

Ethics and Sustainable Community Design

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Veronica D. de Raadt

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*to
Donald
and
the road trodden together*

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Preface

The terrorist attacks on the New York World Trade Centre and Pentagon last September shook the foundations on which rich nations are built. Until then it seemed global markets, technological progress and economic security were firm foundations for the western nations, and others intent on living like those in the west. This criminal action not only shocked us emotionally but also invited us to think about the effectiveness of economics and technology to provide security in life. Could it be that forgetting that our lives are more than technology and economics has left the whole western system vulnerable to the attack of a small band of terrorists?

The research that I have been engaged in for the last four years attempts to deal with how non-technological, non-commercial human factors affect the vulnerability of a community. Factors explored are ways people hold together against threats to community viability - less ominous than a terrorist attack but, nonetheless, as threatening in the long term.

I am indebted to many who have inspired and assisted me in this research. My thanks go to the people of Rosvik without whose help this research would not have been possible. They include the families, school, Betel church and

other groups in the village, especially the village development group. Warm thanks go especially to Arne Forsman, Leif Sandström, Irene and Arne Bäckström, Jan Zetterlund and Max Westerlund. Many thanks also go to the students from my division at Luleå University of Technology who talked to villagers and assisted me with the data collection in Rosvik. Thanks also go to Professor Kristo Ivanov, Dr. Stig Holmberg, Professor Gyorgy G. Jaros, Professor Marcus Schwaninger and Professor Werner Ulrich for their scientific advice. Special recognition though should go to my husband Donald, the inspiration of this work. His scholarship of nearly two decades has been my work's focus and his infectious resolve, its energy. Therefore it is most fitting that I dedicate this book to him and to our future collaboration together.

Uppsala, 2002

Ethics and Sustainable Community Design

CHAPTER 1

Introduction

Ideally, the best futures thinkers specialize in big-picture overviews in time and space. They take a long view into the past and then forward into time, and a broad view across sectoral and disciplinary boundaries of society and often across national boundaries. They are specialists in generalities, integrators of knowledge, thinkers who emphasize breadth, and educators at large. They are at the leading edge of ideas that are shaping, will shape, or may shape society. To be at the leading edge, they frequently prod people to think about the unthinkable (Marien, Michael, 1992).

Threats to a Community's Sustainability

In 1996 I was approached by a group of villagers to assist with a serious threat to the future of their village, Rosvik, which lies within the reach of the midnight sun in northern Sweden. The municipality had decided to take a grade away from the village school. It had made some forecasts about Rosvik's school-age population and projected that the decline in the numbers of children by the year 2000 did not warrant maintaining grade 6, the last grade in the school.

This alone represented a warning signal to Rosvik, as closure of school grades is the first step of a village's steady decline in Sweden.

It seemed Rosvik was going through a mid-life crisis and losing residents at a fast rate. Young singles were not staying, and families were selling up. Middle aged families, a fair proportion of the village's families, were moving into apartments in town; a common pattern in Sweden. By 1997-99 depopulation had culminated in a loss of almost 20%¹ and was no longer a projection, but rather, a fact of life.

There were other changes in Rosvik since the initial cutbacks in education, and the municipality also reduced health-related, postal, banking and other services. This pattern of shrinkage, both in people and services, was happening in other Swedish communities as well. Villages and small communities in remote areas throughout the country were losing out in government resources and economic opportunities to larger population centres.

The response to such problems in remote communities in Sweden has been to initiate business with the support of information technology. In Arvidsjaur, another small northern village, divisions of a car rental company and a travel agency were opened in response to unemployment. Both were owned by international corporations and made extensive use of information technology. In addition, education in information technology was introduced in the village school, beginning in the lower grades. This was done in the hope of enlarging prospects for future employment and therefore of keeping youngsters in Arvidsjaur.

Despite these initiatives in education and new business ventures however, many people in Norbotten,² including the

¹ Figures taken from report of the Village Development Group, 1999.

² Sweden's northernmost county.

governor, did not really believe in them. They thought the only hope was reliance on handouts from Stockholm or Brussels³. Small businesses were unlikely to succeed due to an historical attitude in northern Sweden that had discouraged private business and entrepreneurship. Rather, there had been a preference for state employment and work in large industries such as forestry, mining and steel. For a long time, the region's mentality had overlooked regional, local solutions, and depended on government handouts, or top-down economic and technological solutions.

However by the 1990's government and industry no longer employed as many people. Technology had replaced many who worked in the mines and forests. In addition, people saw that unemployment persisted despite Norbotten's wealth and the access of small businesses to technology. It was against this backdrop of fears that villagers were aware that Rosvik was becoming unsustainable and might not have a future, especially as the young left to make their home in the south.

