Bengt Stymne

Values and Processes

A Systems Study of Effectiveness

in Three Organizations

CONTENT

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PREFACE

Questions about values are fundamental in this report.

What are the values that control activity in organizations?

What connections exist between values in an organization
and different needs in society?

I would like to mention some values which I believe caused me to
choose this particular area of research. One reason for studying
organizations is that the number of large and very large organiza-
tions is increasing. This development is due to many different
factors. Modern production and marketing techniques favor large-
scale production. Information processing techniques make it
possible to coordinate highly complex systems. Society as a
whole is becoming more differentiated at the same time that its
various activities are becoming more planned and organized. This
social development applies to both national and international
systems.

Social development in the direction of greater differentiation
and increased coordination implies that, in particular, the
number of organizations whose job it is to influence, control
and coordinate the activities of other organizations will rise.
It is therefore of interest to augment our knowledge of how these
organizations, which are primarily of the information-processing
type, differ from organizations which have clear-cut production
and service goals.

Methods of administrating organizations have been formulated to
a large extent on the basis of such unambiguous goals. For
example, most of the methods used in business economics and
management science are based on the assumption that returns on

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invested capital should be maximized and that the flow of production should take place as rationally as possible. But I am convinced that the administration of more and more organizations has to take place on the basis of a complex set of interdependencies between organizations and the surrounding society. A proposal in this study is therefore that the organization be regarded as an open system.

Since large organizations are increasing the scope of their activities in society, it is also important that they fulfill their functions well - that they are effective. This study includes a proposed language that can be used to discuss the effectiveness problems of organizations. Many different processes have to go on satisfactorily in order for the system to continue to function in its environment. This means that it is not possible to use a single measure of effectivity; a whole set of different indicators has to be used in order to evaluate how an organization functions.

Different kinds of experts are often consulted for suggestions about how organizations should be designed or changed. They are also asked to help solve different problems of effectiveness in organizations. The purpose of the model proposed in this study is to facilitate a systematic discussion (diagnosis) of the deficiencies in an organization and to provide a basis for the choice of suitable advisors and forms of treatment.

I want to point out one last value of my own. To a certain extent, discussions about the effectiveness of organizations always have to be based on opinions about what it is desirable to achieve. Organizations do not only serve a passive function in society. They can also, for better or for worse, serve as instruments through which individuals and groups influence society.

The empirical material was collected in connection with a project aimed at assisting three organizations in the formulation of a long-range plan. The work consisted primarily of a series of discussions, led by Eric Rhenman, with the top management of the organizations. During these discussions, I participated as secretary. My other task was to carry out an investigation of the organizations' values and the way they functioned. I had complete freedom to choose the theoretical bases for the investigation, to construct a plan for the work itself, to collect data, to analyze the results and to formulate the report.

Since this study covers fundamental values in some organizations that are active in society at present, problems of anonymity arose. The names of the three organizations have therefore been changed. I have also avoided mentioning the industry they belong to by name. The names of different organizations, units and other phenomena have also been altered for purposes of anonimity. Certain figures that could lead to immediate identification of the organizations have been omitted. A more detailed account of the data analysis has been compiled into a Supplement. Information that was believed to involve evaluations of the performance of individual employees has not been included.

This description refers to the situation in 1966. The organizations today are not the same as they were during the period of observation. They have changed partly as a result of the project in which this study was included.

Even though I cannot mention the three organizations by name, I would like to thank them for providing me with the opportunity to study them at close range. I am also grateful to the personnel and members who assisted me with data and answered my interviews and questionnaires.

During the years I worked on this study, I have been a member of
the Swedish Institute for Administrative Research (SIAR). SIAR
is an independent research institute founded in 1965. The
purpose drawn up for the activity of the institute is to do
research on organizations. The projects of the institute can
include action, contract and more traditional academic types of
research. One of the motives behind the choice of this approach
is that a certain proximity to problems in organizations and
participation in change processes can facilitate the formulation
of the theoretical tasks. An approach of this kind can also
give access to sources of data that are not usually open to
research.

Since I have had the opportunity to be part of a closely-knit
research group, my work is to a large extent the result of an
exchange of experiences between a number of colleagues. But the
opinions presented are naturally subjective interpretations of
my own and others' experiences. My work was greatly encouraged
by Eric Rhenman. His restless search for important problems and
possibilities of improving organizations and other social systems
has been a constant source of ideas, suggestions and new questions.
Other colleagues at the institute with whom I exchanged experiences
and who made comments on the manuscript are Curt Berg, Gabor Bruszt,
Walter Buckley, Jan Edgren, Richard Normann, Christer Olofsson,
Bengt Sandkull, Lennart Sjöberg, Lennart Strömberg, Christer
Wallroth and Alvin Zander.

Gunnar Westerlund gave me personal encouragement and assisted
me in many different ways. He emphasized the need for awareness
in the research process and that the researcher makes it easier
for himself and others if he explains why and how he does what
he does. Other researchers with whom I had an opportunity to

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CHAPTER I. INTRODUCTION

1.1 The Purpose of the Report

This report has two main purposes. The first is to develop a
"model" or "language" for discussing and analyzing the effective-
ness problems of organizations which can also provide a basis
for measurements of effectiveness in organizations. The second
purpose is to give an account of a fairly detailed <u>comparative
study</u> of three organizations.

The model is intended to help "diagnose" and explain how problems
of effectiveness arise. It can also facilitate discussions of
measures which can be taken to improve the way an organization
functions. It is argued that the effectiveness of an organization
cannot be estimated in terms of a unique, comprehensive measure-
ment. It is suggested instead that indirect measurements of
effectiveness can be specified by using a model that describes
the organization as an open and goal-oriented system. Different
<u>processes</u> have to take place in order for the system to function,
survive and develop. Special <u>indicators</u> can be developed which
refer to how well each process goes on. But no indicator of a
single process can reveal how an organization functions as a whole.
One process might function quite well, another very poorly. Different
indicators cannot be combined to form a common measure of effective-
ness.

The description of the three organizations is based on extensive
data collected through a large number of interviews, questionnaires
and content analyses of written material. Top management and
representatives of most personnel categories participated in the
interviews and answered questionnaires. One of the tasks of the
organizations is to provide service to a number of member firms.

The opinions of these members were registered primarily through questionnaires. The empirical material was used mostly to describe the values in the three organizations. The term values refers to the purposes which different individuals ascribe to the organization, to separate groups in the organization and to their own activity. I also show how these values are related to one another in special patterns or in a value structure. The values are often found to be connected to important events in the history of the organization. In conclusion, I discuss how values control different processes so as to make it either easier or more difficult for the organization to achieve different types of effectiveness.

1.2 The Study as a Learning Process

When the study began, I had certain conceptions and ideas about how organizations function. I wanted to find out if these conceptions could help describe and explain what I could see in the organizations by using various methods of observation. Many of the concepts in my initial frame of reference were not very concrete. During the course of the study, the content of these concepts increased gradually as observations were made. Not only have the concepts become richer in content, but my ideas about how different concepts are linked to one another have developed and changed. The study has also constituted a learning process. In addition to empirical knowledge, the influence of literature and colleagues has contributed to this learning process. The rest of this introductory chapter is to relate, in an approximate time sequence, the most important events in the study viewed as a learning process.

1.3 The Theory of Organizations as a Field of Study

The literature which was part of my background when the study was

begun early in 1966 belonged primarily to the <u>organization theory</u> which is developing into an independent research field. Even if the main approach of research in this area is behavioristic, there is a great deal of variation in research objectives, methods used and theories proposed.[1] The field is characterized by the fact that the <u>complex organization</u>[2] is selected as the unit to be described and analyzed. One task of organization theory is to investigate the ways in which the organization differs from individuals, small groups or nations. It also analyzes the effects of organizations on the people who work in them and the society which surrounds them.

1.4 The Organization's Goals

Before this study was begun, I talked with my colleagues at SIAR (see Preface) about the idea of making a comparative study of a fairly large number of similar organizations. The method to be applied consisted of asking influential groups, "ideological elites or power elites", to rank different organizations with respect to their effectiveness. By assuming that these rankings would express the evaluators' conception of the organizations' <u>degree of goal-fulfillment</u>, the rankings could be used to investigate:

- a) the goals the evaluators had implicitly set for the organizations and

- b) whether the goals set were one-dimensional or multi-dimensional.[3]

These preliminary plans expressed one of the bases of this study. According to this basis, statements about organizational goals can only be made by a specified evaluating group. The goals of organizations have to be regarded as a multi-dimensional concept. The degree of goal-fulfillment achieved by the organization can

be interpreted as one type of conceptualization of effectiveness.

A second basis for the study was that effectiveness can also be conceptualized as an expression of how well the organization functions as a system, i.e. how well different necessary processes go on in the organization. Different kinds of processes were envisioned, such as those which have to do with the organization's adaptation to its environment and the coordination of activities in the organizational structure.[4/]

In other words, the two bases of the study were to view the organization as a system geared to goal-fulfillment and as a system directed towards survival and adaptation. These two bases represented two different approaches. They were incorporated into a more comprehensive frame of reference during the course of the study.

1.5 The Long-range Planning Project

While these ideas were being discussed, SIAR was asked to assist in the construction of a long-range plan for the activities of three organizations with related tasks. Two of the organizations are employer organizations. The third is a trade association. All three work in the same industry. There are many firms which belong to more than one of the organizations. The long-range investigation was initiated because some of the members had voiced a desire to see the organizations merge. The long-range plan was supposed to involve an objective test of the most suitable working form.

This project was deemed to provide excellent material for an empirical study of organizational goals. Of course, three organizations would not be sufficient for the use of formal

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scaling methods in investigating concepts such as the dimensionality of goals. On the other hand, there were a number of advantages in making a study of a small number of organizations. To begin with, each organization could be described in a fairly detailed way. For instance, people in different positions in the organization could be interviewed about the goals of the organization. A comparatively large number of conditions could be dealt with simultaneously and a more total picture of the organization could be obtained. This would stabilize the empirical and theoretical foundations of a future comparative study. Secondly, the possibility of going in and investigating goals in three influential organizations was a unique opportunity for an organization researcher. Thirdly, the clients would finance the extensive work of collecting data. Fourthly, the investigation would be an important contribution to the job the organizations commissioned SIAR to do, i.e. to assist in formulating a long-range plan.

The material for this report was gathered via interviews, questionnaires and studies of documents. The primary task of assisting the organizations' top management in the construction of a long-range plan was performed through a series of conferences. These discussions were led by a colleague in SIAR and I participated only as secretary. The material from the discussions has not, except possibly indirectly, been used as a basis for this report.

1.6 Formulating the Purpose of the Study

The frame of reference which I formulated prior to collecting data indicated, for example, the areas from which data should be taken. Certain expectations as to relationships were also expressed. There were several reasons why more detailed hypotheses were not formulated. Neither my theoretical studies nor my empirical experiences had led to a comprehensive picture of what an organization really is. One

of the purposes of the investigation was to arrive at this kind
of total picture. If I had specified may expectations in advance,
the observations made could have been forced into categories which
would not have permitted me to learn anything from the data. Another
reason was that three observations would not, under any circumstances,
allow me to test hypotheses using traditional statistical methods.
A third reason was that there was no time for extensive theoretical
preparation. The subjects of the investigation were there and I
had to decide whether or not to take the opportunity.

The most important concepts, as described at the beginning of the
study, were as follows:

> Values and value structure which specify the goal concept.
> Values were regarded as the employees´ conception of the
> purpose of their own and the organization´s tasks. The
> value structure was thought to be constructed in the form
> of a means-end scheme (cf. Wallroth, 1968a).

> The role system and division of labor (these words were
> later replaced by the concept concrete organizational
> structure). I was going to describe the role system and
> the division of labor on the basis of questions about
> contacts between units and the tasks of different individuals.
> I also planned to use organizational charts and other
> formalized descriptions.

> The environment, which I intended to depict by inquiring
> into the employees´ subjective conceptions of the world
> surrounding the organization and by asking important member
> categories about their demands on the organization.

> Processes, which I regarded as ways of coordinating activities
> in the organization, rewarding the personnel, institutionaliz-
> ing goals, adapting the organization to environmental changes,
> etc.

> Internal effectiveness was conceived of as the organization´s
> ability to exploit scarce resources and the absence of strain
> in contacts in the organization.

> External effectiveness was regarded as an expression of the
> organization´s ability to adapt to changes in the environment.

Systems effectiveness was thought to be the organization's total ability to function and survive in its environment. It is affected by both internal and external effectiveness.

Goal space and movements in the goal space. The idea was that goals in organizations with similar areas of activity can be described as points in a goal space. The different axes in this space indicate the different functions which the organizations fulfill in society. These conceptions would facilitate a study of the degree of similarity in the goals of different organizations and of the ways in which the goals of an organization change over time.

The most important expectations about relationships were as follows:

Contradictory values in the value structure lead to low internal effectiveness.

Contradictory values arise due to changes in the environment of the organization or to the fact that the environment makes conflicting demands on the organization.

Substantial differences in the conceptions of the personnel and the members as to the purpose of the organization lead to low external effectiveness.

Defects in the communication system lead to poor coordination and low internal effectiveness.

Differences in the real influence of units that are formally equal lead to strain and low internal effectiveness.

Low internal effectiveness leads to low external effectiveness.

Organizations that have similar goals try to move in different directions in the goal space.

Organizations which move towards each other in the goal space will confront one another (war or negotiation).

A preliminary paper written while the data were being collected in 1966, summarizes my initial frame of reference. I quote it below in full because it also illustrates my feeling of an

inconsistency between my aims and the organizations' expectations.

I regard the project as a link in my studies about the structure and effectiveness of organizations. My frame of reference in this report is described in the strain paper [Stymne, 1968].

In general, this frame of reference says that the organization possesses a structure, which is approximately synonomous with characteristics and relationships that do not change over time. The <u>role system</u> is an important part of the structure of an <u>organization</u>. The <u>value system</u> of the organization is another important <u>part of its</u> structure. The value system expresses what the decision-maker regards as the end of his own activity and that of others in the organization. The organization has to function within the framework of its given structure. In order for the organization to function, the minimum requirement is that it does not disintegrate. Requirements of a higher order are that the organization should fulfill certain functions in society or that it should "run at a profit". If the organization is to function with a given structure, certain life-sustaining processes are required in the organization. A biological parallel to this approach is the structural description of the cell and its nucleus. Ingestion of nutritious matter is one of the processes that has to take place in order for the cell to survive. Examples of processes in an organization are coordination, communication, distribution of resources, distribution of rewards, adaptation, etc. (the list is a wholly unsystematic assortment). In general, the processes can be designated as the flow between different units in the organization (I am not really certain about this statement: maybe a process is an imaginary construction that can be used to explain the presence of different types of flows). The absence of certain processes or the existence of processes that are not well-adapted will cause the organization as a system to function poorly. This event can be detected by the presence of various abnormalities: the organization is succumbing, resources are being utilized to no purpose, the level of conflict is high, the members of the organization are sick or maladjusted. Certain types of indicators are probably related to inferiority in certain types of processes - one of the tasks of organization research is to determine the relationships that prevail.

The study aims at an application of this frame of reference in three organizations. The hypotheses are of the type: differences in the environment of the various organizations produce differences in goals, i.e. fundamental differences in the value structures of the organizations. Differences

in the environment produce different "concrete structures".
The structural features facilitate to varying degree the
fulfillment of elementary organizational processes. As a
result, the organizations will differ in terms of their
"health".

The connection with the means-end discussion presented by
Wallroth in Acta Sociologica [Wallroth, 1968a] will be
included, but in a roundabout way: If certain processes
do not go on to a sufficient extent, inconsistencies in
the members' values will arise. This in turn causes the
system to malfunction.

The description till provide the organizations with a
picture of themselves and of the differences between them
which could obstruct a merger. Bases will also be provided
for an evaluation of the organizations' present and (in
the event of a merger) future effectiveness.

My Plans in Terms of the Material Collected Thus Far

The investigation will not be aimed at the organizations'
future conditions, but at today's. The basis for potential
long-range planning will therefore be indirect. A feature in
the various structures which might be of decisive importance
in the event of a merger is that they contain different
representative systems. Servo's representation consists of
people appointed directly by the member firms while Contro's
representative body is appointed by the local associations.
It is also possible that Contro's maneuverability is greatly
limited by its connection to the local associations so that
a merger should be aimed at negotiations with these associa-
tions. If this conjecture is correct, then people in the
organizations might think it futile if I devote a great deal
of my time to asking them about their communication patterns.

1.7 Collecting the Data

To begin with, the main instrument chosen for collecting data was
the questionnaire. An argument in favor of questionnaires was that
they allowed the development of standardized instruments of measure-
ment which could be used as indicators of effectiveness in future
comparative studies. Work was begun on the formulation of a
questionnaire on the basis of my ideas about processes and com-
munication structure. A number of preliminary interviews were

also begun in order to arrive at meaningful questions, primarily about values.

The explorative character of the study, however, was hardly in agreement with my intention of making measurements with standardized questionnaires. The interview phase of the investigation was therefore expanded and became a significant feature of the study. The interviews were carried out during several intensive months in 1966. They made me aware of how greatly people's values differ, how strongly these values depend on the circumstances in the interviewee's organizational unit and how forcefully the personnel defend the values they feel they stand for.

1.8 Analyzing the Data

The questionnaires were answered by personnel and members of the organizations at the end of 1966. At the same time, the analysis of the interviews was begun. The work consisted of constructing a scheme for content analysis and a method of presenting the results. The presentation, found in Chapters 7-9, contains enumerations and examples of a number of different values which I found among the members and personnel of the organizations. The differences between various units and groups with respect to their values about the organization's activity were investigated. I also tried to determine the historical origin of the values. This work gave me a much clearer understanding of the value concept. The analysis showed how values about the tasks which the organization should carry out often arise as a result of certain significant historical events, such as a conflict with groups outside the organization. The analysis also gave insight into the fact that it is difficult to change values because they often have the character of commitments to groups outside the organization. These groups base their own actions on the assumption that the values of the organization will remain unchanged.

1.9 Developing the Frame of Reference

A report was given to the organizations during the summer of 1967. Its main features were a brief account of the frame of reference referred to above, the descriptions of the concrete structure and value structure of the organizations found in Chapters 7-9 and tables summarizing the results of the data analyses. This means that the descriptions of the organizations´ structure were completed and certain indicators of how the organizations functioned were compiled. But the understanding gained during the course of the investigations about relations between environment, values and concrete structure had to be consolidated in an extended frame of reference.

After the first compilation, the work of developing my frame of reference involved more profound descriptions of the processes that go on in the organization. Burns´ discussion about the function of "political" processes was of great importance (see Burns, 1964 and 1965). These processes have to go on because the individual employee´s future in the organization depends on whether others in the organization regard him and the values he represents as important. Therefore, individuals and groups use different means in order to promote their own policy and influence. This was one of the aspects which led me to formulate a proposition about direct dependence between values and concrete structure. Another proposition was that values about the tasks to be carried out govern the processes and, consequently, limit the organization´s chances of functioning effectively. SIAR´s experiences from a number of studies on long-range planning in different organizations revealed the significance of the power structure and the decisive of the leading group in formulating the fundamental values of the organization and its policy in the environment (see Rhenman, 1969b). This convinced me that organizations are not only products of the

environment or organisms unilaterally aimed at solving internal
conflicts of interest. They are also, to varying degrees, tools
for achieving the purposes of different groups.

The formulation of the frame of reference as presented in Chapters
3 and 4 was also influenced by reading systems literature and by
discussions with colleagues about systems theory.[5/] A distinctive
part of the systems theoretical approach is that the organization
is regarded as a system with the ability to answer to internal
strain and external threats by developing a more complex structure.
Another fundamental aspect is that a certain process can go on
within widely different structural setups.

1.10   An Extended Analysis of the Data

The data I collected desribed the structure during a given period
of time, even though I had access to some historical information.
The theoretical ideas that gradually evolved about organizational
processes, however, referred to flows in periods of varying duration.
Despite these limitations in the data collected, I still wanted
to see the extent to which they could be used to illustrate
different processes. This description was written during the
fall of 1968. Here, I tried to utilize all the types of material
gathered, i.e. from interviews, questionnaires and historical
sources. The description in Chapter 10 also includes discussions
about my initial propositions, although the context in which they
are discussed has developed and changed.

1.11   The Final Result

This study is a process during which I constantly gained new know-
ledge about organizations from data and from contacts with the
research of others. This learning process is not over. This implies
that the model of how organizations function is not closed in the

sense that every concept and proposition is either necessary for explaining other concepts and propositions or is derived from other concepts and propositions. The model is intended primarily as a language that will help make it possible to continue discussing the effectiveness problems of organizations.

In the presentation of the model, it is argued that the development of indicators or the synthesis of indicators already available is required in order to make a diagnosis of the effectiveness problems of organizations. Since "value" is the concept in the model which is dealt with least in other studies of organizations, I have concentrated the empirical investigation on exemplifying and explaining the value concept.

In the concluding chapter (Chapter 11), I try to summarize the study as a whole and to indicate what can be learned from it. This chapter also includes a discussion of how the model should be developed.

Notes

1. Two important manifestations of organization theory as a research area are the publications of the Administrative Quarterly which began in 1955 and March´s anthology (1965).

2. The terms formal organizations, bureaucracies or simply organizations are used in the literature as synonyms for the concept "complex organizations". There is no definition of the concept organization that is accepted universally. Those which do exist usually state that an organization is a durable coordination of human and material resources involved in common efforts. The people in an organization have specialized roles in a differentiated role system. The aspect of rationality is often included in the definition. This implies that efforts are coordinated towards a certain goal and that the contents of the roles are more or less in agreement with the superior goal.

