held not just to exchange goods but also as an opportunity to socialize and exchange information. Each community created a story, song, and symbol to give it an easily recognized identity. Relationships with supporters in nearby cities were created and maintained and used for obtaining gifts such as books for children and the loan of equipment needed only occasionally.

During the week of the opening conference some small businesses would be created. For example, a restaurant, a hair dressing salon, a baby-sitting service, or a bakery. The goal was to increase sales of goods outside the community, to limit goods brought into the community, and to increase the exchange of money inside the community so that as many people as possible used the money to buy what they wanted before it left the village. Hence, the goal was to increase income opportunities and available goods and services in the village.

In the Jamaican project a memorable event occurred. Since the land was very hilly, flat land was in short supply. Jamaica is a former British colony, and the young people played cricket. But the only flat land available had a large granite outcropping on it (Figure 11). The young people wanted to get rid of the rock. I looked at it and decided that dynamite was the only way. However, one of the consultants had experience building roads in Nigeria. He said the rock could be removed with local materials. He organized the young men and began by using a sledge hammer and chisel to bang on the cracks in the rock (Figure 12). Then they built a fire on the rock (Figure 13). When it was very hot, they splashed water on it, creating more cracks (Figure 14). They would then try to enlarge the cracks using the hammer and chisel (Figure 15). This procedure was repeated until they got the rock below ground level. Then they smoothed over the place where the rock had been. Thereafter, the experience of removing the outcropping became an example of what the local people could accomplish themselves by using a little knowledge from others with appropriate experience.

After the first set of 24 Human Development Projects, ICA did a second set of 24 community projects. They also created Human Development Training Schools in India and Kenya. They had a one day event called Town Meeting. In 1976 to celebrate the bicentennial of the Declaration of Independence they organized and conducted a Town Meeting in each county in each country having a Human Development Project. Another program was called Global Women's Forum. It brought together women in the countries in which they were operating to discuss challenges and opportunities. In the early 1980s with support from the United Nations Educational, Scientific and Cultural Organization (UNESCO) ICA organized meetings where Non-Governmental Organizations (NGOs) that were engaged in human development projects described their work. The most interesting projects were selected for a meeting in New Delhi in 1983. The results of this conference were published in a series of books called *Approaches that Work* [1].

I found the work of ICA to be particularly interesting due to their focus on conversation. Many church-related groups are active around the world. Usually they focus on a particular kind of project, for example some organizations dig water wells, some build churches, some build and equip schools, some improve housing, and some work on a particular disease such as dysentery or malaria. ICA instead taught participatory methods so people would learn how to work together to define their needs and create relationships with people who had resources [2]. Similar methods have been developed by others [3,4, 5, 6, 7, 8, 9, 10].

Each summer they would return to Chicago to review what they had learned the previous year and to define programs for the coming year. At the end of the summer they would go to communities around the world to implement the programs they had designed. The next summer they would meet again in Chicago to reflect on what worked and what did not and to design the next year's programs.

Soon after I took part in the opening conference of two ICA projects in Jamaica and Guatemala, I was elected president of the American Society for Cybernetics (ASC). ASC had struggled for a few years in the mid 1970s due to personality conflicts and two competing groups, one in Washington, DC, and one in Philadelphia. Those conflicts were resolved by my predecessor, Barry Clemson working with Doreen Steg, Klaus Krippendorff, and Larry Heilprin [11]. My job was to get ASC moving again [12]. I thought that using the ICA's strategic planning method would both produce the needed plan and illustrate a cooperative style of operation. I asked Pam Thomas from ICA to lead the members of the two groups through a planning exercise (Figure 16). Once again the method worked better than expected. A plan was created [13]. We worked to implement the actions we had defined, and then we repeated the planning exercise two years later [14].

TWO WAYS OF DOING SOCIAL SCIENCE RESEARCH

The way ICA operated was quite different from the way that social science research is usually done. Social scientists test a theory by collecting and analyzing data. Experiments should be

replicable by others. The researcher tries to be objective. Research is an effort to find causal relationships between variables at a high level of statistical significance. The goal is reliable knowledge, not social change directly. Success is measured by the number of papers in leading academic journals.