It was especially because of these youth issues that villagers recognised that normative (moral) issues and not only economic factors, were at stake. Deeper questions were on peoples' minds and they were asking themselves if Rosvik provided good community life and fulfilled the needs of the next generation. People were becoming concerned about the quality of education and care the school provided, the level of security provided by families and neighbourhoods, and the drinking problem among some of the youth and need for parents' attention.

As my involvement grew, it became clear to me that the problem of sustainability needed to be answered by asking normative questions. The central question being posed by

³ Kari Marklund, governor of Norbotten, quoted in Norrbotten's Kuriren, Friday 18th August, 2000.

villagers about their uncertain future was: What is a good community? And how can a sustainable community serve people so they, in turn, can accomplish the work of community?

Finding answers to normative questions such as these, however, led me into a problem. Modern science, especially economic and technological science, could not handle these issues, despite what politicians and bureaucrats believe. Modern science did not detect, nor know how to handle, the normative problems of sustainability, which were interconnected with not only the economy, but also the environment. Modernism ignored the importance of human responsibility and approached human or natural problems armed with instrumental rationality. Its *modus operandi* was causes and explanations, and its solutions, mechanical or technological fixes.

It seemed we needed a new methodology of science and a new method of implementing it, in regards to both analysis and creative design. An understanding that could apply normative thinking⁴ could help us understand Rosvik's crisis in broader terms.

As a result, I decided to make an application of multi-modal systems thinking which was being researched in my department.⁵ I thought this understanding could assist by:

- (i) Identifying the most important normative factors that threatened the village.
- (ii) Building a model to show how these factors interacted with each other.

⁴ Many scholars hold this thesis, one of the most notable being West C. Churchman (Mitroff and Churchman, 1993). His ideas will be further explained in later chapters.

⁵ This approach was developed in the Department of Informatics and Systems Science, Luleå University of Technology, Sweden.

(iii) Building a design blueprint to respond to the threats.

This book describes the application of multi-modal systems thinking to the problems in Rosvik. It is my hope that community activists, entrepreneurs, educators or social workers may benefit by using it in communities affected by the same sort of problems as Rosvik.

Multi-Modal Systems Thinking

Multi-modal systems thinking is a normative approach to systems science that draws from both conventional systems science such as that developed by von Bertalanffy and his successors, and from Dooyeweerd's theory of modalities. The aim of multi-modal systems thinking is to expand science to add the norms of human life to our understanding of the determinative part of the world. Norms address all areas of life including such things as marriage and child rearing, work, service to others, preservation of our heritage, learning, and ethically following religious, cultural and social pursuits.

Multi-modal systems thinking incorporates all types of systems, although the focus here is specifically on the human systems that have been most neglected in the industrialised world, especially Sweden, such as families, schools, small businesses, churches and voluntary associations. The aim is to understand and explain how each of these systems uniquely contributes to the overall sustainability of a community. In regard to the management of these and other social systems, multi-modal systems thinking maintains that management, whether exercised in private organisations or public institutions, is not an instrument for controlling people, but a sustaining practice that encompasses ethical, social and cultural dimensions. Most of these dimensions

have been lost in the narrow utilitarian, economic understanding of modern management.

Multi-modal systems thinking incorporates diversity and understanding different modalities of life such as the ethical, social, economic, aesthetic, psychological and physical. It does this by integrating the knowledge of the diverse sciences, emphasising their unity without sacrificing their diversity. Finally, multi-modal systems thinking suggests all intellectual activities are unavoidably founded upon what we believe, and belief should be explicit in our discussions. Thus, multi-modal systems thinking openly integrates theology into the deliberation and does not conceal it.

Outline of the Book

Our first task is to find out what other people interested in sustainable communities have to say. This is reported in Chapter 2. A review of these writers shows agreement on six major issues important for community sustainability. These include the role played by the state, citizens, economics, ethics, education and the need for a new scientific approach to understand community sustainability. We describe later how these issues played an important role in shaping the project in Rosvik. The need for a new science emerged as a response to this and is described in Chapter 3. It begins by discussing Churchman who argues that modern science, in losing its human focus and shifting away from normative issues, cannot think systemically and effectively implement ideas. The chapter goes on to survey others who also attempted to address these issues, beginning with von Bertalanffy and his break away from mechanistic science in order to understand humanity. It then turns to the philosophy of Herman Dooyeweerd and his theistic attempt to

understand the diversity of the specialised sciences, as well as their unity and integrity. Finally, the chapter discusses how multi-modal systems thinking emerged out of an integration of Dooyeweerd's theory with systems science.