3. The main idea behind the methodology proposed is presented in Coombs (1964), especially the discussion on "similarities data" in part 5. During the past few years, several computor programs for yielding multi-dimensional solutions to ranked data have been constructed. The original project was influenced to a large extent by a study at the Institute for Social Research at the University of Michigan. (See Seashore & Yuchtman, 1967.) A limited pilot study in this area is described in Stymne & Wallis (1967).

4. This frame of reference is described in Stymne (1968).

5. Important sources are Katz & Kahn (1966) and Buckley (1967).

CHAPTER 2. THE DISPOSITION OF THE REPORT

Figure 2:1 is a brief outline of the disposition of this report.

Theory

| Chapter 3 |
| Outline of a systems model of organizations |

Empirical Data

| Chapter 5 |
| A brief description of the three organizations |

Method

| Chapter 4 |
| Five organizational processes |

| Chapter 7-9 |
| Account of the structure of the three organizations |

| Chapter 6 |
| Methods of observation and data analysis |

| Chapter 10 |
| Processes and effectiveness in the three organizations |

Figure 2:1. The Structure of this Report.

A systems model of organizations is outlined in Chapter 3. The purpose of the model is to provide a language that makes it possible to discuss the effectiveness problems of individual organizations. Effectiveness is regarded as the organization's ability to survive as a system and to function in its environment. I also argue that an analysis of systems effectiveness does not provide a sufficient basis for evaluating an organization.

Different groups can use organizations as tools in varying degrees. Those in a position to influence an organization - top management, consultants, researchers, politicians, etc. - should be aware of the fact that there is usually room for choice between the different purposes for which an organization can be used.

The different concepts included in the organization model proposed in Chapter 3 are environment, concrete structure, value structure, sway group values, processes and process indicators. The processes are flows of activities which are necessary for maintaining and developing the organization's concrete structure and value structure. Some of these processes are brought about by environmental demands. Others are necessitated by the organization's own structure. The process indicators are measurements of how well the different processes go on. The survival of the organization can be threatened if one of many processes does not go on satisfactorily.

The process concept is treated in more detail in Chapter 4. I give an account of five processes which I think are important to the organizations investigated. These processes are dealt with relatively extensively in the literature on organizations. I discuss the values that govern each process, the concrete structure in which the process goes on and propose conceivable indicators of the course of the processes.

In Chapter 5, I try to describe the type of organizations I study. On the basis of typologies suggested by different authors, I show that each organization has characteristics of several different ideal types. I argue that each organization is somewhat of a unique system that functions according to its own characteristic pattern. The type concept can be of some help, however, in

describing a particular organization. As compared to most business firms, the organizations investigated can be regarded as belonging to a type that concentrates more on defending and influencing the values of different groups. In conclusion, each organization is described briefly.

Prior to presenting the material I collected about the organizations, I devote Chapter 6 to an account of the methods of observation and data analysis I used in this study. Various questions related to the reliability and validity of the data are also discussed. The problem of the applicability of the descriptions made and the conclusions drawn wind up this chapter.

Each of the three organizations is described on the basis of the material collected, in Chapters 7, 8 and 9, respectively. Each chapter begins with an account of important events in the history of the organization. This is followed by a description of the concrete structure. This includes the different units in the organization, the control structure of the relations between these units and a review of the personnel structure. Next, the environment of the organization is described. Four main environmental areas are depicted: members, the other side and the two other organizations investigated. Most of the content of these descriptive chapters centers on the values I found in interviews, documents and answers to questionnaires. This account emphasizes strategic values, i.e. values about the areas in the environment which should be the targets of the organization´s activity and the key ideas which are available for reaching these groups. I also show how these strategic values are related to values on lower levels and how different values are supported by the concrete structure. A means-end scheme is used to summarize the description of the value structure.

In Chapter 10, the theoretical discussion in Chapter 4 is linked to the descriptions of the organizations made in Chapters 5, 7, 8 and 9. Each process is illustrated by observations from the organizations. Analyses of answers to the different items in the questionnaires are used as indicators of how well the processes go on. Observations about the processes and differences between the three organizations are compared to theoretical expectations.

The descriptions in Chapters 7-10 are written mostly in the present tense. For instance, it is said that Contro has 125 employees. Descriptions such as these refer to the situation at the time of the investigation (the second half of 1966). A number of quotations are also used in Chapters 7-9 to illustrate different values. These quotes are taken directly from the interview records on which a content analysis was performed. They have been selected as typical examples of values discussed in the text. When the opinions of the respondents were contradictory, I tried to use quotes which represented different points of view.

Chapter 11 concludes and summarizes the study. The aim of the model is summed up. The experience gained from applying the concepts proposed is accounted for. Suitable methods of measurement are also suggested. In conclusion, some ways of improving the model are proposed.

The Appendices contain coding instructions and examples of questionnaire and interview forms. A detailed account of the results of the analysis of data from questionnaires, interviews and documents is presented in a separate report (Stymne, 1969). This report will be referred to in the text as the "Supplement".

CHAPTER 3. OUTLINE OF A SYSTEMS MODEL OF ORGANIZATIONS

3.1 Summary

An outline of a model for organizational systems is presented in
this chapter. There are different types of organizations (the type
concept is discussed in more detail in Chapter 5). Models which
are especially adapted in some respects are required to describe
organizations that belong to a particular type. But a given
organization is not identical to the ideal type; it has to be
described by a model that has certain unique features. For these
reasons, the model presented in this chapter is not intended as a
general model of organizations. It is formed primarily to help
describe the three organizations investigated. These organizations
can be said to belong to the political type because many of their
activities are aimed at working for certain values (cf. Chapter
5). The model I propose has also been influenced by earlier in-
vestigations and other projects in which I participated while
this study was in progress. The organizations dealt with in the
other studies were mainly business firms.

The text in this chapter is largely based on what has been advanced
in the literature about organizations. But the review of the
literature is not used to set the opinions of different authors
in contrast to others or to discuss alternative explanations of
various phenomena in the organization. Instead, I have wanted to
express what I personally regard as important. I am well aware
of the fact that this might lead to criticism for a lack of
thoroughness and insufficient consideration of alternative and
complementary approaches.

The purpose of the model is to make it possible to discuss and
"diagnose" effectiveness problems in organizations. Organizations

are not merely systems that should function as effectively as possible in a given environment. They can also be used as tools for definite purposes. As a result, this chapter also contains a discussion of the influence of "sway groups".

I stress the fact that a comprehensive, meaningful measurement of effectiveness cannot be formulated. Instead, I suggest that effectiveness has to be indirectly estimated by means of different measurements: process indicators. Each process indicator is linked to a specific process. Some of the processes are brought about by environmental demands while others are necessary for maintaining or changing the structure of the organization.

The model is based on the assumption that measurable process in-dicators can be formulated for each process. These various measurements are not necessarily correlated with one another. One process that functions well might even obstruct other pro-cesses. For instance, indications of individual adaptation in a certain situation might be negatively correlated with the effectiveness of the production process. Another conceivable example is that an organization which can skillfully exploit market changes might have difficulty getting its internal admi-nistration to function.

3.2   The Task of Clinical Organization Research

I use the term clinical organization research to denote research aimed at simultaneously solving organizational problems and acquiring increased knowledge about the way organizations function. The model introduced is intended for use in this kind of research.

Clinical organization research takes place when social psychologists or business economists participate actively in formulating and observing organizational changes. It is similar to the dual role

of the economist who acts as an advisor in formulating a nation's
economic policy at the same time that he is an observer of the
effects of this policy. I want to distinguish between two problems
that arise in this kind of research. One can be termed the goal
problem and the other the effectiveness problem.[1/] The organiza-
tion researcher shares these two problems with other groups of
persons who attempt to solve the problems of organizations and
design, change or influence organizational systems. Business and
other organization leaders and consultants are two important groups
in this context.

The goal problem has to do with organizations as components in a
larger social system. Organizations affect the surrounding society.
Therefore, the clinical organization researcher has reason to take
his own values into account in his contacts with the organization.
This problem is dealt with in Section 3.3 ("Organizations as Tools")
where the significance of the organization to the surrounding
society is discussed. The ability of individual groups to in-
fluence the organization is discussed in Section 3.4.

One aspect of the goal problem is closely associated with goal
fulfillment. Goal fulfillment is a relation between a specific
evaluator and the performance of the organization. Since there
is, in practice, an infinite range of goals that different groups
can set for an organization, it is impossible to define general
measurements to gauge goal fulfillment. Different evaluators
have to make their own judgements as to whether or not the
organization has succeeded in reaching different goals.

These evaluations can be made by groups that are powerful enough
to formulate the policy of an organization. Other groups can
also evaluate goal fulfillment on the basis of their own con-
ception of what the organizational goals should be. For instance,
sociologists say that an organization fulfills certain functions

in society. In other words, the actions of the organization are regarded as having certain functional or dysfunctional consequences for the surrounding system. The sociologist can analyze the goal fulfillment of the organization on the basis of his own theories about what is good and bad in society. Similarly, a government can evaluate whether or not an organization has had a high degree of goal fulfillment on the basis of its values of what is important in society.

Another problem the clinical organization researcher has to deal with is that as a system, the organization can function more or less effectively. Later on in this chapter I suggest how systems effectiveness[2] can be measured by means of a number of indicators of the different processes necessary to the survival of the system. The model is built on the assumption that the indicators for each process do not show "positive" readings unless a particular organization functions well.

Process indicators are already in use today in clinical organization research.[3] The clinical organization researcher can diagnose dysfunctioning processes fairly quickly if he has a set of process indicators at his disposal. He can then use this diagnosis to gain insight into whether the case interests him and whether he is the most suitable person to continue treatment. Unfortunately, organization researchers and organization consultants do not concentrate enough on making a diagnosis and referring the organization to someone more suited to handle its problems. Instead the researcher or consultant in question tends to adhere to the process he happens to be an expert on, regardless of whether it functions well or not.[4]

Beginning with Section 3.6, the remainder of this chapter is devoted to developing a model in terms of which organizational effectiveness

can be discussed. The model is intended to make it possible to diagnose organizations' problems. This diagnosis can, in turn, serve as a basis for determining what type of treatment is suitable in a given case.

3.3 Organizations as Tools

An important reason for studying complex organizations is their significance for social change. Organizations are not merely a product of the structure of the society surrounding them and the values prevalent in society. The structure and values of society are, to a large extent, a product of the structure of organizations and the values different organizations work for.[5] Studies of organizations and their values can provide explanations for changes in society. Social change can be brought about by using organizations as tools.

According to Adam Smith and classical economic theory, society moves towards a state where productive resources are utilized in an optimal way, with respect to consumer preferences. The emergence of productive organizations is controlled by a hidden hand, the products manufactured are exactly the ones society needs and they are manufactured through the most effective use of resources imaginable.[6]

The way in which the structural-functional tradition in sociological theory views organizations is related to the deterministic approach of economic theory. Organizations exist solely for the purpose of performing specific functions in the surrounding society. Their activity also has to be acceptable to the value system of society (cf. Parsons, 1956).

But I think the social scientist misses an important part of the

explanation of social change if he perceives organizations solely as a result of a certain social structure or as a temporary coalition of persons exchanging goods and services. Organizations are not merely organisms that exist in order to maintain the equilibrium in society or to preserve the social structure. An important characteristic of organizations is that they can be used as tools to attain definite objectives.

I designate as an organizational sway group[7] a set of persons (or sometimes a single individual) that uses a certain organization as a tool. A sway group conceives of objectives for the total activity of the organization, has the power to affect the decisions that govern the overall activity of the organization and wants to influence the organization in accordance with its own objectives. The relationships between different sway groups are an important area for research (see Keller, 1963). The primary purpose of the definition of sway group is to single out those in power, regardless of which subsystem in the organization they belong to. The definition does not rule out the existence of more that one sway group in the same organization. Sway groups are not always formally associated with the organization. The study of organizations containing several sway groups seems to be a promising area for research.[8]

There does not always exist a group which has purposes for the total activity of the organization. But when this kind of sway group does exist, its purposes for the organization vary from being passive and introverted, i.e. the firm should manage reasonably well in terms of competition, to being aggressive and extroverted, i.e. to change the distribution of wealth in society.[9]

The social structure of society does not completely determine who becomes a member of a sway group in relation to a certain organiza-

tion. At any given time society contains a whole array of objectives
that different individuals and groups would like to attain. Some
of these objectives conform to prevailing values and institutions,
while others represent deviate and unaccepted values. Some of these
objectives and ideas will eventually be incorporated into society.
The selection depends to some extent on how different individuals
and groups can establish themselves as sway groups in relation to
organizations that are either new or already in existence. The
weight of different objectives in society also depends on how
successfully different organizations work for the purposes of the
sway groups.

The survival of an organization or its ability to achieve specific
purposes depends to a large extent on the restrictions imposed on
its activities by the surrounding social structure.[10/] The structure
of the organization itself, for example in terms of roles grown
out of tradition, also restricts its ability to function.[11/] But
external environment and internal structure are not the only
determinants. In most cases there is room for sway groups to exert
their influence. In other words, there is room to choose alternatives.
The range of choice includes all the ideas about future states of
society which individuals can have. The objectives that will
actually carry weight depend in part on how advocates of these
various ideas are able to use organizations as tools.

I do not mean to imply that organization theory alone can explain
social change. It cannot explain the emergence of ideas or the
establishment of sway groups. But it can contribute greatly to
understanding the mechanisms that cause society to develop along
certain lines when the variety of directions conceivable is much
greater.

There are numerous examples of how organizations are used as tools
with respect to objectives that are incompatible with deep-rooted

values and that threaten the survival of the existing society.
Examples of this are the German National Socialist Party, the
behavior of the French industrial organizations prior to and
during World War II and the conduct of the Communist Party in
many countries (see Ehrmann, 1957 and Selznick, 1952). The
current debate on the "imperialist" aspirations of large inter-
national firms, the consequences of conglomerates and the political
activity of the defense industry can be regarded as reflections
of the fear that powerful organizations will become the tools of
forces hostile to values that are regarded as important.[12/]

Nor is it difficult to find examples of organizations that have
been used successfully as tools for achieving objectives which,
at least in retrospect, are more in accordance with accepted
social values. President Roosevelt, for instance, was a politician
who used organizations successfully and systematically in order to
achieve his objectives.[13/] As an alternative to nationalization,
the Social Democratic Government in Sweden has tried to establish
organizations that will work to carry out the party's intentions
within the existing socio-economic structure.[14/] Private business-
men have founded firms, based on ideas about possible changes in
society, that have had important consequences for social develop-
ment.[15/] Voluntary organizations often originate in order to work
for definite social objectives which they sometimes achieve quite
successfully.[16/]

There is every reason to maintain that while organizations are
tools for change, they are also effective means of suppressing
ideas and preventing change. This is probably the aspect of
organizational functions that is dealt with most in sociological
literature.[17/] Nor is there a lack of spectacular examples such
as the opposition of the Catholic Church to birth control,
Edison's and Marconi's efforts to have their ideas accepted by

existing firms and the use of police organizations to suppress
political innovations (see Burns & Stalker, 1961, pp. 22-24). These
findings could be generalized into a hypothesis that organizations
already in existence lack the ability to make any real innovations
and that instead, new organizations have to be founded for this
purpose. If the existing organizations can dominate their environ-
ment and hinder the establishment of new organizations, then the
number of innovations in society will be small.

3.4 The Role of Sway Groups

I have stated that organizational sway groups can to some extent
choose the ways they want to use the organization and influence
the surrounding society. This means that the values of these
groups and their awareness of these values are important factors
to someone interested in explaining and predicting social develop-
ment. Selznick (1957) has dealt with this question in connection
with a discussion of "statesmanship" and institutional leadership
in organizations. Institutional leadership means that those who
are in a position to formulate the policy of an organization should
be primarily concerned with the mission of the organization in
relation to various groups in society and to the employees. On
the other hand, the institutional leaders should not worry too
much about the operational efficiency of the organization. Selznick
maintains that an organization runs the risk of becoming expendable
without this kind of conscious leadership. Rhenman (1969b) has pro-
posed the hypothesis that the necessity of institutional leadership
varies in different types of organizational environments. In addition,
the necessity for institutional leadership can be assumed to increase
the larger the organization under consideration and the larger the
organization´s impact on the surrounding society.

Those who establish themselves as a sway group in relation to an

organization are not always aware of the fact that the decisions they take part in concern objectives for which the organization will be used as a tool. Consequently, they do not base their decisions on the impact these decisions will have on society and on the employees. Various professional groups which work as advisors in organizations may find themselves in this situation. This can be exemplified by management consultants who function as a sway group because of the authority their knowledge carries. They might have reason to deliberate whether they want to agree to work for the values adhered to by the leaders of the organiza- tion or whether they themselves want to influence how and why the organization is used.

But it is probably easy for the advisor to avoid this problem by saying: "According to my calculations, alternative A is likely to yield more crowns and öre than alternative B. Perhaps you (the executive) want to evaluate social consequences too, but that is quite another matter - after all, I'm an economist and value-free." This is actually an ultimatum to management: "If you want to utilize my expertise, you have to accept my values - only that which can be calculated in terms of crowns and öre is of any importance." Instead of clarifying the values relevant to the decision, they use the organization as a tool for their own values. As a result, the assistance given to management can often become highly doubtful.[18/]

3.5 Organizations as Open Systems

Several attempts have been made to develop systems models for social systems on the basis of "general systems".[19/] There is not much unanimity among authors of systems-oriented literature with regard to the definition and concepts used. Therefore, I would like to discuss briefly some of the concepts and ideas which I think are important in describing an organization as an open, complex,

goal-directed and adaptable social system.

Interdependence. A system is made up of a set of components that
are related to and influence each other in various ways. Many
relations between different components all have to be taken into
consideration at the same time in order to explain the behavior
of the system or of an individual component (see Hall & Fagen,
1968).

Openness. Organizations exhibit the characteristics of open
systems. It is difficult to draw a line between an open system
and its environment. This kind of boundary is somewhat arbitrary
and depends on the purpose of the researcher's analysis
(ibid.).

Information processing. Organizations are essentially systems
for information processing. Flows of information across systems
boundaries are the most important exchanges between the environ-
ment and the organization. In this respect, organizations differ
from mechanical systems such as a clockwork system, where pure
energy exchange with the environment is most important to the
continued functioning of the system (see Buckley, 1967, pp.
46-50). Control centers and feed-back loops (cf. Figure 3:1)
are important features of information processing systems (cf. von
Bertalanffy, 1968).
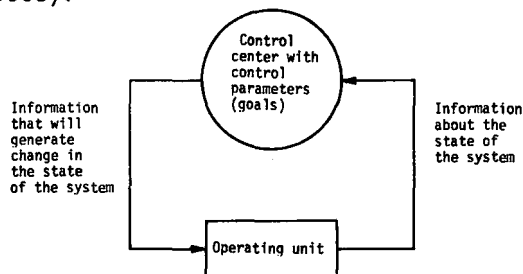
Figure 3:1 Feed-back Loop.

Goal-direction and adaptability. The typical behavior of a non-living, physical or clockwork system is to move toward a state of disintegration. These systems are characterized by increasing entropy.

Cybernetic or homeostatic systems have the ability to maintain a state of equilibrium in spite of variations in the environment. However, the structure of a cybernetic system is fixed. The basic structure of the system is not changed as a result of information received from the environment. Therefore, the capability of these systems to function in environments other than the ones they were designed for is limited (cf. von Bertalanffy, 1968).

Organizations and other social systems are goal-directed in the sense that they can adapt their behavior to the state of their present and future environment on the basis of the information they receive from it (cf. Sommerhoff, 1969). Though they have many of the characteristics of cybernetic systems, they differ from them in that they have the ability to innovate and change their own structure. Organizations often adapt to their environment by increasing their complexity and degree of organization (cf. Pringle, 1968). In other words, organizations, like living systems, are able to import resources from the environment and use them to differentiate their own structure in order to adjust to increased environmental variation (see Ashby, 1968a and b, pp. 108-122, 129-136).

3.6 A Systems Model of Organizations

The essential concept in the model I propose is that of organizational processes. A process is a number of interrelated activities extended in time. An activity is seen as the behavior of an individual at a given point in time. Organizational processes are

prerequisites for the survival and proper functioning of the organization as a whole. Processes that function properly, to use a physiological analogy, bring about the fulfillment of certain organizational needs. I choose to say "needs" despite the obvious fact that an organization or society does not have needs in the same way a human being does. The expression "organizational needs", however, indicates that the survival of the organization depends on the fulfillment of certain conditions, which implies something more than the fulfillment of the needs of individuals in the organization. Conversely, serious disturbances in the functioning of the organization can be traced to deficiencies in organizational processes.[20/]

In addition to the terms "sway group" (explained in the preceeding sections) and "process", three other concepts are used in the model. Together, these five concepts define the organization. The other three concepts are environment, concrete structure and value structure. The meaning of these terms will be explained in detail later on in this chapter. For the time being, I will just suggest some preliminary definitions.

The environment is everything regarded as being outside the boundary of the organization. It was pointed out above that this boundary is drawn somewhat arbitrarily. The parts of the environment relevant to an organization consist of resources and groups that control them, cooperating groups, legislators and other types of norm senders, etc.

Concrete structure refers to a description of the different individuals, physical buildings, machines and material that belong to the organization at any given time plus the relationships between these components. Individuals can be described in terms of their background, knowledge, tasks, etc. A description of the relationships includes the characteristic flow of rewards in the

organization, the system of distributing work, the system of
communications, etc. The appearance of the structure depends
on how long the system has been under observation. Structure
is synonymous with those aspects of the system that have remained
stable during the observation period chosen.