In contrast the people in ICA read widely. They read authors such as Kenneth Boulding [15], Ivan Illich [16], Soren Kirkegaard [17], Margaret Mead [18], and E.F. Schumacher [19]. They started with current knowledge and learned by doing, changing methods as needed, based on experience in particular environments. Successful methods were used in additional communities. The consultants established relationships with local people. The goal was to improve the quality of life (health, income, education) as quickly as possible by using available knowledge and expertise. Success was measured by higher standards of living and the spread of participatory methods to nearby communities. Reflection and redesign were done at the local level each week and annually in Chicago. Networks of supportive people were created and maintained.

Given the successes that ICA achieved, it is interesting to ask why social science is so abstract. One reason is an attempt by social scientists to imitate physics. There is a desire to be quantitative, not merely qualitative. General knowledge is preferred over culture-specific knowledge. The observer is assumed to be outside the system observed. And theories are assumed not to alter the behavior of the system studied.

In contrast the ICA staff were deeply involved in communities, trying to improve the lives of villagers. They worked to resolve conflicts. Because they were trained in the ministry, rather than science, they were concerned with emotions, spiritual feelings, and cultural beliefs and practices. They tried to create a shared concern for the community not just individual advancement. The ICA staff told the villagers that people around the world were watching them; that improving their community would be a sign of possibility not only for themselves but also for people in communities in other countries.

HOW IS THIS WORK RELATED TO SECOND ORDER SCIENCE?

Why do we do science? Of course, we do science to understand the world. But why do we seek understanding? I would say we create science because we want our actions to be more effective. Human beings and societies are purposeful systems. We use knowledge created through science to achieve our objectives. We can study purposeful systems and the effectiveness of the way we use the knowledge we have accumulated. How is the work of ICA an example of second order science? Karl Mueller has defined first order science as exploring the world and second order science as reflecting on those explorations [20, 21, 22]. Cybernetics is a science of purposeful behavior [23]. We could shift our thinking from viewing science as creating descriptions of systems to viewing science as an active part of social systems. We would think about the co-evolution of theories and society. We could evaluate theories based on their positive impact on the world.

In the natural sciences we assume that theories do not affect what is studied. We carry over these assumptions to the social sciences, because we think this is the way to do science. But we can remove our self-imposed blinders and expand our conception of science. We could see the earlier conception of science not as a model for all of science but rather as a special case of a larger conception of science.

One intent of second order science is to improve the productivity of the scientific enterprise. A science of purposeful systems operates at a higher level than a science of causality. By improving both our understanding and our ability to act, second order science improves our ability to manage the planet wisely.

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FIGURES

Figure 1. Mango and banana trees

Figure 2. Wood house with metal roof

Figure 3. House of former coffee plantation owner

Figure 4. The church where meetings were held

Figure 5. The kitchen for preparing food

Figure 6. Children ready for school

Figure 7. Generating and clustering ideas

Figure 8. Children watch the report writing process

Figure 9. Who will do what, when and how?

Figure 10. Organizing a preschool

Figure 11. The cricket field with a large rock

Figure 12. Enlarging cracks in the rock

Figure 13. Making the rock very hot

Figure 14. Throwing water on the hot rock

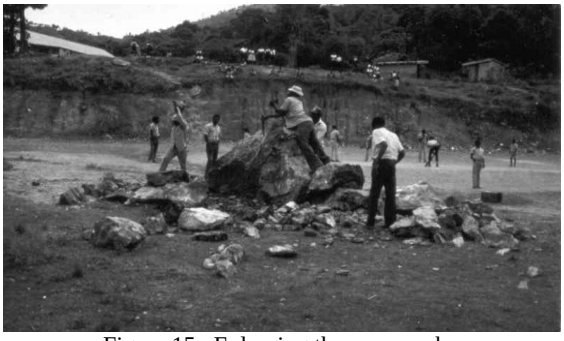

Figure 15. Enlarging the new cracks

Figure 16. A planning meeting for ASC