Chapter 4 explains the next step in the project: the application of multi-modal systems thinking in order to help the villagers in Rosvik preserve the long-term sustainability of their school and village. It begins by presenting multi-modal systems thinking in more detail. It discusses how various aspects of the theory including domains, modalities, social systems and relationships between them, help us have a broader understanding of sustainability; one that is not limited to an economic or technological understanding. The chapter then goes on to describe more of the situation in Rosvik, the changes the village is going through, and what effects this is having on community groups. The chapter also describes the various means used to collect and analyse the data. Finally it describes the application of a specialised software package, SmCube, to select and analyse various normative factors affecting Rosvik.

The collection of data and selection of a set of normative factors threatening sustainability is followed by an analysis of how these factors are linked and affect each other. Chapter 5 deals with factors that belong to people's character and intellect: these factors include *education*, *heritage*, *ethics* and *religion*. It analyses the need to educate people to become ethically aware of community issues and the role that religion plays in promoting ethical action. Finally it discusses heritage and education, especially how the knowledge of its heritage can strengthen a community and give it identity.

Chapter 6 turns to analyse factors concerned with the civic domain of human life, and how the factors *community sense*, *statism* in public institutions, personal, social and professional *competence* and *education* link with each other.

These links are then assembled in a graph which gives an overall picture of how the interplay of the factors promote or weaken sustainability in Rosvik. The graph shows that while undoubtedly there are some links that help sustain the village, there are others that present such serious threats that the overall situation is rather grim. Therefore this point in the project begs us to ask: What can the villagers do about this?

The analysis helps to respond to this dilemma. It not only explains how the links between the factors affect the sustainability of the village, it also suggests further possibilities and what to do next. In this way the analysis is normative and reveals the responsibilities of villagers towards their village and how they can materialise their responses into actions or operations. To this end, the last stage of the project, presented in Chapter 7, applies the multi-modal systems design approach and produces a blueprint sketch. The blue print suggested could be used by community leaders to develop their own community design.

Finally in Chapter 8 I draw conclusions in reference to villagers decisions and to what extent multi-modal systems thinking helped them.

Some Limitations

Before concluding, I would like to point out some limitations that circumscribe this project. Firstly, the focus of this book is the implementation of a methodology and method in order to help communities ensure their sustainability, rather than the examination of the methodology per se. Therefore the methodology presented is taken as is. This is especially significant because of the normative foundation and belief system upon which the methodology is built. Thus, certain things are assumed as

being good such as love, family, faith and self-reliance and there are others that are regarded as bad, such as bureaucratic control over peoples' lives, state dependence and selfishness. The epistemological process through which these norms are reached is not discussed, as they have been amply covered in the theoretical literature on multi-modal systems thinking. These norms did not present a problem for the people in the village. On the contrary, they were held by most who wanted a better future for Rosvik.

Secondly, although multi-modal systems methodology makes a clear cut separation between *normative* and *determinative* effects for explanatory purposes, there is not such a sharp separation made in this book. Factors are referred to as being normative when, in reality, they are a blend of normative, as well as, determinative influences. Thus, for example, one can regard religion as normative, for it is up to a person to choose to believe or not to believe. However, this does not mean that religion is not influenced by determinative forces: most people tend to follow the religion of their parents rather than seek a new one.

Thirdly, the term *community* is used in reference to people living in social places, rather than with reference to social problems studied in a location. This distinction has been drawn by Payne (1993), a sociologist, as the two principal foci of interest of community studies in his discipline. Payne points out that most use *community* in the context of problems of communities such as homeless youth, alcoholism, unemployment etc. Therefore the majority of community studies focus on solving problems. However, I use *community* in the broader sense of making a whole community sustainable, including its unique social structures such as families, churches, political party branches and municipalities.

Fourthly and lastly, the term "sustainability" is used in a broad sense and corresponds to the systems term "viability" discussed in Chapter 3. Sustainability is often used in the context of irreversible environmental damage caused by economic and technological development (Marien, 1992), and excludes equivalent cultural and social damage. However, I understand sustainability as encompassing the totality of the natural, human and cultural environments and the systemic endeavours to avert threats from any source, including economic and technological development, to preserve life.

CHAPTER 2

Sustainability and Normative Issues

Introduction

Sustainability has become a catch-all phrase used by researchers in futures studies, technology, environmental issues, sustainable development, domestic issues (usually health care, education, social welfare) and third world development projects. The vast majority of these pose economic and biophysical questions so that about 80 - 90% of the literature on sustainability is limited to economic and environmental issues.

Naturally, these questions are of such an urgent nature that they demand careful consideration. They question whether we can balance our ecology with the present rate of economic growth, and bring up basic long-term doubts over how long human life can be sustained on the planet under these circumstances. These concerns have become known as sustainable development and came to the attention of world governments and the scientific community after the release of the Brundtland Report by the World Commission on