Values are the purposes an individual has for his activities in
the organization and for the tasks he attributes to his work
group and the organization as a whole. Values in this sense do
not imply all a person's motives and ideas about himself. They
refer primarily to his conception of his, the group's and the
organization's role. I use the concept of values rather than the
concept of roles so as to emphasize that an individual's percep-
tion of his situation is something other than the formal role
description assigned to him by some authority in the organization.
Value structure refers to a description of the values found
within an organization at a given point in time and to how these
values are related to each other. Values for the organization
can also be expressed by persons outside the organization. In
this case, values usually refer to perception of the role of the
organization as a whole.

Figure 3:2 illustrates the relationships between the concepts
used in the model. The numbers refer to seven propositions about
the way an organization functions.

Values of
Sway Groups

P7

Organization

Value
Structure

P3

P5

P6

Environment

P1

Processes

P4

P2

Concrete
Structure
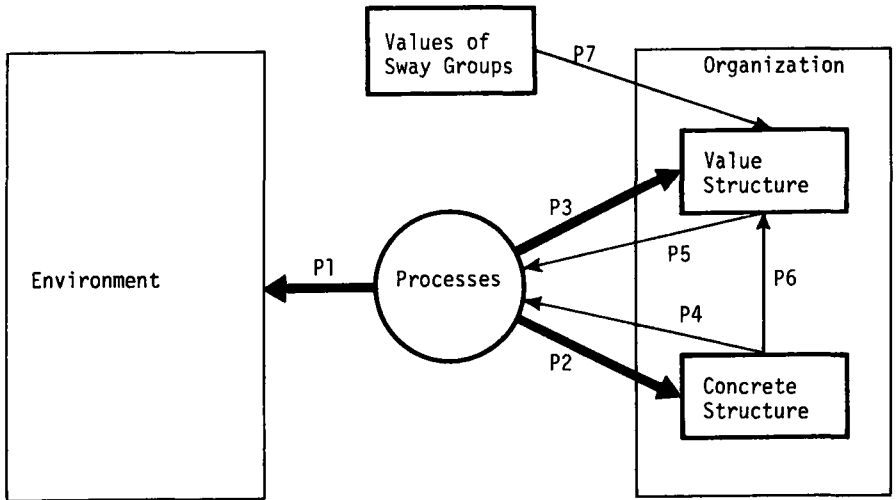
The numbers refer to the different propositions. Propositions
P1-P3, designated by thick arrows, are statements about the
organization´s conditions of existence. They show the processes
as necessary to the survival of the organization. The thin
arrows denote propositions that contain statements about how
the different components in the model influence each other.

Figure 3:2. Main Features in the Organization Model.

The first three propositions define conditions of existence for
organizations. They are:

P1   Certain processes have to take place across the boundary
      between the organization and its environment in order for
      the organization to survive and function.

P2   Certain processes have to take place in order to develop and
      maintain a concrete structure.

P3   Certain processes have to take place in order to develop and
      maintain a value structure.

The last four propositions are statements about the relationships
between the different concepts in the model.

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P4 A concrete structure is required in order for the processes
    to take place. Every process can take place within a large
    number of alternative structural patterns.

P5 A value structure is required to govern the course of the
    processes.

P6 The concrete structure directly affects the value structure
    so that changes in the concrete structure usually bring about
    changes in the value structure.

P7 The value structure is influenced by the values of sway
    groups.

3.7 Structure and Process

The system described by propositions P1-P7 is in a state of con-
stant flux. There is always tension in the system which threatens
to break it down. Tension may stem from environmental stress.
Tension is also caused by the conflicting values of different
groups in the organization. These tendencies toward destruction
can be counteracted by organizational processes that are flows
of activities aimed at maintaining or elaborating the existing
organizational structure.[21/] The processes will cause the
structure to undergo successive changes.

Some structural changes can be traced to changes in the values
of sway groups. Others are due to the fact that environmental
changes cause certain processes to increase in importance (P1).
The concrete structure also has to make adjustments so that these
new processes can be carried out (P4). This kind of adjustment takes
time. Often, the organization cannot reach a state of equilibrium
before the next environmental change occurs. The system also
has other characteristics that cause it to change rather than to
reach a state of equilibrium. P4 states that the processes pre-
suppose a concrete structure. Once a concrete structure appears,
it in turn requires new processes to keep it together (P2). These

new processes again require structural adjustments in order to continue (P4, P5). All this results in an unbroken series of processes aimed at counteracting tensions in the structure, the development of a structure that permits the processes to continue, etc.[22/] The relationship between the value structure and the concrete structure also contributes to this instability. A particular concrete structure is reflected in a certain value structure (P6). This value structure requires different processes (P3) that, in turn, require a concrete structure in order to continue (P4), etc.

3.8 The Concept of Effectiveness

I stated earlier that my aim in proposing the model was to be able to evaluate systems effectiveness in organisations. I make a distinction between two types of systems effectiveness: external and internal effectiveness. Figure 3:3 shows that external effectiveness has to do with the organization's relations to the environment. Internal effectiveness is related to the organization's ability to gather and process information and resources it receives from the environment.
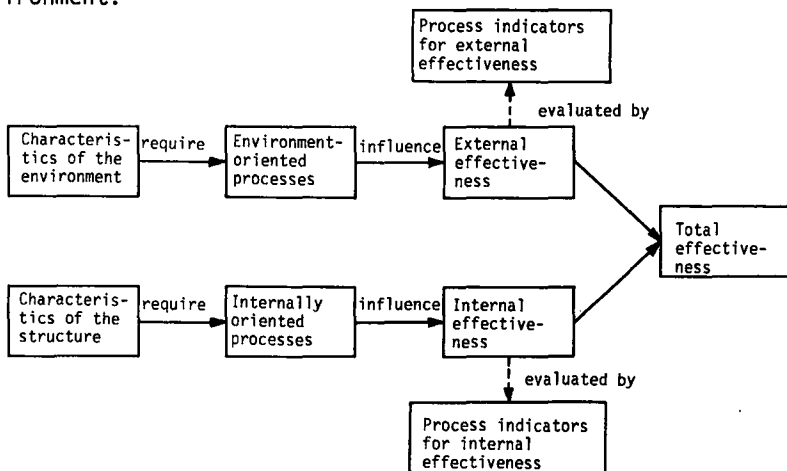
Figure 3:3. Schematic Presentation of the Concept of Effectiveness.

A set of environment-oriented processes can be regarded as necessary
in order to cope with the environment. These processes determine
how successful the organization is in attracting information,
resources and different kinds of inflow from the environment.
These processes also include the ability to develop a structure
that ensures continued contributions from the environment. This
capacity to establish cooperation with, use, dominate or exploit
the environment will be called external effectiveness. External
effectiveness cannot be gauged directly by any singular measure-
ment. On the other hand, there are a number of process indicators
(cf. Table 3:4) that can provide an estimate of how effectively
different processes take place. External effectiveness is some-
what related to the strategic values of the organization. These
values indicate the areas in the environment that are targets
for the organization. If these values single out very benign
areas, then external effectiveness will obviously be far greater
than if the targets had been scarce areas. A firm that, either
of its own choosing or by chance, selects the Swedish market as
a target from the outset, has limited its possibilities of attain-
ing high external effectiveness in relation to those firms that
select the North American market as their target.

Theory	Process	Process Indicators
Theories on the organization as an economic unit that exchanges goods and services with its environment; Theory of the firm; Inducement - contribution theory[23]/	Exchange processes	Balance between in- ducements and con- tributions; Cash flow; Net increase of personnel
Theories about economic growth in society (cf. Baumol, 1959)	Growth processes	Market share; Growth rate
Theories about competition between organizations (cf. Shubik, 1959)	Strategy formulation	Vulnerability; Dis- tinctive competence
Theories about technological and social changes in society (cf. Jantsch, 1967)	Innovation	Innovation rate in relation to com- petitors
Theories about business cycles (cf. Lundberg, 1953)	Evening-out processes	Flexibility

Table 3:4. Process Indicators for Environment-oriented Processes

Internal effectiveness is related to internally-oriented processes and refers to how well the organization can use the resources and information it receives from the environment. If an organization is likened to a machine, internal effectiveness is the degree of efficiency of the machine or its capacity to transform input into output with the least possible loss of energy. Unfortunately, neither the input nor the output in the organization is especially easy to measure. This is partly due to the fact that an organization is not a machine but a social system where information processing is often more important than resource transformation. There are also many different kinds of input and output that would be impossible to weigh together even if they could be measured. For example, an estimate of the value of output requires adding profits to the owners, goods to the customers and satisfaction to the personnel. Instead, I propose that internal effectiveness can be estimated by means of process indicators (cf. Table 3:5) for processes that have to take place in order to keep the organizational structure together. These processes involve transformation and utilization of resources and information received.

Theory	Process	Process Indicator
Theory about division of labor (cf. Weber, 1968, pp. 114-137)	Division of labor	Quantity; Speed
Theories about production (cf. Amber & Amber, 1962)	Production	Unit cost; Rhythm; Continuity
Theories about control (cf. Georgopoulos & Mann, 1962, and Ramström, 1967)	Control	Strain; Rationality
Theories about motivation (cf. Vroom, 1964, and Dahlström et al., 1966)	Reward process	Willingness to work; "Alienation"
Theories about investment in the firm (cf. Lutz & Lutz, 1951)	Allocation of resources	Yield on capital invested for different purposes

Table 3:5. Process Indicators for Internally-oriented Processes.

Taken together, external and internal effectiveness represent the total effectiveness of the organization. It is difficult to express what the concept of total effectiveness really stands for. Total effectiveness has to do with the total ability of the organization to survive and adapt itself to changing conditions.

Many theories and methods can be used to derive the kind of process indicators suggested by the frame of reference underlying this presentation. These theories can be found in the social sciences, economics and engineering. In terms of the model suggested, many of these theories should not be regarded as conflicting or as offering alternative explanations but as complementary theories and explanations. Of course, a complete list of the theories that can be utilized to derive process indicators has to be based on a very careful survey and systemization of the existing literature. Tables 3:4 and 3:5 only serve as examples of different processes and their associated process indicators. They also suggest relevant theories.

3.9 Time Dimension of the Processes

Organizational processes are flows of activities in time. Different processes have different time ranges. Time range refers to the time that elapses between the emergence of a change in the state of one part of the system and the point in time when the processes have effected a change in other parts of the system (cf. Sommerhoff, 1969). The processes that result in perceptible and extensive structural changes have a considerably longer time range than processes that merely help maintain the existing structure. Table 3:6 contains some examples of processes with different time dimensions. They are all examples of adaptation to changes in the environment.

Type of change in the environment	Example of process and the resulting change in the organization	Approximate time range
Changes in the basic structure and values of society: Transformation from rural to urban society. Technology of printing, invented and applied	Selection. Certain types of organizations disappear and others emerge	Centrury
Changes in the relative weight of different groups and values in society: Educational level considerably increased	Institutionalization, i.e. changes in the basic values of the organization	Enough for the succession of two sway groups, i.e. 10-30 years
Changes in the market. Technological development in society: Market for refrigerators is saturated	Adaptation and innovation processes, i.e. organizations look for new markets, new products and new technology	At least 3 years
Cyclical fluctuations, regularly recurring crises and disturbances: Strikes, tight capital market	Processes that involve switching between different standard programs, e.g. restrictive credit policy toward customers in a time of capital scarcity	Seconds - week
Daily transactions: Supplier demands payment, buyer files an order	Processes involving day-to-day exchanges with groups in the environment	Seconds - week

Table 3:6.   Examples of Environment-oriented Processes having
             Different Time Ranges.

3.10   The Environment of the Organization

The appearance of and changes in the environment determine which
processes are essential to the survival of the organization at
any given time.   This means that the development of a theory of
organizations has to include a classification system for environ-
ments.   Simon[24/] has shown how the process through which the
organization finds different alternatives in the environment may
take different forms depending on whether the probability of
success is evenly distributed over the whole environment, as in
free competition or whether certain parts of the environment
contain comparatively more rewards, as in an oligopolistic
market.

The environment of the organization is composed of groups (such
as other organizations), markets and areas or strata defined in
some other way, with which the organization has current or
potential relationships.   There can be different kinds of
relationships such as flows of resources and/or information,
the exercise of control, etc.   The relationships can involve
some kind of reciprocity, such as exchange relationships with
a market.   They can also be unilateral, i.e. the organization
obtains information that is publicly accessible, without having
to give anything in exchange.   One-sided directives from a
legislator are another example of unilateral relationships.

I am not going to develop a typology of environments.   Instead,
I will introduce the concepts I intend to use in order to describe
the environment.[25/] The most general concept is that of an environ-
mental area that designates part of the environment that can be
delimited into an area in which the members have one or several
common attributes and with which the organization has current or
potential relationships.   The expression critical environmental

<u>area</u> refers to an environmental area with which the organiza-
tion has relationships that give it decisive advantages or dis-
advantages in comparison with other (especially competing) organiza-
tions. In addition, the survival of the organization depends to
a large extent on continued relationships with the critical
environmental area. If relationships with a critical environ-
mental area cannot be maintained, then essential parts of the
structure of the organization will break down.

Relationships to a critical environmental area are specific to
the organization in question. They are not only the result of
rules of the game that apply to the surrounding society as a
whole. The labor market, for example, cannot be a critical
environmental area when there exists a functioning labor market
for the kind of manpower a firm needs. On the other hand, the
labor market can be a critical environmental area for a research
institute that has to compete with other organizations in order
to recruit able researchers. Customers cannot be a critical
environmental area for a firm that sells staples at quoted world
market prices. But if the same firm has to control those in
political power in order to gain access to a natural resource,
then those in power become a critical environmental area.

In addition to critical environmental area, I use the term
<u>participant</u> to denote another type of environmental area. The
relations between a participant and an organization are reciprocal
to a certain extent and consist of an exchange of contributions
and rewards.

Values control the continuous flow of the processes in the organiza-
tion (P5). This implies that the values also serve to define the
limits of the ability of the organization to adapt to environmental
change and to maintain a workable concrete structure in order to
survive.

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Suppose that an organization exists in an environment where there are constant market and seasonal fluctuations. A special process that evens out these environmental variations is required in order for this organization to survive (P3). The evening-out process is controlled by values which indicate, for instance, that the resources of the organization should be used in such a way that freedom of action is maintained (P5). Another example is the organization operating in an environment which is undergoing considerable technological development. A technological innovation process is required if this organization is to survive (P3). This process has to be controlled by values that presuppose the importance of research and development work (P5).

3.11 Concrete Structure of the Organization

The concrete structure, which has been defined previously as the pattern of individuals and tasks as well as the physical pattern of fixed assets and other resources, is to a large extent a historical product. An organization often originates in order to achieve certain objectives and the founders try to provide the organization with personnel who are suitable and willing to work to achieve these objectives (P7). The people in the organization have numerous cultural and social values with regard to how an organizational structure should be constructed (P6). These principles and methods, e.g. for the division of labor, are likely to be those which are accepted in society at that particular time. As the organization grows, these values will control the processes that result in a more elaborate organizational structure (P5). As the organization develops, various things happen which bring about demands for changes in the structure. These demands might be due to changes in the environment of the organization (P1) or to changes within the organization itself (P2). The organization usually adjusts to both of these demands in a similar way - new personnel are recruited, new units are created

to take care of new functions and tasks at the same time that others disappear. These adjustments and elaborations of the organizational concrete structure take place through different organizational processes. Since the processes are controlled by the values in the organization, the set of possible structural patterns becomes restricted (P5).

Independent of the environment, the conrete structure requires that certain processes take place (P2). For instance, if we regard size as an expression of concrete structure, then the transition from a small to a very large organization implies that the exchange of information between different parts of the organization increases in importance (cf. Haire, 1959). The fact that the concrete structure often contains machines and buildings as well as people requires processes that can adapt human needs to those of the technological system and vice-versa (see Emery & Trist, 1969b, and Thorsrud & Emery, 1969).

The appearance of the concrete organizational structure has been the topic of a great deal of the literature on administration. Less interest has been devoted to the relationship (P4) between the make-up of the concrete structure and what will take place within it. An example of a result of the connection between process and concrete structure is that an innovation process for finding new solutions has been shown to take place inside a communication structure, where each individual is easily accessible to every other individual. On the other hand, an administrative process for coordinating programmed tasks usually requires a more hierarchically ordered structure (cf. Weiss, 1956, and Burns & Stalker, 1961). Figure 3:7 gives a few illustrations of relations between concrete structure and process.

Figure 3:7 diagram:

Structural characteristic	Process	Concrete structure (alternative solutions)
Different specialized staff functions arise	Coordination	Conferences, group work / Tele-communications, report systems / More administrative experts
The organization expands and many can make contradictory decisions	Control	Report systems / Closer supervision / Profit centers

Figure 3:7. Two Examples of the Relations: Concrete Structure - Process - Concrete Structure (P2, P4).

Figure 3:8 contains some examples of what the relations between environment, process and concrete structure might look like.

Figure 3:8 diagram:

Environmental characteristics	Process	Concrete structure
Customer preferences change	Product innovation	Internal research department / Cooperation with a research organization / Hiring of qualified engineers in important line positions in the organization / Establishment of a reward system that encourages creativity
Economic growth	Adaptation through growth	Technology for mass production / Increased personnel

Figure 3:8. Two Examples of the Relations: Environment - Process Concrete Structure (P1, P4).

3.12   The Value Structure

The value structure was defined as the purposes individuals have
for their actions in the organization and the way these purposes
are related in terms of a pattern. With regard to each individual,
there is usually reason to distinguish between values on three
levels. The first level contains values for the individual's
own actions, the second concerns his values for the actions of
the group and the third consists of his values for the actions
of the organization as a whole. Values for the group refer to
the purposes the individual has, or would have, when he acts on
behalf of the group as a whole and when he tries to relate his
own activities to those of the group. Values for the organization
can be described in a similar way. Not all individuals have
values on all three levels. Some individuals might not have any
values at all for the organization as a whole. Individuals who
belong to the environment of the organization are likely to have
more pronounced values for the organization as a whole than for
their own activities in the organization.

Though my intention is to indicate the meaning of the term "value"
("värdering" in Swedish) by describing the organizations in
Chapters 7-9, I want to mention a few studies in which I think
the term is used in a way similar to mine.

Myrdal prefers the term "valuation" to translate the Swedish "vär-
dering". A person's

> ... valuations - that a social situation or relation is, or
> was, "just", "right", "fair", "desirable", or the opposite,
> in some degree of intensity or other - cannot be judged by
> such objective standards as science provides... Some
> valuations have general and eternal validity; others have
> validity only for certain situations... behaviour is con-
> ceived of as being typically the outcome of a moral com-
> promise of heterogeneous generality and rising in varying
> degrees and at different occasions to the level of con-
> sciousness. (Myrdal, 1958, pp. 71-78.)

> Like beliefs, valuations are social factors which can -
> although not without difficulty - be determined through
> empirical research. (Myrdal, 1968, p. 21.)

Like Myrdal, MacCrimmon distinguishes between values and beliefs
in his attempt to outline a process theory of organizational
decision-making. About values he says:

> The decision-maker possesses a value structure of ends he
> would like to attain. There are many such arranged in some
> hierarchical fashion. He has a valuation function that
> transforms information about perceived present and projected
> future states of the environment and his own resources into
> relative desirabilities vis-à-vis his goal. (MacCrimmon,
> 1969.)

Another statement about the role of values is an excerpt from
Rescher, who philosophically treats values developed in the
light of relevant work in the social sciences, particularly
economics.

> We explain N´s action in the present case with reference to
> his subscription to a value, but then justify this sub-
> scription claim with reference to the pattern of past actions.
> The underlying thesis is one of stability in behavior patterns:
> We suppose that a man´s actions tend to be "true to type"
> so that present behavior conforms to past patterns. This
> temporal aspect, together with the stability thesis that
> provides its basis, prevents the ideal-type variety of
> value explanation from sinking into circularity. (Rescher,
> 1969, p. 27.)

3.13 Strategy: Values Governing Relations with the Environment

The strategy of the organization is a specific part of the value
structure. It indicates the most important aspects of the or-
ganization´s approach toward its environment. Strategy points
to the environmental areas which the organization cooperates
with, dominates or exploits. Strategy also expresses ideas about
how these important environmental areas will be reached.[26/]

The values people have about the organization as a whole designate
important areas in the environment. These areas will be called
targets. The values of people who have the power to formulate the
policy of the organization are especially relevant in determining
the targets. Completed or contemplated major allocations of re-
sources can also give a clue to how the targets are defined.
Environmental areas which are designated by a sway group are
also targets. The concept of target is closely related to the
economic market concept. It can also be used more widely in the
sense that it can refer to an important personnel group or an
important source of information.

Key idea is the second element in the concept of strategy. A key
idea is made up of values describing the ways that can and will
be used to reach the targets. The most important methods of
describing key ideas are to study the values of sway groups and
leaders as well as the pattern of values behind major allocations
of resources in the organization.

One way of perceiving organizational strategy is to regard it as
a point in multidimensional space. Certain spatial dimensions
denote targets, others key ideas. Changes in strategy are then
expressed as movements in space. These movements occur whenever
there are changes in either targets or key ideas. These notions
can also be used to compare organizations with one another.
Figure 3:9 shows a two-dimensional slice of a possible strategy
space. One dimension describes the extent to which the organiza-
tion selects the domestic market as its target. The other
dimension shows the degree of aggressiveness in behavior towards
competitors that is included in the key ideas. The strategies
of organizations A and B, today and tomorrow, are compared in
the figure.

Dimension y

Key idea:
Degree of
aggressiveness
in market
behavior

high

low

x Org. A
tomorrow

x   Org. A today
x

Org. B
today

Org. B
tomorrow
x

100 %
domestic market

100 %
foreign market

Dimension x   Target: Market
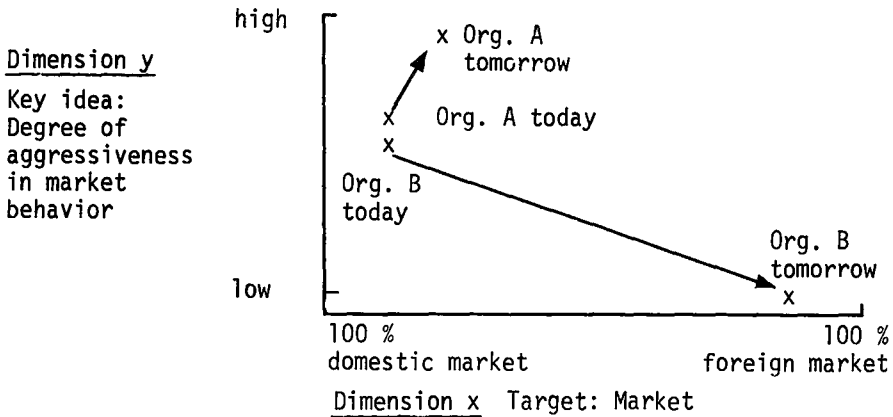
Figure 3:9.   Slice of Strategy Space.

The two elements in the strategy concept can often be expressed
in a few words or several simple phrases. An example of this
is Selznick´s description of the American Communist Party. He
talks about a political organization, a combat party. The target
of the organization described was every organization having a
large membership, i.e. associated with mass society. The key
idea was infiltration. Selznick uses the term organizational
weapon to describe the whole strategy (Selznick, 1952). Another
example can be taken from a study of a construction firm
(Sandkull & Stymne, 1968). A large Swedish industrial firm was
an important target for the construction firm in question. The
key idea was to offer this customer a system of cooperation which
permitted flexibility and changes during the course of construc-
tion, as opposed to the traditional tender system.

Strategy can be simple or complex, depending on the number of
targets and key ideas it contains. Strategy can also be more or
less diffuse, depending on how precisely targets and key ideas
are specified by values and on the extent of the differences in
the values of various groups in the organization. There are

probably organizations that have no strategy whatsoever. This
may be due to the fact that the individuals do not have a good
understanding of the environment. The concept of strategy can
probably be extended to include values about how targets and
key ideas should be altered, contingent on events that have not
yet taken place.[27]

3.14 Means-end Scheme: A Way of Describing the Value Structure

The value structure can be illustrated using a means-end scheme.
The means-end scheme is often used as an aid in decision-making
and planning. But as is suggested here, it can also be used as
a means of depicting the values held by people in the organization
and their conception of how these values are related to each
other.[28] Figure 3:10 (cf. also Figures 7:5, 8:5 and 9:5) shows
how the upper boxes in the scheme correspond to targets and key
ideas as expressed by strategy. The lower boxes correspond to
the operative values in the organization, i.e. the purposes for
action in different units and groups.
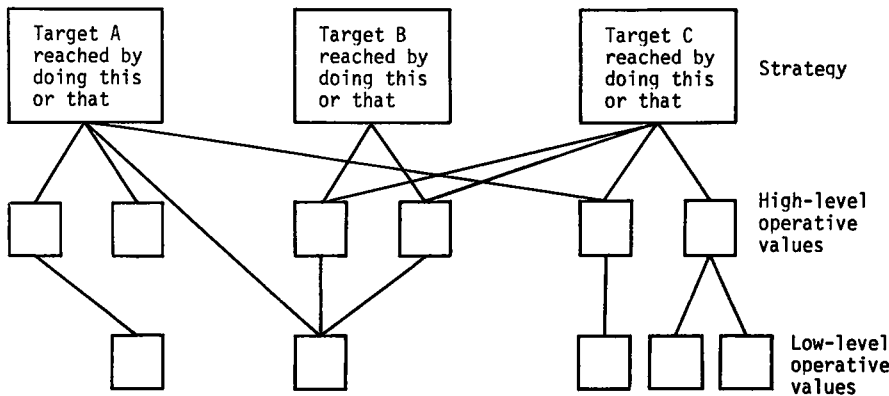
Figure 3:10. Means-end Scheme.

Sometimes these operative values are directly connected to a target indicated by strategy. Sometimes they also include notions about the way to reach a certain target. By starting with the target indicated or from ideas about how the target can be reached, the operative values can be linked to one or several strategy boxes. Operative values can also exist on different levels. High-level operative values are superordinated in relation to those on a lower-level. This means that a high-level value can incorporate a large part of a certain environmental area as a target. A value on a lower level might only include a smaller part of this area. A high-level value can also consist of values that govern several processes and processes having a long time range. Low-level values usually have to do with parts of processes and processes having a short time range. However, just because a value exists on a high level does not necessarily mean that it explains - or even agrees with - values on a lower level. In other words, high-level values include a larger part of the behavior of the organization than values on a lower level.

There are values in the organization that have no connection with the strategy level, i.e. the highest level in the means-end hierarchy. This is exemplified by values that refer to relations with groups in the environment that are not targets. There are also values that govern processes which are required primarily to maintain the structure of the organization so that no direct connection to strategy is necessary. Therefore it is probably impossible to describe the complete value structure of the organization in a connected means-end scheme. Instead, the description will be composed of one or several chains connected to the strategy boxes plus some truncated and disconnected chains. These boxes describe values which govern internally-oriented processes or processes for exchange with non-target groups.

3.15 Sway Groups and Value Structure

It was argued in Sections 3.3-3.4 that sway groups could influence the values of an organization over and above what is given by environmental and structural restrictions (P7). In other words, there are usually fewer demands on the organization than it could satisfy. This "slack" leaves room for persons or groups who have values for the organization as a whole and intentions of working for these values.

Sway groups influence the formulation of strategy in particular. The extent to which sway groups can dominate the formulation of strategy depends on the means of exercising power they have at their disposal. Their ability to influence strategy is also related to the degree of power it is necessary to exercise in order for the actions of the members of the organization to coincide with the values of the sway group. As a general rule, more power is needed the more the values of sway groups conflict with the values of members of the organization.

3.16 Concrete Structure and Value Structure

Values originate with the private jobholders (P6). The individual brings along different types of values and ideas from society outside of the organization. He has to make his own interpretation of what his tasks should be and what the organization should do, in order to function in his organizational role. The interpretation the individual makes will, consciously or unconsciously, be influenced by his values based on experience outside of the organization. If given the opportunity he will try to influence the organizational structure so that it agrees more fully with his own values about what his job and the organization should look like. By constructing the formal structure as a hierarchical system of responsibility, the management of the organization

often tries to reserve for itself the power to change the structure. As a result, management's own values gain decisive influence on the concrete structure and on the value structure of the organization (P7). This is probably one reason why it is often new members of the top management group of the organization who initiate structural changes (see Normann, 1969a and Rhenman et al., 1967).

The concrete structure of an organization is to a large extent made up of different groups that interact. Owing to the division of labor process, different groups will have different jobs. And these various jobs need to be governed by different values (P5). Different units and groups are also in contact with various groups in the environment of the organization. There are processes that work towards a harmonious relationship to these external groups (P1). The local jobholder tends to modify his values through these processes so that they agree more fully with the values of the group he communicates with. As a result, the development of a value structure is similar to learning. Selznick's (1949) study of the TVA is an example of this. The values that controlled the activities in the organization successively had to be modified so as to agree more fully with the demands of different groups in the immediate environment with whom the organization had to cooperate.

The concrete structure can also affect the value structure in other ways. The concrete structure includes the reward system. The reward system can be composed of several classification principles. Generally speaking, the greater the strategic importance of a particular organizational unit or specific group within the organization, the higher the prestige and salary of its members. In other words, values advocated by groups that are especially favored by the reward system will be regarded as particularly important.[29/]

Since different groups in the concrete structure have different values, conflicts between these groups are bound to arise. Conflicts can have their origins in the division of labor. Management literature contains numerous examples of conflicts between the sales and production departments in the firm. Conflicts can also originate from the fact that different organizational units safeguard the interests of various external groups. The local sales office tends to meet the demands of local consumers while top management primarily protects the interests of the owners. Other conflicts stem from the reward system. Representatives of the marketing division can maintain that their function is at least as strategically important as production. They are therefore likely to claim the same prestige and rewards as the production division. Conflicts can also arise when a sway group tries to use the organization as a tool.

These conflicts within the value structure give rise to certain processes (P3). These processes are political in nature and can involve compromises and power struggles between persons with different values in the organization. A recurring theme in the literature about complex organizations is the conflict between members of the bureaucratic line-organization and the various professional staff experts which are needed, particularly in the case of organizations with complex technology (cf. Litwak, 1961).

An informal or political structure is established within the organization in order for the political processes to take place (cf. Burns, 1965). This structure is made up of a concrete component (P4) - groups and channels of communication - and a value component (P5). These concrete patterns and values are not prescribed or perhaps even permitted in the formal structure. The political processes affect the effectiveness of the organiza-

tion in different ways. It is easy to observe how a considerable amount of energy in the organization is consumed in carrying out political processes. This means that the production process, for example, is deprived of some of its energy. On the other hand, the structure would break down rather quickly if political processes could not take place within the organization (P2, P3). Political processes also serve a more positive purpose in the organization. They are vital to the adaptation process. One of the reasons why it is so difficult to change organizations is that their values are historically conditioned and supported by a concrete structure (P6). As a result, organizations have difficulty adjusting to environmental changes (P5). Small groups of jobholders, however, might perceive environmental changes at an early stage. They realize that this changed environment will cause the organization difficulty and that they can increase their own influence in the organization by exploiting these changes. This then becomes a political platform for these groups, from which they try to influence the rest of the organization. By means of political processes (P2, P3), the values of the group can be transformed into concrete organizational patterns that make it easier for the group to increase its influence and for the organization to accomplish its exchange of resources with the environment more profitably (P5, P4, P1).

1. This set of problems is mentioned by Frenckner (1953, p. 58). He points out that the study of how the activities which take place in the firm depend on the goals of different individuals can be a prerequisite to developing a business economic theory and methods for solving problems in the firm. He suggests that analogies between business economics and medicine could be used in such studies.

2. Research on organizations has shown that measurements can be constructed which indicate how well different processes go on within the organization (cf. Georgopoulos & Tannenbaum, 1957). See also the discussion by Seashore & Yuchtman (1967), based on the factor analysis of a large number of organizational measurements of organizational performance, where they conclude that effectiveness has to do with the organization's "ability to exploit its internal and external environments in the acquisition of resources to sustain its own functioning". Effectiveness in their study is regarded as a kind of balance in the exchange process. Cf. also Stymne (1968).

    The necessity of developing a number of "social indicators" for attaining favorable development in a country is presented in a collection of essays from 1966 (Bauer, 1966).

3. Likert (1967) has made an effort in this direction using a set of indicators to measure the leadership climate in organizations. Other attempts have been made to develop indicators for diagnosing subsets of organizational activities (cf. Stymne, 1968). Considerable work in this area being done at the Center for Research on Utilization of Scientific Knowledge at the Institute for Social Research, Ann Arbor, Mich. (A series of Research Bulletins, starting

in October 1966).

4   Related problems are dealt with in e.g. Wallroth (1968b),
     Shepard (1965), Rhenman (1969b), Whyte & Hamilton (1964)
     and in Churchman & Emery (1966).

5.   Cf. e.g. how Stinchcombe (1965) maintains the importance of
     studying organizations in order to understand the social
     structure.

6.   Cf. Smith (1963 and 1966). M. Friedman is an influential
     advocate of the idea that there are a number of scientifically
     established economic laws (see e.g. Friedman, 1953).

7.   Webster´s (1968) defines sway as "the ability to exercise
     influence or authority or apply preponderating pressure".
     The term "sway group" was preferred to some other alternatives
     because it has fewer connotations. The other alternatives
     were "elite group", "status group" or "power group". In
     addition to being somewhat value-loaded, all these terms
     are usually used in the sociological literature to describe
     the over-all stratification of society. The term I want
     should even be applicable for describing groups inside a
     certain organization. The terms "leader" or "leadership
     group" were not chosen because they usually refer to the
     established authority in an organization. The suggested
     definition of "sway group" also takes into account the
     possibility of people without any formally recognized
     authority who exercise power in order to influence the
     objectives of the organization.

8.   Selznick (1957) dicsusses, for example the need for develop-
     ing elites within organizations. In Selznick (1952) he

analyzes how communist power groups could take power away from the ordinary leaders. Burns (1961) also discusses the competition between different groups which try to influence the organization from within. In one of a series of case studies on product innovation, Normann (1969a) relates how different groups in a pharmaceutical firm tried to support lines for the policy of the firm. Another case study shows how a revolutionary group took over power in the firm (Sandkull & Stymne, 1968).

9. Rhenman (1969) has proposed that there is a connection between the value environment in which an organization finds itself and the objectives the organization can work towards.

10. In his investigations of production organization in non-industrial societies, Udy (1961) has shown a strong negative correlation between the degree to which membership in the organization is determined by extra-organizational norms (social involvement) and the rational planning of tasks.

11. There is abundant literature on resistance to change. An informative analysis of the relation between tradition and the organization's possibilities of functioning can be found in Crozier (1964).

12. This debate is somewhat related to C.W. Mill's analysis of a power elite that uses mass society as a means of maintaining its position. Cook (1963) tries to describe this development in the USA. Several descriptions of the "imperialism" of American organizations have also appeared recently, e.g. Julien (1968).

13. See, e.g. Tugwell (1957). Napoleon I, Fredrick the Great

and Gustav Wasa are other examples of politicians whose
success was related to the creation of effective formal
organizations.

14. Samordnad näringspolitik (1961). See also Lewin (1967, Ch.
    5 and 6). Current examples include the establishment of a
    state-owned investment bank and a state-owned development
    company.

15. This is exemplified by the driving forces behind various
    Swedish non-profit companies. See the accounts of Koopera-
    tiva Förbundet in Göres (1965), of HSB in Wallander (1968)
    and of the Savings Bank movement in Sommarin (1940).

16. Examples taken from two distinct areas are: The Zionist
    movement with the Zionist Congress and the Jewish Agency
    for Palestine under the leadership of Chaim Weizmann (see
    Hertzberg, 1959) and the National Foundation for Infantile
    Paralysis (see Sills, 1957).

17. Cf. e.g. Weber's discussion of the routinization of charisma
    in organizations and Michels' iron law of oligarchy which
    indicate how organizations become ends in themselves and
    how the leaders become conservative and lose interest in
    the wishes of the members (Parsons, 1947, and Michels, 1962).
    Galbraith (1967) discusses how a complex network of over-
    lapping organizations, the technostructure, permits develop-
    ment only in a very limited number of directions.

18. This type of question also arises in the debate on "planned"
    or "induced" change in organizations. This is discussed in
    detail in Wallroth (1968b). An analysis of how strictly
    economic calculations can have unplanned and undesirable

effects on the surrounding society is found in Brox (1966).
During the past decade the Swedish forest industry in Norr-
land has undergone substantial rationalization and mechaniza-
tion. The changes have, to a large extent, been based on
business economic investigations (cf. e.g. Näslund, 1964).
These changes are now causing profound social problems for
the whole (especially inland) regions. The consequences for
a particular community are described in Daun (1969).

19. See three articles by Miller (1965a, b and c) on living
    systems, Buckley (1967), Buckley (1968), Katz & Kahn (1966)
    and Blegen & Nylehn (1969).

20. The discussion is related to Selznick (1948). Other authors
    have used a similar frame of reference. See the survey
    of literature in Stymne (1968). Johnsen (1968) shows how
    notions of this kind can be transformed into normative models
    of decision-making. The type of models Johnsen suggests is
    not primarily intended to explain why certain objectives
    have to be achieved and certain functions have to be carried
    out but to state how management could proceed if it is look-
    ing for a decision model with "necessary and sufficient pro-
    perties for steering a man-machine system". The model he
    presents incorporates the possibility of taking several
    objectives into account simultaneously. Reaching the
    objective is a step-wise procedure during which a search
    for new ways to combine activities into objectives takes
    place and during which objectives can eventually be changed.

21. "System tensions" are discussed in e.g. Selznick (1952 - the
    introduction), Katz & Kahn (1966) and Buckley (1967, pp.
    51-52).

22. This can be compared with the vicious circles in bureaucracies discussed in March & Simon (1958, pp. 36-47).

23. All elementary textbooks on price theory include a presentation of how market demand is balanced by the firm´s supply (cf. Due & Clower, 1966). The participant model is formulated in March & Simon (1958) and Rhenman (1964b)

24. See Simon (1957b, pp. 261-273). Simon´s ideas have been expanded upon in Emery & Trist (1969a).

25. Attempts to characterize environments have been made in the works quoted here by Simon (1957b); Emery & Trist (1969a) and Rhenman (1969). Similar efforts have also been made in the expanding literature on social and technological forecasting; cf. e.g. Towards the year 2000 (1967).

26. For a discussion of strategy based on somewhat similar ideas see Ansoff (1965) and Thompson´s (1967) discussion of "Domains of organized action".

27. This kind of formulation agrees more fully with the concept of military strategy discussed in Beaufre (1966).

28. The presentation of the means-end scheme is based on Simon (1957a). Wallroth (1968a) discusses the effects of conflicts in the means-end scheme. Johnsen (1968) makes a survey of the literature on means-end analysis. He describes it as a way of planning and decision-making in a multigoal situation, in that it breaks down ultimate criteria into analyzable outcomes of alternatives.

29. See Thompson (1964) for a discussion of how the struggle for strategic importance causes "bureau-pathological" behavior.

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CHAPTER 4. FIVE ORGANIZATIONAL PROCESSES

4.1 Summary

A proposal for a model of organizations was presented in Chapter
3. The primary purpose of the model was to facilitate a diagnosis
of the effectiveness problems of organizations. How effectively
the organization functions as a system depends on how well different
processes go on in the organization. How well the processes go
on can be estimated with the aid of process indicators. In this
way it is possible to estimate systems effectiveness indirectly
via the process indicators.

I will describe five processes more extensively in this chapter.
In Chapter 10 data from the three organizations are used to
illustrate the five processes. Chapter 10 also contains a com-
parison of the organizations in terms of the various processes
and process indicators.

The five processes dealt with do not comprise an exhaustive list
of the processes essential to the survival of organizations.
But I do think they are all examples of processes which are
important in the organizations studied. I also believe that an
analysis of these processes can provide a many-faceted illustra-
tion of the organizations investigated. The five processes
selected are also treated rather thoroughly in the literature
on organizations.

Three of the processes described are environment oriented. This
means that part of the activities included in these processes
takes place across the organization´s boundary with the environ-
ment. These three processes are:

1.   The institutionalization process, which consists of activities

through which the organization becomes an indispensable part of a larger social system.

2. The adaptation process, which is comprised of activities through which the organization's strategy is changed. This takes place through the search for new targets and the invention of new key ideas.

3. The exchange process, which consists of activities which involve the continuous exchange of contributions and inducements between the organization and its participants.

The two remaining processes described are internally oriented. They can be dealt with as if they took place mainly inside the boundaries of the organization. They are:

4. The control process, which is comprised of activities that result in the coordination of different parts of the organization.

5. The reward process, which consists of activities that involve reinforcing the behavior of individuals through, for example, rewards.

Each process is presented in a separate section. The beginning of each section contains a general definition of the process. This is followed by a discussion of measurements which can be used as indicators of how well the processes go on. Some of the activities included in the processes are exemplified. Some of the features of the concrete structure in which the process takes place are presented, as are the values that govern the process. In conclusion, some aspects of how each process goes on are discussed.

4.2 The Institutionalization Process

The institutionalization process[1/] is related to gradual and
profound changes in the organization. In order to be able to
study the institutionalization process, the time perspective
involved usually has to be at least one generation of organization
leaders. The process consists of those activities through which
the organization becomes an indispensable part of a larger social
system. As a result of the institutionalization process, the
organization becomes not only a means for an individual group
to attain certain purposes; is also obtains a definite role in
its environment. This role means that the survival of the
organization becomes vital to the functioning of other environ-
mental areas. These environmental areas can consist of other
organizations or markets.

Measurements constructed on the basis of the concept of distinc-
tive competence proposed by Selznick can be used as indicators
of the institutionalization process. An organization has attained
distinctive competence in relation to a particular group if this
group receives more from cooperation with the organization than
it gets by satisfying corresponding needs in any other way. In
reference to a customer group, distinctive competence means that
the customers are prepared to pay more for the firm's products
than for alternative products. An organization that has attained
distinctive competence is regarded more as an end than as a
means by the groups that support it. These groups are prepared
to defend the organization against threats. Conversely, the
absence of distinctive competence implies that other groups accept
the organization's goals and values only slightly. Therefore,
they cannot be expected to lend the organization very much support
in critical situations. There are other ways, besides providing
groups in the environment with indispensable services, in which

an organization can attain distinctive competence. For example, political levels in society can take measures to defend an organization through legislation.

The institutionalization process involves a series of activities via which some type of congruence develops between the structure of the organization and that of the environment. These activities consist of mutual influence and adjustments between the organization and its environment. In the beginning, an organization's contacts and exchange with a particular environmental area can be rather limited. If these contacts or exchange relations turn out to be advantageous then they can be extended. The organization's value structure and concrete structure evolve on the basis of relations with the environmental area. Similarly, the structure of the environmental area may change so that it corresponds to the fact that there is an organization which carries out certain functions in relation to the environmental area.

Certain types of values have to exist in the organization in order for the institutionalization process to go on. These values should identify definite needs in an environmental area. They should also state that it is important for the organization to satisfy these needs. There should be certain employees in the concrete structure who feel that they have a special responsibility to protect these values in their work. Selznick, says that these employees perform a leadership function. The institutionalization process also requires the values about what the organization's tasks in society are to be "embodied" in the concrete organization structure (Selznick, 1957, pp. 90-133). "Embodiment" can take place if there are influential units who preserve the values, knowledge and technology to transform values into tangible benefits for the environment.

The exercise of what Selznick calls "statemanship" is included among the activities that make up the institutionalization process. Statemanship involves the identification of important needs in the environment and work on behalf of values in the organization that correspond to these needs.

Not all organizations attain distinctive competence. These organizations never become more than expendable tools. Other organizations attain distinctive competence but eventually lose it. An unsuccessful institutionalization process means that in the long run, the organization will disappear. It should be mentioned that the institutionalization process does not go on in concrete organizations only. Different sub-systems in society, such as whole groups of organizations, can be institutionalized. For example, the free market system in our society is highly institutionalized even though most individual firms do not attain distinctive competence. As a result, the system itself will survive for a long time, while most of the firms will disappear.

Stinchcombe (1965, pp. 153-164) has pointed out a characteristic relationship between changes in the environment and the institutionalization process. He argues that a certain type of organizations such as an industrial branch, come into being during a fairly concentrated period of time. This period occurs when technological and social conditions in the environment have reached a certain level of development. The environment at the time the organization is founded is imprinted on the concrete structure and the value structure. Stinchcombe's observations suggest that the institutionalization process tends to come to a standstill after an initial set of fundamental values has been built up in the organization.

The environment of certain organizations changes very quickly.

This is true in the case of rapid technological development.
Since there are many difficulties which obstruct the institu-
tionalization process in established organizations, development
takes place more rapidly in the environment than changes occur
in the structure of the organization. Therefore, in environments
which change, newly-founded organizations usually turn out to
be more effective than older organizations. If this assumption
is correct, then several corollaries can be proposed:

1. Old organizations will try to control their environment
   so that it does not change.

2. Old organizations will be unwilling to recognize that the
   environment has changed.

3. Old organizations try to prevent the founding of new
   organizations in their field.

4. New organizations will arise and survive in areas where
   the environment has changed. Old organizations will
   disappear in these same areas. A group that wants to try
   to bring about changes in society will be more successful
   if it uses new organizations rather than those already in
   existence.

Even if there are obstacles to the institutionalization process
organizations can change their value structure and their concrete
structure under certain conditions. But these conditions imply
that the role of the organization in its environment has to be
reconsidered. This in turn means that the organization has to
undergo very "profound discontinuities" (cf. Emery & Trist,
1969b, pp. 292-293).

I have described the institutionalization process as a gradual
change in the organization. However, the fundamental structure
of the organization can be changed in ways other than via the

institutionalization process. I will use some analogies from other
fields to illustrate these types of processes. "Mutations" can
arise as a result of more or less random external factors, as an
unforeseen outcome of internal conflicts, when key men who deviate
from the established norms enter the organization or when a new
sway group assumes power. "Fission" means that the parent organiza-
tion splits into parts, some of which are relocated in a - at least
partially - new environment. "Fusions" imply that several organiza-
tions merge to become a new organization. Judging from the litera-
ture, the outcomes of mutations, fissions and fusions are highly
unpredictable (see Kitching, 1967). It therefore seems likely
that more detailed descriptions of the processes implied by these
words would be a rewarding area for research.

4.3 The Adaptation Process

The adaptation process (cf. Cadwallader, 1959) consists of activities
through which the organization changes its strategy. Strategy
changes involve changes in the organization's relations with its
environment in terms of targets and key ideas.

The need to adapt can arise from structural changes in the environ-
ment. Examples of structural changes are population changes, tech-
nological development, changed laws. Structural, irreversible
changes differ from reversible, random or cyclical changes. New
fashions, business fluctuations and other types of temporary load
variations are examples of reversible changes. The organization
can meet reversible changes through various types of evening-out
processes. This means that the structure of the organization can
vary between a number of given states (cf. Rhenman & Bruszt, 1968).

In contrast to reversible changes, irreversible ones require changes
in the structure of the organization. With respect to the individual

organization, structural environmental changes might cause previously profitable markets to disappear and previously successful products to become obsolete. An organization is said to have the ability to adapt if it is able to meet such changes in the environment by changing its value structure and its concrete structure so that they include new targets and new key ideas. A possible indicator of the adaptation process is innovation ability. This ability could be measured as the number of innovations made by the organization during a given period of time in relation to the number of environmental changes during the same period. Innovations refer to more than just new products. Innovations can also consist of changes in technology, in administrative methods, in marketing techniques, etc. (see also Normann, 1969b, Olofsson, 1969, Rhenman et al., 1967 and Sandkull, 1968).

The adaptation process is similar to learning. As the environment changes, the repertoire of behavior at the disposal of the members of the organization is not enough. New ways of responding have to be learned. Information is collected about the demands of the environment and suitable answers are invented, often through trial and error.

According to this description, the adaptation process is to a large extent initiated by the environment. Another way open systems adapt is to increase their chances of survival by dominating the environment. The main way of accomplishing this is through growth, where increasingly greater parts of the environment are incorporated (cf. Emery & Trist, 1969a and Rhenman, 1969b). These processes, which imply that the organization influences its environment to a large extent, will not be dealt with here.

Some of the activities included in the adaptation process are gathering information from the environment, research and development work and changes in the structure of the organization.

The following aspects of the structure of the organization can be regarded as important to the adaptation process:

1. Search structure. It can be assumed that the more information the organization obtains from different parts of the environment, the greater the probability that new problems and new possibilities will be detected. The existence of information channels from the environment is therefore a part of the search structure. Another part consists of search resources, i.e. resources allocated to systematic searches and interpretations of information about environmental changes.

2. Development structure. This has to do with the organization's ability to use available information in order to invent and develop new alternatives of action. This ability is related to the internal communication structure of the organization. The communication structure determines the extent to which information about the environment is accessible to different parts of the organization. A description of the internal information structure should include an account of the degree to which different parts of the organization exchange information about conditions which can result in changes in the direction of activity. Also included in the development structure are research and development resources, i.e. resources devoted to inventing and developing new methods, new products, new technology, etc.

3. Power structure. This is made up of a description of how power and influence are located in relation to different strategical values. Four examples of power structures with different effects on the adaptation process are as follows: a) No units in the organization have a great deal of influence. b) Influence is concentrated to units that stand for the established values in the organization. c) Influence is concentrated to units that support values involving change

in the organization's strategy. d) A relatively large amount
of influence is spread out among several different units which
advocate different types of values.

The conclusion I want to make from the literature on innovations
in organizations is that the course of the adaptation process is
determined by complex interplay between the search structure, the
development structure and the power structure.[3/] Two extreme cases
will be discussed, planned adaptation and organic adaptation.

Planned adaptation[4/] can exist in organizations where the power
structure is such that power is concentrated to certain units,
top management for example, which support strategic values that
differ from those established in the organization. Another
assumption is that the information conveyed to the organization
via the search structure should probably be concentrated to a
certain point in the organization. Planned adaptation also
implies that those in power "protect" research and development
resources so that they are not controlled by established values
in the organization.

Organic adaptation can exist in organizations where power is
distributed among different units which advocate values that
compete with the established ones. The different units should
also be in direct contact with the environment. Information
should be able to be exchanged freely between different units.
According to Burns & Stalker (1961) who developed the theory
of organic adaptation, this make-up of the organizational structure
permits groups whose values are in harmony with environmental
demands to obtain more and more influence in the organization.
In turn, this increasing influence implies that the direction
of all activity will be changed so as to agree more fully with
the environment.

In most organizations there are probably large obstacles to the adaptation process. Organizations whose structure is supposed to be suitable for planned adaptation easily end up in a situation where management does not dare support, say the research department. Consequently, the department's results can no longer influence the rest of the firm. The structure established for planned adaptation is centralized. Those in power in this kind of structure easily identify with the organization's traditional values. In this way, units that are supposed to bring about changes will strive to maintain the traditional structure of the organization.

A structure suitable for organic adaptation is also difficult to achieve and maintain. There are many different influential groups in this kind of a structure. This situation leads to a great many conflicts between different groups. The desire to reduce the number of these conflicts easily results in the application of bureaucratic procedures. In turn, bureaucratization brings about centralization of power and the organic structure disappears.

4.4. The Exchange Process

Figure 4.1 illustrates the exchange process.[5/] The double lines indicate the boundary between the organization and its environment. Many definitions can be used to determine the location of this boundary. One definition is that all those inside the boundary should be full-time members in the organization and that persons outside the boundary are primarily active in other organizations. A, B, C and D represent participant groups. A participant group is an environmental area consisting of a group of individuals or organizations that regularly take part in some kind of exchange of utilities, services, influence, etc. with the organization. Examples of this kind of groups are markets, suppliers, investors,

labor unions and government authorities. E, F, G and H represent non-participant groups.

The participants demand inducements from the organization. They make contributions in exchange for these inducements. Organizations receive contributions and can handle them in two ways. The contributions can be transformed via the production process so that new types of inducements are produced in the organization. Also, the contributions can simply be redistributed among the participants without any transformation.
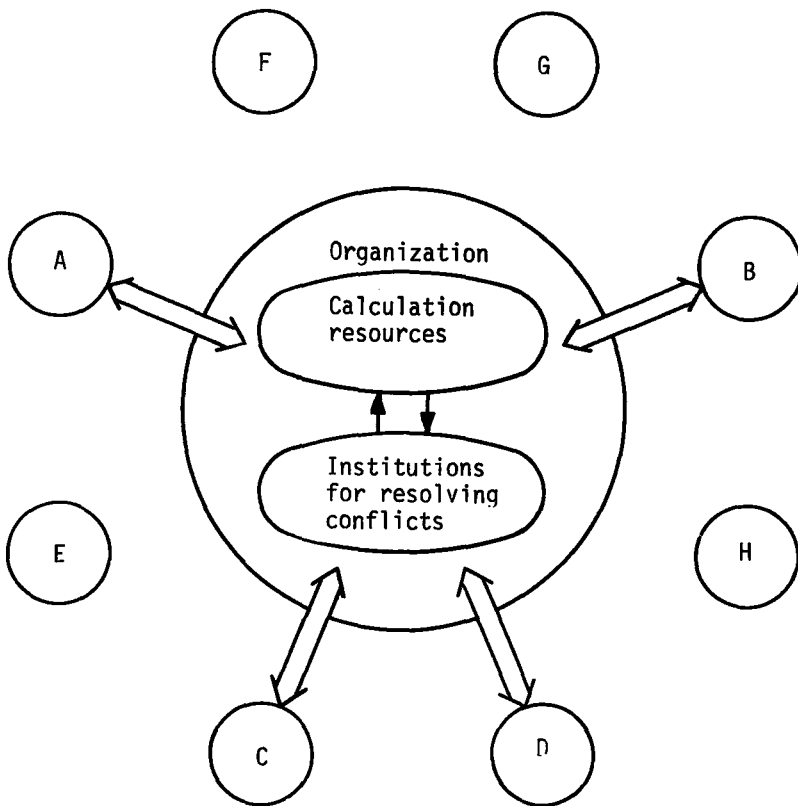
Figure 4.1. The Exchange Process between the Organization and the Environment.
Key: ⇄ Information Flow; ⟺ Flow of Contributions and Inducements.

The exchange process can be said to function well if there is
a balance between contributions and inducements for each partici-
pant. Contribution-inducement balance implies that every partici-
pant group thinks that the value of the inducements it receives
is at least as great as the value of its contributions. The
participants´ attitudes towards the organization can be used as
indicators. Members of different participant groups can be asked
how satsifactory they find their relations with the organization,
if they think they receive at least as much from the organization
as they could from some other organization and if they feel the
organization fulfills the goals they think it should have. A clue
to the contribution-inducement balance is that the participants
do not leave the organization. Therefore, another indicator might
consist of measurements of how often individual members of different
participant groups defect to other organizations. Market share
is an indicator of this type that is often used.

The exchange process differs from the adaptation process in that
it concerns exchange with a system consisting of a number of
established participants (A, B, C, D ...) and a given set of con-
tributions and inducements $(\alpha, \beta, \gamma, \delta$ ...). The exchange
process is necessitated by the fact that the participants change
their preference order of different inducements or the quantity
of inducements they demand. In contrast to the exchange process,
the adaptation process can lead to the appearance of a new par-
ticipant group H or to the formation of a new contribution or new
inducement λ.

The exchange process is environment oriented and has to do with the
exchange of inducements between different participant groups across
the boundaries of the organization. This causes it to differ from
the rationalization process, for instance, which takes place within
the structure of the organization. The rationalization process has

to do with making the organization's production system more effective so that a larger quantity of inducements can be produced with a given quantity of contributions.

One class of activities in the exchange process is the exchange of contributions and inducements between the organization and different participant groups. Exchange activities involve collecting contributions from the participants and distributing inducements to them. The concrete structure in which these exchange activities take place can be called exchange channels. This kind of channel can be exemplified by a system of retailers, the stock market, a personnel department, etc.

A characteristic feature of the exchange process is that the participants evaluate different contributions and inducements in various ways. As a result, negotiations and conflict-solving belong to a second important class of activities in the exchange process. Negotiations take place in institutions for resolving conflicts. Examples of these kinds of institutions are a group of persons who negotiate about personnel wages or a court of arbitration for disputes between buyers and producers (cf. Rhenman, 1964b).

A third class of activities in the exchange process consists of distributing the contributions the organization receives to the different participants. Due to the bounded rationality characteristic of organizational systems, it is often possible - in practice - to calculate a solution to the problem of distributing the inducements that is better than the current one (see Simon, 1957b, pp. 196-206). A possible definition of a better solution is one which brings about more satisfaction to at least one participant without lowering the satisfaction of the remaining participants. Often, it is also possible to calculate solutions that still meet

the conditions for a contribution-inducement balance but that
provide the organization with a greater supply of contributions
which do not have to be distributed (cf. the discussion about
"organizational slack" in Cyert & March, 1963, pp. 36-38). This
statement is valid if the contributions are given at the outset,
if the formulae for transforming contributions into inducements
are known ("production functions") and if the preferences of
the participants are known. An organization's ability to handle
the exchange process depends on whether it has calculation
resources in its structure for making this type of calculation.
An example of calculation resources is a planning unit which
takes the market situation into account when planning the best
utilization of the production apparatus.

4.5   The Control Process

A characteristic of organizations is that they are functionally
specialized. This means that the tasks carried out in the
organization are divided into specialized jobs. These sub-tasks
are accomplished by different persons or groups of persons.

Jobs carried out in different parts of the organization require
coordination. What is done today depends on what is going to be
done tomorrow. As a result, tasks which are temporally interdependent
also have to be coordinated. The activities of different persons
and groups are coordinated primarily by transmitting information
via some type of information channel. This can be exemplified
by the spoken word, written messages, deflection of a pointer
on an instrument board, etc. Some coordination also occurs
through immediate sensory perceptions, such as the coordination
of a football team. Coordination can also take place through
the design of the task or the job site, as in jobs controlled
by an assembly line. In this section I deal only with coordination
that occurs via the first type of direct information exchange.

Activities that involve an exchange of information in order to accomplish spatial and temporal coordination of tasks in the organization will be termed the control process.[6/]

A control process that functions poorly is reflected in strained relations between different units due, for instance, to unfulfilled expectations of the behavior in other units. The level of orga-nizational strain, can therefore be used as an indicator of the control process (cf. Georgopoulos & Tannenbaum, 1957, Georgopoulos & Mann, 1962 and Stymne, 1968). Defects in the control process also result in poor use of the organization´s resources. There-fore, indicators of the control process could also be constructed as attitude questions about or measurements of disturbances caused by deficient coordination, the existence of duplicated work and uncertainty in decision-making because information is unavailable, etc.

Figure 4.2 illustrates the discussion about the control process. The figure shows a sub-system in a larger organizational system. The sub-system consists of a controlling unit which tries to influence the behavior of a controlled unit by transmitting information to it. Besides the controlling and controlled units, there is a box in the figure which denotes the surrounding system. It should be mentioned that one and the same unit is often controlling and controlled simultaneously in relation to another unit. So as to simplify the analysis, control in only one direction is dealt with in the figure.
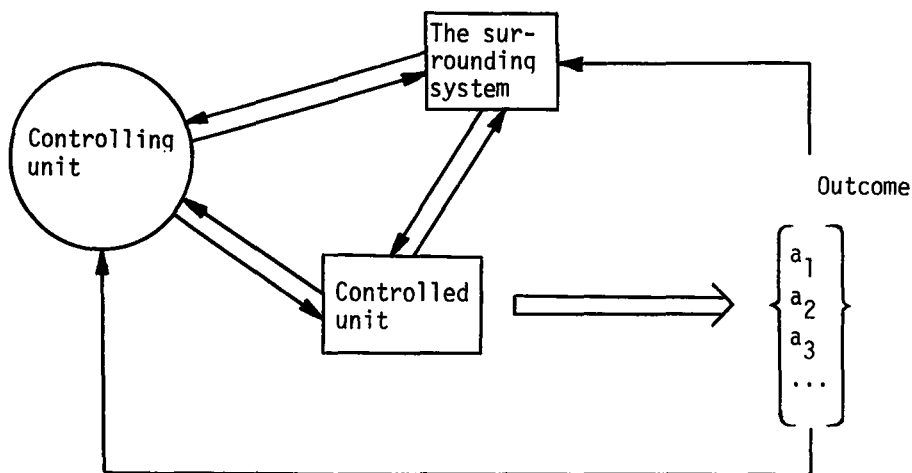
Figure 4.2. Flow of Information that Influences Controlling and Controlled Unit.

Key: ——→ Information flow;

⟹ The behavior the controlling unit wants to influence.

The controlled unit has a certain repertoire of behavior. The alternative actions at the disposal of the controlled unit can be designated a_1, a_2, a_3 ... . a_1 can stand for a high rate of production and a_2 for a low production rate; a_1 can denote a decision to introduce product A, a_2 for a decision to introduce product B, etc.

The controlling unit is assumed to rank what it regards as the controlled unit's behavior alternatives according to its own values about desired outcomes. At a given point in time, the controlling unit transmits information to the controlled unit such that the latter chooses an alternative which is desirable according to the values of the controlling unit. The controlling unit's choice of the information it transmits is influenced by the information it receives from different sources. These

sources can be other units in the organization and feed-back
from previous behavior of the controlled unit. The information
received by the controlling unit comprises the values of the
controlled unit, other types of information received by the
controlled unit and how the controlled unit is programmed
(cf. March & Simon, 1958).

If the behavior the controlling unit anticipates corresponds with
that which it perceives the controlled unit as exhibiting, then
the control process can be said to function well. In an organi-
zation where different units transmit information to each other,
the control process functions poorly when the outcome seldom
agrees with what was expected.

There are many reasons why expected and perceived outcomes can
differ. I am going to mention a few that are related to the
control process:

1. The controlling unit receives erroneous or incomplete informa-
   tion from the controlled unit or from other sources.

2. The controlling unit is unable to receive, interpret, store
   or transmit information. This can cause the controlling
   unit to have a defective "model" of the controlled unit.

3. Information from the controlling unit disappears or is
   altered on the way to the controlled unit.

4. The controlled unit receives information from other sources
   which changes its behavior in a way the controlling unit did
   not anticipate.

The activities included in the control process consist of trans-
mitting and receiving information between different units,
processing information (e.g. problem solving), the development
of new programs and storing information. An elaborate treatment

of these activities and a review of relevant literature is found
in Ramström (1967).

The concrete structure in which the control process takes place
is the communication structure, i.e. the network of information
processing units connected by communication channels. For in-
stance, the units can be described on the basis of the programs
at their disposal, their problem-solving ability and their capacity
to receive, process and transmit information. The channels can
be described by different types of capacity and quality measure-
ments. A series of measurements for describing the communication
structure as a whole can be constructed (see e.g. Shaw, 1964 and
Harary, Norman & Cartwright, 1965). Examples are centralization/
decentralization of information processing and the degree of inter-
dependence between decision-makers in different units.

The information transmitted between different units is influenced
by values about desired consequences. It is probably more diffi-
cult to achieve agreement between expected and exhibited outcomes
when the values of different units conflict than when they are
independent of one another or lend mutual support. This implies
that a description of the degree of inconsistencies in the value
structure is important to the analysis of the control process
(cf. Wallroth, 1968a).

4.6   The Reward Process

The activities included in different processes are composed
primarily of human behavior. In this section I discuss a process
that causes the individual to devote time and effort to work in
the organization. The reward process refers to those activities
which imply that the organization reinforces or weakens different
types of individual behavior via rewards and sanctions. Reinforce-
ment means that an individual's tendency to devote time and effort

to a certain kind of behavior increases.[7]

Only some activities that make up the individual's total behavior are part of an organizational process. This means that individuals can generally exhibit many different kinds of behavior and still accomplish their functions in the organization. Indicators of the reward process should therefore be constructed on the basis of the type of tasks relevant in a particular individual's job. Measurements which estimate the personnel's involvement in certain activities, the time put into certain kinds of behavior or the willingness to work for different values in the organization can all be used as indicators of the reward process.[8]

Figure 4.3 shows that in the beginning, individuals come to the organization via the recruitment process. The figure also shows that the reward process reinforces or weakens different types of individual behavior. The behavior exhibited by the individual can agree to a greater or lesser extent with activities required in the different organizational processes.
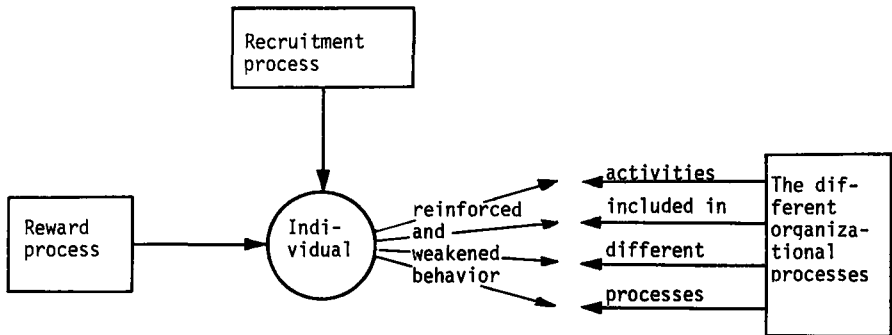
Figure 4:3. Via the Reward Process, the Behavior Exhibited by Individuals can agree to a Greater or Lesser Extent with the Activities required in the Different Processes.

The reward process can be discussed on the basis of a definite "model" of the individual. This model is presented schematically in Figure 4:4. I disregard biological aspects in this model and concentrate instead on man as an open, information-processing system. As such, humans have the ability to set goals for their activity, direct their behavior towards certain goals, learn from experience, relate their own behavior to what happens in the environment and maintain different types of exchanges with their surroundings. Within the limitations set by biological make-up, ageing and other disintegrative processes, man can develop and differentiate his ability to process information. This can result in more fully developed cognitive and emotional processes.
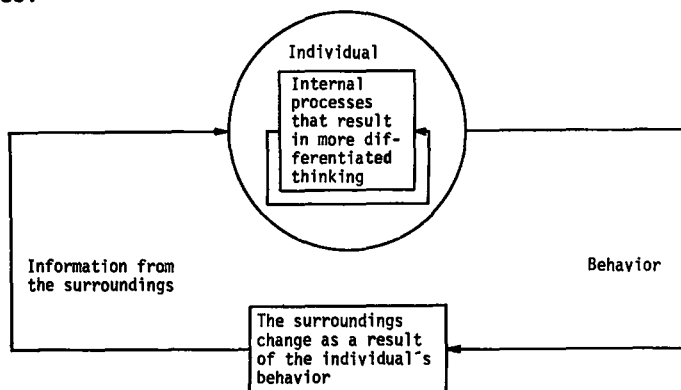
Figure 4:4.   The Human Being is an Information-processing System in Contact with His Surroundings.

According to Figure 4:4, the individual receives information from his surroundings. The information can contain indications of the kind of behavior that will be rewarded and signs of rewards or sanctions, such as signals of approval or disapproval from the surroundings. The information is not only restricted to what is desirable or undesirable behavior; it also contains clues to the structure and functioning of the surroundings.

Information does not always result in behavior directly. The individual can reconstruct it and use it in his thinking in different ways. Besides resulting in increased knowledge, it can contribute to a more differentiated cognitive and emotional capacity. This implies that the way an individual responds to different types of rewards and sanctions can be expected to change over time. This influence is not always directed towards the individual from his surroundings. Since the individual's surroundings consist mostly of other people, individual behavior also results in changes in his surroundings (cf. von Bertalanffy, 1967).

I will now distinguish between three rough classes of individual behavior:

1. Executing programmed activities, such as production jobs and simple problem-solving. [9/]

2. Solving unstructured problems, such as making innovations.

3. Finding new goals, such as the formulation of new symbolic expressions of the direction of activities.

Presumably, these three classes of behavior are reinforced in various ways. Psychological motivation theory, which assumes that behavior is controlled by expectations of desirable consequences, has mostly worked with programmed activities. Compared to programmed activities, the reinforcement of innovative and goal-formulating activities is more dependent on rich and varied information from the environment.

Similarly, a person's needs are probably very important to his involvement in programmed behavior. A person's ability to process information in the form of intelligence and creativity

(see Pelz & Andrews, 1966) and to mobilize psychic energy[10/] might
be more important in non-programmed than in programmed activities.

All this implies that the following discussion about the rewa·d
process refers primarily to a peron´s choice between relatively
well-structured behavior alternatives. An analysis of the
reinforcement of all types of information-processing behavior
would require access to a more developed theory of the individual
as an open, information-processing system (see von Bertalanffy,
1967).

The literature which uses motivation theory to explain the time
and effort individuals devote to different kinds of behavior
regards behavior as a function of the individual´s preferences
(sometimes called needs or valances) and of the supply of rewards
in the environment. The individual is assumed to behave so that
he satisfies his needs, avoids punishment or reduces his anxiety.[11/]

A description of the reward structure consists of enumerating
the rewards and sanctions which the organization furnishes to its
employees. An account of the values about what is desirable and
undesirable behavior also belongs to this description. Some
rewards are supplied through the formal organizational structure,
such as the promotion system. Other rewards can be derived
directly from the work situation, such as the satisfaction inherent
in the feeling of doing a good job or having good relations with
customers. Then there are rewards derived from belonging to a work
group, such as opportunities for social contact or recognition
from colleagues. There are also indirect rewards which make it
possible to satisfy needs outside the job situation, such as
money.[12/]

Individual needs can be assumed to vary in accordance with basic

personality, social background, social stratum and groups within and outside the firm with which a person identifies. If the rewards existing in the organization are going to reinforce the individual's behavior, the rewards and the individual's needs have to correspond. Individual needs can be mapped out with the aid of psychological tests or instruments for measuring attitudes.[13/] However, measurements of this type are used mostly in connection with selecting personnel and are rarely used as a means of improving the reward process.[14/]

Rewards in organizations are usually distributed on the basis of dividing the personnel into categories (cf. Thompson, 1964). Therefore, a description of the personnel structure is important to an understanding of the reward process. A typical example of this is a categorization of personnel in terms of routine workers, professional workers, office workers, lower managers, higher managers, staff specialists and top management. Rewards can also be distributed in accordance with the personnel structure by making a classification in terms of sex, age and education. This way of distributing rewards can be partly explained in relation to the kind of behavior that will be reinforced. Production work, for example, can be assumed to be reinforced in one way, management work in another. Differences in the types of rewards, distributed to different groups are probably also derived from values and beliefs that different groups have different needs.[15/]

The relation between rewards and needs can be summarized as follows. At a given moment, an individual can choose to become involved in one of several mutually exclusive kinds of behavior. The probability that he becomes involved in a certain kind of behavior depends on how this alternative is evaluated in relation to other possible alternatives. The evaluation of an alternative is determined on the basis of how its positive and negative consequences

are instrumental to or block the satisfaction of different needs. In order for the reward process to go on satisfactorily, there has to be agreement between the individual's preferences, available rewards and sanctions and the different kinds of behavior to be reinforced.

Notes

1. Questions related to the institutionalization process are
    discussed in Selznick (1949, 1952 and 1957). Cf. also the
    model for institutionalization in society presented by Buckley
    (1967, pp. 136-138) in connection with his discussion of
    morphogenesis.

2. Apparently, success of some enterprises depends mainly on the
    fact that decisions can be made on the basis of what is
    most profitable at the time, without being linked to
    institutionalized values (see Grayson, 1966). See also
    a study of small publishers (Steenberg & Zetterquist, 1968).

3. See e.g. Normann (1969a), Burns & Stalker (1961), Weiss
    (1956) and Thompson (1965).

4. Methods and experiences related to planned adaptation are
    dealt with in Chandler (1962), Scott (1965) and Steiner
    (1969).

5. I found the best expression of the theory behind the exchange
    process in Simon (1957b, pp. 170-182). The theory says that
    the organization can be regarded as a coalition of participants
    who cooperate in an organized way. Each participant receives
    rewards in exchange for his contributions. Every participant
    will remain in the coalition as long as he thinks that the
    inducements are at least as valuable as his contributions.
    In other words, each participant has to feel that he is as well
    off in his present affiliation as he would be by participating
    in another organization. This theory is closely related to
    classical economic theory. Classical theory of the firm could
    be said to be a special case of Simon's theory. In this

special instance, the entreprenuer's rewards are maximized
with respect to the restriction that the rewards of all the
participants should be equal to their contributions, i.e.
all the participants should be indifferent to remaining in
the coalition or leaving it. This theory has been developed
in Sweden by Rhenman (1964b). The exchange theory has been
criticized for being static. Some left-wing social scientists
(see Therborn et al., 1966) have accused Rhenman, the Swedish
Employers' Confederation and the Swedish Confederation of
Trade Unions of using this theory to create a neo-capitalistic
dogma that defends the status quo and the Swedish power
elite's right to exploit the common man. I also believe that
objections can be made to the participant theory. This does
not mean that the theory is erroneous but that it only
partially explains how an organization functions. The theory
specifies the conditions necessary for equilibrium. It also
suggests the most important activities required to maintain
this balance. But in order to understand how it changes,
the exchange process has to be regarded as one among several
necessary processes.

Another version of the exchange theory on a different level
was formulated by Homans (1961). See also Thibaut & Kelley
(1961).

6. The following studies deal with questions related to the
    control process: Ramström (1967), Rhenman (1964a),
    Georgopoulos & Mann (1962), Georgopoulos & Tannenbaum
    (1957) and Tannenbaum (1968).

7. Literature on industrial sociology and industrial psychology
    deals extensively with the reward process. Here are four
    examples from different areas: Likert (1961), Etzioni (1961),

Blau (1955) and Vroom (1964).

8. Measurements used in various studies include morale (see
    Morse, 1953), the attractiveness of the group (see Seashore,
    1954) and job performance (see Vroom, 1964, pp. 191-210).

9. See March & Simon (1958) for a discussion of different
    degrees of programming.

10. See Nyman & Marke (1962) who use a differential psychological
    approach to treat the individual´s capacity to generate
    psychic energy.

11. Vroom (1964) presents a detailed review of the literature
    on the motivation to work. Edgren (1970) discusses factors
    which affect the desire to perform in production work.

12. Vroom (1964) suggests that the following factors in the
    organization are important to motivation: supervision, the
    work group, job content, wages and promotional opportunities.
    Tagiuri & Litwin (1968) argue that motivation is not created
    on the basis of isolated factors but that instead, the whole
    job situation ("organizational climate") is involved.

13. See McClelland (1958). Herzberg, Mausner & Snyderman (1959)
    used the critical incident method to determine the employees´
    needs in the job situation. Haire, Ghiselli & Porter (1963)
    used the semantic differential in an attempt to determine how
    managers in various countries estimate the importance of
    different rewards in the job situation.

14. Some examples of organizational changes made on the basis
    of explicitly formulated ideas about the worker´s need for

"psychological job requirements" is found in a study by
Thorsrud & Emery (1969).

15. Maslow claims, for example, that needs are ranked hierarchically
and that satisfaction of more primary needs has to precede the
fulfillment of higher needs. Therefore, management should feel
more motivated than other groups to work for altruistic values
of goodness and beauty (cf. Maslow, 1965). However, there is
no strong empirical evidence of the existence of need
hierarchies.

CHAPTER 5. A BRIEF DESCRIPTION OF THE THREE ORGANIZATIONS

5.1 Summary

It is difficult to furnish organizations with labels that describe
them thoroughly. Instead, I have tried to adopt Selznick´s approach
and describe each of the organizations as a more or less unique
system. This has been done by using the type concept. A type is
a specific model that, in its purest form, does not exist in reality.
By representing a refinement of characteristic features, the ideal
type can contribute to a more perceptive analysis of each individual
case.

5.2 Organizational Type

Formal organizations differ in many ways. Attempts have been made
to propose measurements and procedures for ascertaining differences
and/or regularities in organizations.[1/] The results of these efforts
have often been contradictory. Additional measurements in the form
of intervening variables have been introduced in order to explain
these contradictions. Descriptions such as these are expressed in
the form of generalized hypotheses that are valid under certain
conditions. An example of this kind of organizational description
is:

> Except where there is a high degree of professionalization,
> organizations which have a high degree of mechanization are
> more likely to have a high degree of effectiveness than
> organizations which have a low degree of mechanization.
> (Price, 1968, p. 30.)

One objection to organizational descriptions of this type is that
they can only provide a partial description of the organization.
And Price´s study (1968) illustrates that descriptions containing
even as few as three variables turn out to be awkwardly complex.

These descriptions are often relatively meaningless, too, if they
are called upon to serve as guides in organizational design.
The knowledge that there is usually a negative correlation between
the size of an organization and the number of employees per super-
visor is usually of limited value with respect to setting up an
administrative system in an organization (see Bendix, 1956,
Andersson & Warkov, 1961 and Indik, 1964).

Selznick has suggested an alternative to concise and standardized
measurements for describing similarities and dissimilarities
between organizations. In his book The Organizational Weapon
(1952), Selznick proposes that the sociologist learn from dynamic
psychology and psychoanalysis when he studies coherent, adaptable
social organisms such as organizations. The essence of this
approach is that each organization is unique. As a group, the
organization "has a special identity, which may mean that it
has a peculiar capacity to do a certain kind of job, that it
embodies a special set of values, or simply that it has had a
significantly unique history" (Selznick, 1952, p. vi). A special
model has to be constructed for the organization under study in
order to explain the particular characteristics relevant to the
system in question. The model should be based on the inherent
tensions in the system and on its distinctive competence. It
should explain "how it is held together, what resources it can
muster and what it can do with them, and what its posture is in
relation to other groups".[2/]

Construction of the "unique model" that Selznick talks about can be
facilitated by using the type concept. Weber (1968, pp. 1-22 and
1949, pp. 50-113) elaborates on the usefulness of "ideal types"
in his discussion of "the three pure types of authority". In this
sense, one type is a specific model used to focus the researcher's
attention on certain characteristic features of, for example, a

particular class of organizations. The type does not describe what the organization "really" is but should be treated "as concepts on which to base programs of research".[3/] Several typologies are proposed in the literature on organizations. But most of the literature on formal organizations is based on traditional areas of research rather than on deliberations about constructing theories that extend across existing disciplines. There are well-established research traditions in areas such as trade unions, political parties, public administration, military establishments, hospitals, mental institutions, schools, prisons, concentration camps, religious organizations, firms, etc.[4/]

The divisions in organizational research correspond to a similar breakdown with respect to education in this area: political science, sociology, education, psychology and business economics. This structure is derived primarily from the name assigned to different organizations' function in society. It prevents the emergence of typologies based on characteristic similarities and dissimilarities between organizations with different functions. I would, however, like to refer briefly to three well-known examples of typologies of organizations that are intended to cover a wide range of different organizations. Parsons (1960) has suggested four organizational types corresponding to the notion that four main functions have to be carried on in society. Blau & Scott (1962) propose a classification based on those who benefit by the organization. Etzioni (1961) assumes that organizations exist in order to control people's behavior. He groups organizations according to the methods they use to obtain the "lower participants'" compliance.

I use Parsons' (1960, p. 45) typology when I refer to the organizations as "political" in various places in the text. Political in this sense means that the organization promotes certain values,

influences the values others (such as politicians) use in decision-making and mobilizes resources and various types of support (such as from the press or the general public) for certain values. According to Parsons' typology, political organizations differ from economic organizations in that the primary function of the latter type is to produce goods and services which can satisfy the needs of various groups (such as customers). When this definition is applied, it immediately becomes clear that no organization is solely political or solely producing. For instance, if a firm tries to alter consumer values, then it is engaged in political activities. In other words, the term political is only used to indicate what I regard as the most prominent aspect of the three organizations. The type "political organization" is reflected in the discussion of sway groups and strategic values. The third kind of organization in Parsons' typology is the "integrative organization". Since they are engaged in solving different kinds of conflicts, the three organizations in this study can also be said to have some characteristic features of integrative organizations.

According to Blau & Scott's terminology, the organizations in this study would be called "mutual benefit organizations" because the members make up an important group. A classification as "service organizations" could also be justified by the fact that a great deal of the organizations' activity involves providing direct service to various clients.

If Etzioni's method is used, the organizations in this study are classified as "utilitarian organizations" because the employees are salaried and are free to take jobs in other organizations. These organizations can also be said to belong to the "normative" type because the personnel are supposed to feel motivated by working for a worthwhile cause.

5.3 Cover Names

Different typologies can be used as guides to the characteristic
features of the three organizations. But the image of the organi-
zations constructed in Chapters 7-10 does not quite correspond to
any of these types. Many features of the concrete and value
structures and the processes are specific to each one of the
organizations. The purpose of the model developed in Chapters
3 and 4 is to furnish a language that is suitable for describing
the organizations. Therefore, the model has certain distinctive
features and does not fully correspond to any given ideal type.

The names I have assigned to the organizations, like Selznick's
"organizational weapon", are supposed to indicate the character
of each organization. My intention was also to let the names
suggest how the organizations differ from one another.

Intro indicates the character of an interest organization that
should represent the interests of its members in relation to
other groups. Later on, I show that a number of non-private
firms in the industry comprise a group that threatens Intro's
members. This adversary group has to be fought and defended
against in different ways. Contro refers to the character of
a control organization. Contro's concrete structure is made up
of many local associations. The job of the employees in these
associations is to see to it that the member firms do not
deviate from existing regulations for setting wages. Servo
represents a strong value in the organization that the member
firms should receive service and support and not be controlled.

5.4 An Introductory Presentation of the Three Organizations

Contro and Servo are employers' associations and members of the
Employers' Confederation. They emerged as the employers' counter-

move against the trade union movement. They began as combat organizations and gradually developed into components in a system for the peaceful solution of conflicts between labor and employers. They also perform other types of tasks for their members and society in general which are described in Chapters 8 and 9. The Employers' Confederation and its various associations represent large employer interests and are important segments of the national political structure. The role of the Confederation is to comment on legislative proposals and be represented in committees and agencies which formulate labor market policy. It also shares the responsibility for an important part of the nation's economic policy along with the government and the Confederation of Trade Unions.

Intro is a trade association. It is one of many trade organizations associated with the Federation of Industries. The primary job of the Federation is to represent the interests of industry in relation to the government. According to the by-laws of the Federation of Industries, its goal should be to promote a high rate of production growth within the framework of free, i.e. private, enterprise. Intro originated in order to increase the cohesion of the firms in the industry. It was also supposed to act as a united front to prevent the industry's customers from establishing unreasonable contract provisions by taking advantage of the producers' weaknesses. Intro also represents its members in relation to legislators and government authorities.

Each of the three organizations has a large number of member firms. They have to represent their members' claims and interests in matters of employment and business policy. Membership in the three organizations overlaps. This is illustrated in Figure 5:1.
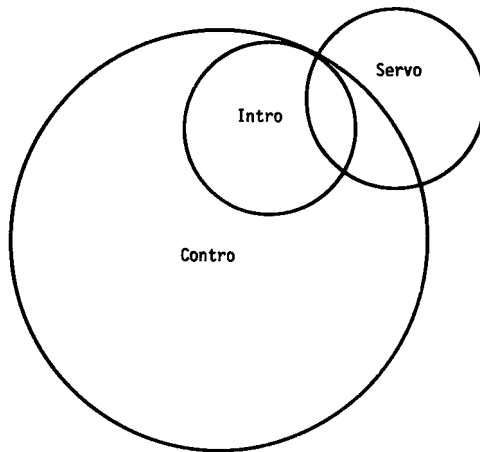
Figure 5:1. Overlapping in the Membership Areas of the Three Organizations (the size of the circles is proportional to the number of members in each organization).

Each organization has a central office with a number of employed personnel. Almost all of the member firms are privately owned. They all belong to the same industry. The industry manufactures durable goods with a very long life. There are three types of products:

Standard production refers to products manufactured by means of relatively simple technology. The products can be manufactured by comparatively small firms with an emphasis on craftsmanship. A raw material that is very difficult to transport is especially important and influences the price of the product. Buyers are often large firms, organizations and authorities which also try to control the utilization of raw materials in different ways. Government authorities try to steer production along an acceptable course by means of a number of regulations. The government also uses the flow of capital to standard producers as an instrument for regulating business activity.

Mixed production generally refers to products that are somewhat

more complex and varied than in standard manufacturing. The products are usually made to order. The market is less regulated than the standard production market. Privately-owned firms are an important buyer category.

Heavy production utilizes the most complex technology. There is a relatively high degree of mechanization. The share of university graduates (especially civil engineers) is large as compared to the other two types of production. Orders often involve large sums of money. Therefore, the firms in heavy production are usually quite big. Government and local authorities and industrial firms are important buyers.

All of Servo's members have strong features of heavy production. Many of Servo's members also manufacture all three types of products, i.e. they can be said to be general producers. The by-laws state that firms in standard or mixed production should belong to Contro. This means that the general producers are also members of Contro. Many small manufacturers in standard production, whose methods are very similar to those of craftsmen, also belong to Contro. Intro used to be highly selective in approving new members. Only well-reputed firms were to be accepted so that the organization was unwilling to offer membership to the standard producers. This policy has gradually been changed and many standard manufacturers are now members of Intro.

Notes

1. See, for example, Hall (1962 and 1963) and Udy (1959, 1961 and 1962). Very careful studies aimed at formulating methods of measurement for describing organizations have been made by The Industrial Administration Research Unit at the University of Aston in Birmingham, England. See for instance, Pugh et al. (1969).

2. An example of how this kind of a model of the structure and functioning of an individual system can be constructed with the aid of standardized methods of data processing is presented in Paige (1966).

3. This quote is from an article by Bendix (1968). For further discussions of the type concept, see Cattell (1957) and Klapp (1958).

4. See, for example, the enumeration in Chapters 17-25 in March (1965).

CHAPTER 6. METHODS OF OBSERVATION AND DATA ANALYSIS

6.1 Summary

The model that will be used to describe the three organizations and
to discuss their problems was presented in the preceding chapter.
The concepts used to describe the organization are environment, sway
group values, value structure, concrete structure, processes and
process indicators. The purpose of this chapter is to give an
account of the different sources I used to gather observations about
the organizations. The sources of error which impaired the various
methods of observation are also accounted for.

Figure 6:1, which is from Coombs (1964, p. 4), shows that observa-
tions cannot be regarded as data until they have gone through an
interpretive phase. This phase involves different kinds of classi-
fications. In this study the observations have been transformed
into measurements so as to represent the concepts specified in the
model.
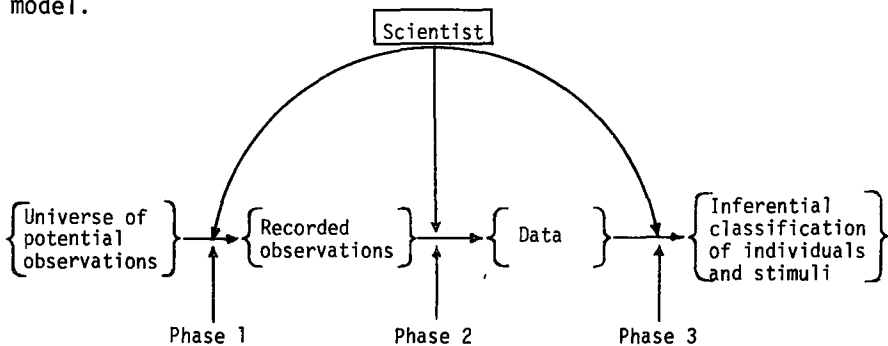
Figure 6:1. Flow Diagram from the Real World to Inferences
(From Coombs, 1964).

The question of reliability is discussed in relation to the methods
used to analyze and interpret the data, i.e. the degree of accuracy

and precision in the measurements. One section deals with validity. Validity in this context refers to the ability of the meausrements chosen to actually describe the concepts used in the model.

In conclusion, I discuss the crucial question of the relevance of the description as a whole. Can the model be said to be "correct" in some respects despite sources of error in the methods of observation and less than perfect reliability and validity? I propose the answer that the description results in a systems representation of the organization. The various aspects of this description support each other. The description permits me to make specified statements about differences in the effectiveness of the organizations and to locate ineffectiveness. Alternative models would have probably yielded other combinations and interpretations of the data. This would have resulted in another total picture of the organization and led to different explanations (cf. Coombs, 1964, p. 5). In the end, the choice of a model is not a question of correctness but of suitability. The model that knowledgeable judges think is suitable for a particular task should be chosen. The probability these judges attribute to the event that a model is suitable for a particular task is affected by information from applying the model. A prerequisite for choosing is that there have to be several alternative models available which describe the organization as a system. This study should be regarded as an attempt to offer an alternative and to influence the judges' probability by providing information from an application of the model.

6.2   Sources of Observation and Methods of Analysis

Figure 6:2 is a flow chart that sums up the course of the study from the source to the final description of the processes in Chapter 10.

Four main types of sources were used for observations: available
documents, interviews, questionnaires and participation in a long-
range planning project in the organizations. My initial frame of
reference can also be regarded as analogous to other sources used
for observation because it guided my perception of the organizations.

Different methods were used to analyze observations from the four
sources. One of the methods in Figure 6:2 is designated not
specified. This means that I did not use any formalized method
to interpret the observations. An example of this is that I went
through Servo's personnel roster and found that there are 11
employees in the negotiation department. Observations made via
the questionnaires were analyzed in various ways. The use of
data processing yielded different types of mean values describing
the attitudes of certain groups, etc. Content analysis has been
applied to interviews, board minutes and parts of the questionnaire.

Results of the measurements have been used in Chapters 7-10 to
describe the three organizations and the five processes. These
descriptions have been influenced by the different observations
as well as by my original frame of reference which I have described
in Chapter 1. In Figure 6:2, I wanted to indicate that via con-
frontations with the organizations I got an unformalized impression
of them. It seems plausible that this picture has affected the
description in Chapter 10.

6.3 Classification of the Observations

Figure 6:2 shows how observations from five different sources were
analyzed using different methods and classified into five categories.
These concepts are the organizations' history, environment, concrete
structure, value structure and process indicators. These concepts
were discussed in detail in Chapters 3 and 4.

Source and method of observation   Method of analysis   Processing has resulted in

Myself Documents Projects Interviews Questionnaires

Not specified Data processing Content analysis

x					Initial frame of reference	△		Modified frame of reference (Chapt. 3-4)
						△		
	x				Project, discussion with top mgts.	△		My unformalized impressions of the organizations
		x			Preliminary interviews	△		
x					Available investigations and descriptions	△		
						△		
				x	Contact part of questionnaire	○		
				x	Structural description part of questionnaire	○		Concrete structure (Chap. 7-10 Supplement)
				x	Open-ended questions about (dis)satisfaction	▢		
		x			Interviews with personnel	△		
				x	Open-ended questions about policy of organization	▢		
x					Board minutes	▢		Value structure (Chap. 7-9)
				x	Pre-coded questions about policy of organization	○		
				x	Contact part of questionnaire	○		Environment (Chap. 7-9)
x					Board minutes	▢		
		x			Interviews with employees with long tenure	△ ▢		History (Chap. 7-9)
x					Available investigations and anniversary publications	△		
				x	Indicator part of the questionnaire	○		Indicators (Chap. 10 Supplement)

Description of how the processes go on (Chap. 10)

Figure 6:2. Flow Chart of How Observations from Different Sources were Processed and Classified into Descriptions which were then used in the Summary Description of the Processes.

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The historical description is derived from documents (primarily histories published about the organizations), board minutes and interviews with employees with the longest tenure. I have tried to indicate the most important conditions and occurances in the environment during the various stages of the organizations' development. I have also tried to give an account of the repercussions these occurances have had on the organization's concrete structure and value structure. The study does not contain a detailed discussion of the sway groups' values, although the historical description does serve this purpose somewhat. During the various stages of development, the values of the leaders have determined the way the organizations function to a great extent. They have formulated the organization's objectives, dictated policy, indicated targets, outlined key ideas and tried to influence the value structure in accordance with their own values.

The environment of the organization has been described on the basis of the contact part of the questionnaire and an analysis of the board minutes. The most important environmental areas and the organization's relations to them are stressed in the description.

The individual employee and the attributes which can be used to define his position in the organization make up the bases for the description of the concrete structure. The attributes include the designation of his work group, the informal groups to which he belongs, hierarchical level, professional category, age group, etc. Proximity relations can be ascertained by classifying the job-holders in this way (cf. the discussion in Odhnoff, 1967). Proximity relations can then be used to depict various aspects of the concrete structure. Employees who are "close to one another" in the concrete structure are likely to have similar values. It is also probable that their activities are components of a certain process. High frequency of contact is an example of

a proximity relation. If a set of departments in an organization
can be shown to have a higher frequency of contact with each other
than with other units, then the actions of these departments are
likely to be components in a specific process.

Investigations, descriptions of the organizations and personnel
rosters were used in describing the concrete structure. This in-
formation was supplemented by data obtained in interviews with
the personnel. Several items in the questionnaire dealt with
contacts between different units, other structural aspects and
the reward system. Organization unit was the main attribute used
in classifying the employees. The analysis of the differences in
the employees´ values is based on the concrete structure. The
organization unit is the most important differentiator in this
analysis. Classifications have also been made according to
hierarchical level, line and staff and geographical localization.
In addition, the employees´ backgrounds in terms of education and
previous jobs have been used to describe the organizational structure.
The control structure depicts how different groups and units
control each other´s activities and how the flow and treatment of
material in the organization are constructed. A diagram based on
the organizational scheme, descriptions of the organization and
interviews is used to summarize the control structure (cf. Rhenman,
1964a, Rhenman & Stymne, 1965, pp. 69-86 and Stymne, 1966). The
communication structure describes the flow of information between
different units in the organization (cf. Ramström, 1967). A diagram
based on the questions about the frequency and direction of contacts
between units is used to summarize the communication structure.

Four sources have been used to describe the value structure. The
first source consisted of interviews with the personnel, the second
was an analysis of the open-ended questions about the policy of
the organization, the third was an analysis of the board minutes

and the fourth was an analysis of the pre-coded questions about the organization's policy. The presentation of the values in Chapters 7, 8 and 9 is preceded by an account of the strategic values. I show how strategic values are related to other values in a means-end scheme. The lines in this scheme, which designate relations between different values, indicate that a value on a lower level can be regarded as a means of implementing a value on a higher level. In this context, I also attempt to assay inconsistencies between different values. An inconsistency is said to exist if the successful fulfillment of one value would make another value difficult or impossible to implement.

The process indicators have been estimated by using the indicator part of the questionnaire. The indicators of some of the processes have been supplemented by my own evaluations.

6.4   The Long-range Planning Project in the Organizations

SIAR was asked to assist the three organizations in working out a long-range plan at the end of 1965. The work on this long-range plan consisted of a series of discussions with the top management of the three organizations. The length of these discussions varied from two or three hours up to two or three days. At first, the purpose of these discussions was to create a common language and frame of reference for the participants. The work gradually began to concentrate on the tasks of the organizations in relation to their environment. Hearings with outside experts were also arranged. At the end of the first year, strategy and alternative formulations of the organizations' formal structure were being deliberated. A colleague from SIAR led the discussions. I acted as observer and secretary.

The reason for my participation was not primarily to gather material

for this study but to furnish a documentary basis for the future
long-range plan and to register important phases of the change
process we assumed the management group would undergo. Indirectly,
of course, my role as observer of the management group's work has
influenced the appearance of this report. By listening to the
discussions I was able to get a general picture of the way the
organizations function and the problems they encounter. I have
also formed an impression of the values of top management in the
three organizations. My conception of the organizations' environ-
ment has also been influenced.

6.5 Interviews

Shortly after I began to work on the project, I carried out a number
of interviews primarily with the top management in each of the three
organizations. These interviews were aimed at familiarizing myself
with the organizations' areas of activity and their important
problems. In connection with forming a general impression of the
environment of the organizations, some executives in influential
member firms were interviewed. These interviews were carried out
mostly by a few of my colleagues at the Institute. After these
preliminary interviews were concluded, I decided to interview a
large part of the personnel in the three organizations in order to
clarify the organizations' value structures.

6.5.1 Respondent Sample

During the latter half of 1966, nearly 90 interviews were conducted
with personnel in the three organizations, of which 14 were with
representatives of Contro's local associations. All management
personnel, i.e. those who had subordinates other than office
workers, were interviewed. A sample of other personnel with the
exception of office workers was also included. Those who had been
employed by the organization less than one year were excluded from

the interview study. The respondent sample is shown in Table
6:3.

Organization	Total no.	No. inter- viewed	Sampling ratio	No. in the quest. study	Sampling ratio	Response rate
Intro	30	18	60	26	86.6	100
Managers of units outside Intro proper	6	6	100	0	0	0
Contro	58	34	58.6	54	93.1	98.1
Personnel in Contro´s local associations	>100	14		12		91.6
Servo	16	15	93.7	16	100	93.7

Table 6:3.   Sample of Interviewees and Persons Participating in
the Questionnaire Study (excluding office workers,
piece-rate investigators and time and motion study
men).

6.5.2 Procedure

The interviews usually took place in the respondent´s office. At
the beginning of each interview I gave a brief account of the in-
vestigation in progress. I informed the interviewee that the
study now being carried out would be used in a report to the
organization´s management and in a scientific report. The inter-
viewee was assured that the material would be presented in such a
way that no individuals could be identified. The interviews lasted
anywhere from one to four hours; the average was two hours. The
main purpose of the interviews was to extract the values that
control the work of the personnel. I asked the respondent about
his tasks and their underlying purpose. In addition, I asked
what the respondent regarded as especially important in his, the

unit's and the organization's tasks and what changes or improvements he would like to suggest. The interviews were conducted according to the interview form shown in Appendix D. The answers were jotted down on the form itself or, when this was insufficient, on a separate note pad. After the interview I transferred my annotations to a new interview form. At the same time I edited my notes. The sentences and statements which I had had to shorten in order to keep up with the interviewee were written out in full. I tried to make the phrases as short and concise as possible without changing the content. Some of the interviews were more informative than others. I dictated them as soon as possible after the interview. This dictation was then written out as a record of the interview.

6.5.3 Sources of Error

Many sources of error are associated with interviews as a way of collecting data (see Kahn & Cannel, 1957). There may be different types of interviewer effects. Since the results were going to be reported to the organization's top management, it is reasonable to assume that the interviewee would withold information which could affect him in a negative way. Instead, perhaps he tended to talk about conditions that revealed the importance of his own work. There was also a tendency to emphasize how necessary it is for top management to take the interviewee's own job into consideration.

Another effect is that the respondent tries to figure out the interviewer's expectations in order to meet them as much as he can in his answers. I assume that the interviewees assigned me the role of a young economist out to make some kind of rationalization survey. The expectations to be met might therefore have provoked answers that had a rational, rather than an emotional motivation. It is also likely that answers were not given which

could be interpreted as suggestions for cutting down on the organization's activity. I think this bias made it more difficult to detect differences between values in the various units. On the other hand, I think the direction of the differences which could be detected is the same as that of the "real" ones. Regardless of how much he tries, I do not believe a respondent in an interview can free himself entirely from the image of himself and his tasks imposed on him by his position in the organization and the problems he encounters. Well aware of the limitations inherent in interview technique, I did not aim at anything more than getting the respondent to state what he does and why. In addition to simple questions, I was able to control the consistency of the interviewee's answers by asking several questions with approximately the same content. By describing the purpose of the long-range plan, I also tried to make the interviewee understand that the study did not involve rationalization.

It might have been possible to increase the truthfulness of the answers by using a more profound interview technique and longer interviews. But this would have been very expensive and might also have had an active - and not always desirable - influence on the interviewee. Even if more truthful answers can be obtained in dynamic interviews, it is sometimes difficult to ascertain exactly which questions have been answered.

Another source of error associated with interview technique has to do with transferring the information from the respondent to a written record of the interview. My ability to receive information has, of course, been affected by my limited experience with respect to the interviewee's job situation.

Another factor is that I could only write down part of the

respondent´s answer. In all probability, I noted what I under-
stood, i.e. that which was already included in my conception
of the respondent´s situation. It also seems likely that I
paid more attention to well-formulated and controversial answers
and to statements that appeared to contain important explanations.
However, this latter type of filter is not only a disadvantage
since everything an interviewee says does not contain equal
amounts of information. Some statements are much more important
than others. The sources of error in transferring the material
could have been partially avoided by using a tape recorder. But,
the cost of typing the tapes and coding the records was deemed
much too high due to the large number of interviews.

6.6 The Questionnaire Study

The questionnaire study was carried out after the interviews were
concluded. The purpose of the questionnaire was to investigate
the personnel´s and members´ evaluations of how well the organiza-
tion functions. Another purpose was to obtain information about
the appearance of the concrete structure, especially in reference
to the communication system. An additional purpose was to find
out which values the various groups regarded as important to the
organizations.

6.6.1 Respondent Sample

Participants in the questionnaire study included the organizations´
personnel, with the exception of office workers (secretaries,
clerks and office boys) time and motion study experts and piece-
rate inspectors. Persons recently employed by the organization
were also excluded. Questionnaire forms were also sent to the
managers of twelve of Contro´s local associations who had
previously been interviewed. The sample of the personnel in
the questionnaire study is shown in Table 6:3.

Additional forms were sent to a sample of the member firms.
This was not a random sample. It was made by the executive
presidents of the three organizations according to the principle
that all the member firms with more than 400 employees should
be included. Firms with less than 400 employees should only
take part if they could be characterized as firms in the sense
of carrying on continuous activities and having an administration
with full-time personnel who were not only working supervisors.
Small firms, made up of sub-contractors who specialized in a
certain production component, were to be excluded. Those selected
from among the remainder of the small firms were the ones regarded
as possessing information about the activity of the organizations.
The presidents were requested to include firms with positive
attitudes towards the organization's activity and firms with
negative attitudes in this sample. Since a statistically
random sample was not aimed at, the sample was guided by a
definition of the environmental area "members". This area has
been defined as those members the top managements in the
organizations regard as important, those who can influence the
organizations or participate in exchanging contributions and
rewards with the organizations. The members who were not
covered by this definition were deemed less relevant to the
description of the environment. Compared to a random sample,
this sampling method implies an overrepresentation of large
firms and of small firms with documented interest in the organi-
zations' activity.

The large firms are often made up of a number of units that are
geographically scattered and relatively independent. These units
are almost equivalent to independent firms. Forms were sent to
the executive presidents and unit managers in these large firms.
In the compilation of the answers to the questionnaire found in
Chapter 10 and the Supplement, Section A, every answer has equal

weight regardless of whether it belongs to a manager of a sub-
unit or top management. In other words, I did not try to
calculate mean values for the firms. I assumed that every
respondent would provide the same amount of information about
the members´ attitudes. This means that the large firms carry
more weight than the small ones in the average for all the
firms. There is no objective criterion for how answers from
firms of varying size should be weighted. The tables where the
size of the firm is controlled can be used to examine the effect
of this weighting (see Supplement, Table A:3). The firm sample
and the number of persons in the firm who answered the question-
naire are shown in Table 6:4. The percentage of non-responses
among the small firms is somewhat higher than the average.

Size class	No. of firms in sample	Sampling fraction (percent)	No. of persons in the sample	No. of persons asked per firm	Percentage of respon- dents among persons asked
Small firms ≤100 employees	26	<10	26	1.0	69.2
Medium-sized firms 101-1000 employees	61	38.6	68	1.1	93.0
Large firms > 1000 employees	17	100	61	3.6	95.1
Total	104	5.3	155	1.5	91.0

Table 6:4. Sample of Member Firms for the Questionnaire Study
in Different Size Classes.

Most of the firms included in the questionnaire study were members
of more than one of the three organizations (cf. Chapter 5, Figure
5:1). Respondents in firms that belong to more than one organiza-

tion filled out forms with questions pertaining to two organizations. Some firms belonged to all three organizations, but it seemed to be too much of a burden to let one respondent answer three questionnaires. In addition, one and the same person rarely maintained the firm's contacts with all three organizations. In general, the small firms belong to only one of the organizations - usually Contro. Of course, respondents in these firms only answered a form pertaining to Contro. The sample of the representatives in terms of combinations of organizations is shown in Table 6:5. The procedure of letting one and the same person answer questions about two organizations may mean that, due to transfer effects, the different organizations were judged to be more similar than they really are. This technique was chosen, however, in order to make use of a potential increase in certainty in the differences reported which can be obtained when one and the same person has sufficient information to evaluate two organizations.

Combination	No. of persons	No. of respondents	Response rate
Intro + Contro	82	73	89.0
Intro + Servo	29	28[x/]	96.6
Contro + Servo	21	21	100.0
Contro	23	19	82.6
Total	155	141	91.6

x/ of which one answer arrived too late to be included in the analysis of the data

Table 6:5. Sample of Respondents who Answered Questionnaires with Respect to the Combinations of Organizations.

6.6.2 Sources of Error

Some of the sources of error associated with interview techniques
can be avoided when using the questionnaire method. But other
sources of error arise instead. Since the respondents all answer
exactly the same questions under more or less identical conditions,
the stimulus situation is highly standardized. But this is no
guarantee that all the respondents view the questions in the same
way.

The questionnaire was accompanied by a letter from the organization's
executive president. It gave information about the investigation in
progress, assured the participants that they would remain anonymous
and requested that answers be made promptly. A letter from SIAR
was also enclosed which contained the same type of assurances and
some instructions on how the form should be filled out. One of
the main purposes of these letters was to motivate the participants
to answer the questionnaire. The high percentage of responses
indicates that this purpose was fulfilled. The way in which a
questionnaire is presented brings about effects similar to the
effect of an interview. It can be assumed that the respondents try
to avoid compromising their own department and do not give answers
that could result in interference with their own activity. Judging
from the answers to the communication question, for example, this
source of error did arise.

The use of Likert-type questions (cf. the discussion in Coombs,
1964, pp. 314-325) is based on a rather far-reaching assumption
that all the respondents apply the same underlying scale in
organizing their perceptions. This implies that when the different
organizations are compared in this investigation, it is assumed
that persons in Contro mean the same thing as persons in Intro
when they indicate the expression "very good" to describe a
certain condition. In addition, conditions in Intro and Contro

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are assumed to deteriorate to exactly the same extent when the respondent changes his evaluation from "very good" to "rather good". These assumptions underlie all questionnaires constructed according to Likert-type scales and there is good reason to challenge t em. It is a well-established sociological fact that groups tend to develop norms that differ from those of other groups. Therefore, norms about what is regarded as "very good" can be assumed to shift from one group to the next. The effects of this source of error could be estimated by comparing the personnel´s and members´ share of positive responses to questions answered by both groups. There is, on the average, a somewhat larger difference between the share of positive answers of personnel and members in Intro (22 %) than in Contro and Servo (18 %). Since the difference between personnel and members is almost the same for the three organizations, it can be assumed that the same underlying scale was used to evaluate the different organizations. This means that the group norm in each of the three organizations for what "very good" is can be regarded as identical. Conclusions about differences between the three organizations can therefore be drawn on the basis of responses to the questionnaire.

Another source of error associated with questionnaires is that the respondent might not always understand the questions or interpret them in the way the researcher intended. This source of error was avoided to some extent by letting a number of employees fill out a test questionnaire in advance and by using questions similar to those asked in other studies.

In questionnaire studies, it often happens that the respondents do not feel the questions accurately express what they think is important or what they would like to emphasize about the conditions they are asked to describe. This is probably due to the fact that the questions are formulated on the basis of the researcher´s frame

of reference rather than the respondent´s. The more standardized
the questions, the more unlikely it is that they suit the views in
the organizations investigated. This clearly limits the usefulness
of the questionnaire method. If the reliability of the questions
can be increased by standardizing them after gaining experience
from several investigations, then their ability to describe atti-
tudes and opinions decreases with respect to the individual case.
The effect of this source of error has been lessened in this study
by formulating the questions on the basis of knowledge about the
organizations´ present situation and by giving the respondents a
chance to express their opinions in open-ended questions.

The open-ended questions also contain sources of error. The most
important aspect in this instance probably has to do with great
differences in the respondents´ ability to write down and verbalize
their thoughts. Since university graduates and employees engaged
in writing reports and articles have the upper hand, their opinions
can be overrepresented in an analysis of open-ended questions.

6.7   Available Documents

The documents included historical material from reports published
in connection with the organizations´ 25th or 50th anniversary.
Annual reports were used for the years not covered by these pub-
lications. I also had access to board minutes from 1950 and
onwards. In addition, there were a number of organization reports
and analyses of important policies, membership and personnel rosters
and organization schemes.

With the exception of the member and personnel statistics, which
can be assumed to be very reliable, there are sources of error in
all the types of documents mentioned above. Historical documents
can be swayed by the historian´s own conception of a situation and
by a desire to glorify the past. Annual reports seldom contain

large quantities of information. The fact that a topic warrented
a concrete investigation does not necessarily mean that it was the
most important topic dealt with in the organization during a certain
period of time. Reports are often written by employees who merely
want to assert a certain policy. Board minutes are often rather
formal and more or less avoid reflecting differences of opinion
among board members. However, the board minutes of the three
organizations in question were relatively detailed and supplemented
by reports and other documentation. Discussions of important matters
were sometimes reproduced verbatim in these supplements.

The easiest way to conteract sources of error in documents is to
confirm every piece of information in at least two different
places. This rule has been applied. Information from one type
of document was always compared with the same information from
other documents or sources.

6.8 Content Analysis

A formalized content analysis was made of all the interviews (with
the exception of the introductory ones), the board minutes and the
open-ended questions. "Content analysis is any research technique
for making inferences by systematically and objectively identifying
specified characteristics within text." (Stone et al., 1966,
p. 5). The inferences to be made from specified characteristics
can be relatively simple, i.e. to determine how often the word
"defense" appears on the editorial page of various newspapers.
Early studies of mass media (cf. Willey, 1926) were usually based
on simple frequency calculations and space measurements. Content
analysis can also be more qualitative and aim, for example, at
drawing conclusions about an author´s personality (Paige, 1966).
I think I have met all the demands for systematism in the analysis
carried out in this study. If objectivity means that the procedure
can yield exactly the same results when it is repeated by another

researcher (cf. Berelson, 1952), then nothing can be said about objectivity because I did nearly all the coding myself. This was primarily a question of time and cost since processing thorough coding instructions and training other coders are very time-consuming procedures. Instead of increasing efforts in this area, I decided it was better to use supplementary methods of collecting data such as questionnaires.

6.8.1 Coding the Interviews

The content analysis of the interview records was performed by dividing up the records into a number of statements. Every statement was classified under one of the following seven headings:

1. Values about the policy the organization as a whole has or should have

2. Values about the purpose the interviewee's own unit or job has or should have

3. Values which have to do with general principles about how work in the organization should be performed

4. Statements about relations to the members

5. Statements about relations to the other side

6. Statements about relations to each of the other two organizations

7. Opinions about the results the organization has achieved

Every statement was assigned a code for the unit and level to which the interviewee belonged. In this way, differences between the various organizational levels and units could be compared. Categories 1 and 2 were also divided into sub-categories. In category 2, this division was performed separately for every organizational unit. In other words, the analysis of values was based on the

concrete structure. Sub-categories were chosen by dividing up the material in the initial category so that identical or nearly identical statements were put in the same pile. After reading through all the statements in a pile, a heading was assigned to the sub-category to which the pile corresponded. The process of assigning headings sometimes made it possible to combine two or more sub-categories containing statements that had the same meaning even if the wording was not identical. Briefly then, the content analysis of the interviews resulted in sub-categories for two of the main categories, each containing a number of statements that described values for the organization as a whole. There were also sub-categories for every unit that contained statements about the activity of the unit. In addition, there were a number of statements in each of the five remaining categories.

6.8.2 Coding the Open-ended Questions about the Policy of the Organization

Content analysis was also performed on the open-ended questions about the policy of the organization. Both members and personnel were asked the following questions:

1.   What do you think are the organization´s most important tasks today?

2.   What changes would you like to see take place in the organization´s goals and methods within the next ten years?

The original purpose of the analysis was to be able to compare the respondents´ conception of the organization´s present policy and the policy they thought the organization should have in the future. But the answers showed that the respondents did not distinguish between the two questions. The answers to both questions reflected the respondent´s opinion of how things ought to be. Therefore, the two questions were not analyzed separately but were regarded

as one answer. A classification scheme was constructed on the basis of a trial classification of a number of answers. Each answer was evaluated in terms of whether it belonged to one or several categories. If it was found to coincide with several categories, it was divided into partial answers which were then put into their respective categories. The results of this content analysis are presented in Chapter 10, Table 10:8 (see also Supplement, Section E). The categories shown in the table are somewhat different from the original ones, i.e. some of the classes in the initial categories were combined and the headings were changed in some instances. The expression "the open-ended questions" is used from now on when the coding of these open-ended questions about the policy of the organizations is referred to in the text.

6.8.3 Coding the Board Minutes

A content analysis was performed on the board minutes of the organizations from 1951-55 and 1961-65. These two periods of time were chosen in order to be able to observe changes in the work of the organizations. The content analysis was based on the experience gained in coding the open-ended questions. The instructions used in analyzing the board minutes are shown in Appendix A. Except for recurring matters of a formal nature, all the items in the minutes were assigned a code. This code contained the type of item, the counterpart(s) mentioned and the direction of the initiative taken in connection with the item. The results of this content analysis are presented in the Supplement, Section D.

6.8.4 Coding the Open-ended Questions about Job Satisfaction

The personnel were requested to answer two open-ended questions about job satisfaction and dissatisfaction:

1. What do you find most satisfying about your job?
2. What do you find most dissatisfying about your job?

The coding scheme for the content analysis of these questions was constructed on the basis of other studies. Therefore, it was not entirely dependent on the answers to these particular questions. This also meant that a more standardized coding procedure could be used. Another coder and I coded a number of statements together. We made comparisons, discussed coding principles and repeated this procedure until we reached what we regarded as a high measure of agreement. The other coder performed the final coding. Just as in the case of the question about the policy of the organization described above, an answer was either put into one category or divided up into partial answers that were each assigned to different categories. The results of the analysis of the questions about satisfaction and dissatisfaction are presented in Chapter 10, Section 5.

6.9 Reliability of the Content Analysis

The principal means of increasing the reliability of the content analysis was to divide up the text into statements. Each statement was then assigned to a category. This process involved cutting up the material and sorting it into different piles. Relatively elaborate coding instructions could be used to analyze the board minutes and the questions about job satisfaction and dissatisfaction. The coding instructions for these two questions were based on experience from other investigations (Zander et al., 1965, Rhenman, 1969a and the categories proposed by Herzberg, Mausner & Snyderman, 1959). The questions and the coding instructions can therefore be regarded as having a certain amount of documented reliability. Joint training of two coders also served to increase the reliability of the content analysis of the questions about satisfaction and dissatisfaction.

A further increase in reliability can be achieved by specifying very clear rules for determining what should be placed in different

categories. But because I could not make exact predictions about the different types of values which could be found in the organizations before performing the content analysis, this possibility was rather limited. Another way of increasing reliability is to let several coders go over the same material or to let the same coder process the material several times. The increase in interpretative value involved in either of these two alternatives did not appear to be proportional to the share of given resources and time this procedure would have required. Since parallel coding could not be applied, it has not been possible to give any estimate of coder reliability. Nor does the relevant literature contain much information about norms for what can be regarded as reasonable coder reliability. I participated in a study with similar content analytical problems where detailed instructions were formulated. The measure of agreement between the results of the different coders was then estimated. The eight classes coded were ranked on the basis of the frequency with which statements had been assigned to each class. Pair-wise correlations of the coders˜ rankings were computed. The outcome was tau = 0.70, which can be regarded as a good result. Although the basic text in the latter study was more complicated than in the present one, the resulting figure should still serve as an approximate measure of certainty in the coding.

6.10   Data Processing and Reliability of the Measurements

6.10.1   Likert-type Questions

Samples of the various types of questions used in the questionnaire are shown in Appendix C. Most of the questions are of the type exemplified in Figure 6.6. They are known as Likert-type questions and consist of a statement or question about which the respondent is to express his opinion by indicating one of several alternative answers. The purpose of these questions was to find out about

aspects of the concrete structure and to serve as process indicators. Earlier studies provided suggestions for formulating many of the questions (see Georgopoulos & Mann, 1962, Wieland, 1965 and Zander et al., 1965). The measurements cannot be considered standardized because they are not exactly the same as those used in other studies. This also means that the degree of reliability cannot be known with certainty. However, it does seem reasonable to assume that reliability in this instance is on a level usually attained with respect to pre-coded questions. Correlations between two single items of this type can generally reach a maximum of 0.70. This could be regarded as an upper limit for reliability (cf. Patchen, 1965).

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11. In your own and others' work there are periods of extremely large work loads and occasions when an unexpected problem has to be solved. How well do you think people in the organization handle load variations such as these?

____ (4) Very well

____ (3) Satisfactorily

____ (2) Rather satisfactorily

____ (1) Not fully satisfactorily

Figure 6:6. Example of a Likert-type Question.

Answers to the pre-coded questions were transferred to punch cards that were processed on a computer. The data processing was aimed at producing output in the form of tables showing how many respondents indicated different categories. Various types of cross tablutaion were also performed. The answers given by the personnel were divided into line and staff as well as into top management and others. Answers from the member firms were calculated separately

with reference to firms with different types of production and of varying size. Table 6:7 shows the number of respondents in these four groups.

	Intro	Contro	Servo
Office	26	53	15
Line	18 a/	24 b/	11
Staff	6	28	4
Top management	9	11	6
Others	17	42	9
Firms	101	113 c/	48
Standard production	19	24	1 d/
Mixed production	19 d/	28 d/	3 d/
Heavy production	7	5	10
General production	56	55	34
Small firms ($\leq$100 empl)	11	20	
Medium-sized firms (101-1000 empl)	49	57	12
Large firms >1000 empl	41	36	36

a/ Excluding a regional representative and the organization's accountant in the line-staff distinction

b/ Excluding the organization's accountant in the line-staff distinction

c/ One firm in Contro could not be classified in terms of production pattern

d/ Because of their small size, these groups are not accounted for separately

Table 6:7.   Number of Respondents to the Questionnaire in Different Groups.

The tables in the Supplement, Section A, contain the percentages of the total number of respondents in these groups. The percentages refer to the share of persons in the group that gave positive answers to the questions. A positive answer expressed high effectiveness, positive opinions of the organization's activity and/or structure, etc.

The analysis of the questions was used in the description of the processes in Chapter 10. An important aspect of this analysis has to do with a comparison of opinions, i.e. whether one organization is evaluated more positively than another or whether one personnel group has a more positive opinion of the organization´s activity than another group. Since the sample in this study is not random statistical tests cannot be used to determine whether there is a suggestive difference between two groups. I have used the following reasoning as an arbitrary rule for deciding whether a group differs suggestively from other groups:

In order to determine whether a sample of n_1 observations of which p_1 per cent are positive is taken from a total population in which P is positive, use the following test variable:

$$z = \frac{p_1 - P}{\sqrt{\dfrac{P(100-P)}{n_1}}}$$

If $|z|$ exceeds a certain value, say 2, then it is probable that the sample is taken from a population with a mean value other than P. The formula shows that the greater n_1, the smaller the differences regarded as suggestive. Table 6:8 shows how large the percentage difference between P and p_1 has to be in order for it to be suggestive for different n if $\delta_p = \sqrt{P(100-P)}$ is given its highest possible value, i.e. 50 and if $|z|$ is set = 2.

n =	least suggestive difference =	n =	least suggestive difference=
4	50 %	30	18 %
6	41 %	40	16 %
8	35 %	50	14 %
10	32 %	100	10 %
20	22 %		

Table 6:8. Least Difference between a Group´s and the Total Population´s Mean Value that is Regarded as Suggestive. n denotes the size of the group.

Suggestive differences such as these are designated in the Tables in the Supplement by special signs. The mean values and standard deviations for the various questions were also obtained in the computor processing. These mean values could have been reported instead of the percentages. The "test variable z" could also have been calculated by using mean values and standard deviations. This would have led to many more suggestive differences. But I have refrained from this procedure because the increased precision obtained would not have made the rule less arbitrary. The calculations would also have been much more time-consuming. The decision to report the percentage of positive responses instead of mean values for each question was motivated by two factors: making things easier for the reader and increasing the comparability of different questions.

6.10.2 Pre-coded Questions about the Policy of the Organization

Another type of question is exemplified in Appendix C, question 21. Throughout the remainder of the study, these questions will be referred to as "pre-coded questions about the policy of the organization" or simply "pre-coded questions". These questions were based on the introductory interviews with employees in the organizations and top management in the member firms and on a preliminary review of available documents. I made a note of statements about the organization's policy which I found in interviews and documents. Statements that were mentioned frequently and that indicated some type of value conflict were then selected. They were put into a questionnaire that was distributed to a total of fifteen members and personnel. A simplified scalogram analysis was performed on this material (cf. Coombs, 1964, pp. 66, 227-237 and Torgerson, 1958, pp. 307-336). Statements that differentiated most between respondents were chosen for the final questionnaire. An additional basis for choosing was to select pairs of statements which were negatively correlated in

the sense that if someone agreed with one of the two statements, he tended to disclaim the other statement.

These pairs of statements were then included in the final question- naire. The respondents were requested to give their opinion of a number of items in the form of values which described the policy of the organization. The examples in Appendix C show how the questions were arranged as end points on a line with four intervals. The respondents were asked to check the statement that best agreed with his opinion. There were two sets of similar questions. One set referred to the respondent´s opinion of the organization´s present activity. The other set referred to his ideas about how the organization should function in the future.

There is reason to believe that the way in which the questions about the values of the organization were constructed gives them a certain degree of reliability. A rough measure of reliability was obtained by correlating the respondent´s opinion of the organization today with his answer to the corresponding question about the future policy of the organization. Even if the questions involve different time aspects, there should still be a certain amount of agreement if the question is reliable. These correlations averaged 0.30 (n = 150, computed after about half of the question- naires had been received). On the basis of this rough method of estimating reliability, two questions were not reliable and therefore not used for making inferences (cf. Supplement, Section B, Figures B:2 and B:9).

After the results were data processed, they were arranged in figures of the type shown in Figure 6:9 (see also Supplement, Section D).

PROVIDE SERVICE

The organization supports the individual firms via its service and information activities

CARRY ON PUBLIC RELATIONS

The organization supports the individual member firm via external action on behalf of the industry

M = Members
P = Personnel
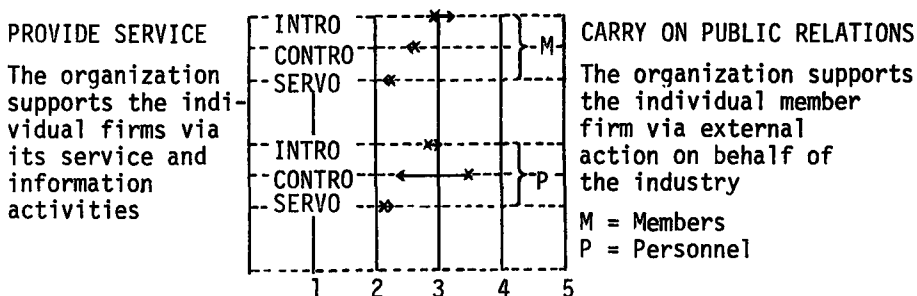
Figure 6:9. Example of the Comparison between the Attitudes of Different Groups to the Organization's Present and Future Policy.

(x) in Figure 6:9 indicates the average answer with respect to what a particular group thinks about the organization's present policy. The tip of the arrow (———>) indicates a certain group's average opinion about the policy the organization should have in the future. These kinds of figures were used to investigate different groups' opinions of the organization's present policy and of the direction in which changes should be made.

The mean values are based on a scale ranging from 1.0 to 5.0. In most instances, the standard deviation in the mean values for these questions was less than 1.0. Under the assumption of a random sample, this means that differences of about 0.5 would be significant with respect to Servo's personnel (the smallest group) as would differences of about 0.02 with respect to Contro's members (the largest group). Since the sample in this study is a kind of total sample, the matter of significance is more or less irrelevant. But if the standard deviation = 1 is accepted as a lower limit for the reliability of the estimates of the opinions in each group, then this can be used as a guide in evaluating the reliability of the measurements of the kind that are presented in Table 6:9.

In other words, differences of more than 0.5 for the personnel and of about 0.1 for the member firms could be regarded as having been determined in a reliable way.

6.10.3 Questions about Contacts

There were five questions in the form where the personnel in the organizations were requested to indicate, on a four or five point scale, what they thought about their contacts with a number of units within and outside the organization. The members were asked to answer corresponding questions about their contacts with representatives and other employees in Contro and Servo, with representatives in Contro's local associations and with employees in Intro. An example of one of these questions is shown in Appendix C, question 25. Most of the questions had been used previously in two investigations (of a firm and a hospital) in which I participated.

Processing of the five contact questions resulted in five matrices of the type shown in Figure 6:10. The questions were formulated and the calculations were performed as follows.

Counterpart unit in the contact / Unit reporting the contact	1 . . . j . . . n	Unit's mean contact with the organization	1 . . . k . . . m	Unit's mean contact with the environment
Units within the organization 1 . . . i . . . n	K_{ij}	$\frac{1}{n-1}\sum_{j=1}^{n} K_{ij}$	K_{ik}	$\frac{1}{m}\sum_{k=1}^{m} K_{ik}$
Organization's mean contact with the unit	$\frac{1}{n-1}\sum_{i=1}^{n} K_{ij}$	$\frac{1}{2n-2}\sum_{i}^{n}\sum_{j}^{n} K_{ij}$		
Areas in the environment 1 . . . k . . . m	K_{kj}			

Figure 6:10. Principle for Constructing the Matrices Which Describe Each Organization's Internal and External Contacts.(K can be the frequency, direction, importance, satisfaction or strain attributed to the contact. The double sum expression is the mean contact between all the units in the organization.)

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1. Frequency of contacts - how often in your work do you have contact with a person in the different units and groups?

   The frequency of contacts $F_{ij} = F_{ji}$ between units (i) and (j) was calculated as the highest mean frequency of contact reported by either managers or personnel in one of the units in relation to the other unit. In other words, frequency of contact is a symmetrical measurement. The frequency was set equal to the maximal frequency of contact reported by a sub-unit because communications between one unit and the surrounding system are often specialized in terms of position or sub-groups. For instance, a unit manager might have daily contact with another unit but his subordinates might never have such frequent contacts.

2. Direction of contacts - who usually receives the most information from the other during the contacts in question?

   The direction of contacts $D_{ij} = D_{ji}$ is the mean direction of the contacts reported between persons in (i) and (j).

3. Importance of contacts - how important are different contacts to the satisfactory performance of your tasks and to the achievement of the desired result for your unit in the organization?

   The importance I_{ij} of the unit's (i) contacts with another unit (j) was calculated as the greatest importance that either managers or others in the group attributed to contacts with j. Importance is an asymmetrical measurement.

4. Satisfaction with the result of contacts - how do you evaluate the result usually obtained from different contacts in terms

of what you think should be accomplished?

The satisfaction T_{ij} in the unit´s (i) contact with another
unit (j) was calculated as the mean satisfaction reportec by
the respondents in (i) in their contacts with (j). The measure-
ment was calculated for the members who stated that they had
at least some contact with (j).

5.   Strain in contacts - how much strain and difficulty in coope-
     rating do you think there is in your department´s contacts
     with other units?

     The strain S_{ij} in the unit´s (i) contacts with another unit
     (j) was calculated as the mean of the strain expressed by
     the personnel in (i) in their contacts with (j). The measure-
     ment was calculated for the members who said they had at least
     some contact with (j).

Representations of the communication structure helped in describing
the concrete structure of the organizations (cf. Supplement,
Section C). These representations are based on the frequency and
direction matrices. Figure 6:11 is an example taken from Intro.
The lines between the units indicate a channel of communication.
A channel is said to exist when the frequency of contact between
two units was ≥ 4 (once or several times per week). The arrows
denote the direction of the contacts. D_{ij} varied between 1.0 and
3.0. When D $1.75 \leq D_{ij} \leq 2.25$, the units were regarded as receiving
equal amounts of information from one another. These instances are
indicated in the figures by arrows in both directions.

The matrices also served as bases for formulating a number of
measurements which describe the communication system. The measure-
ments are listed in the Supplement, Section C. Measurements taken

from the matrices were also used in describing the environment of
the organizations in Chapters 7-9 and the processes in Chapter 10.
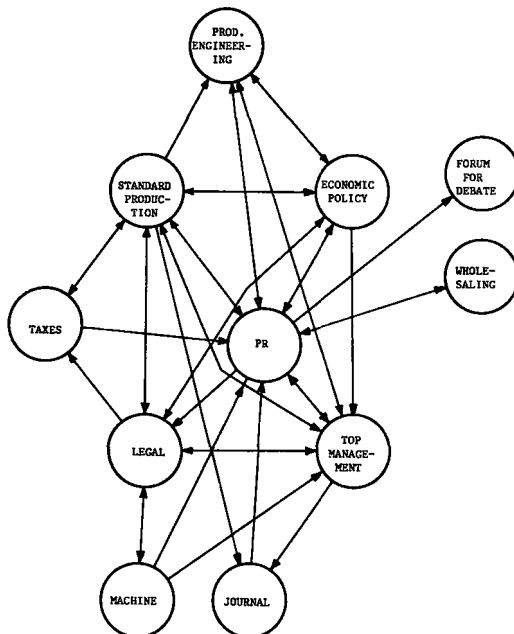
Figure 6:11. Contacts between Units in Intro.

Reliability in questions about contacts with others is probably
affected by the fact that every person experiences a contact in
a different way. The statements reported obviously do not reveal
the "real" frequency, satisfaction, etc. but a general attitude
toward contacts with other units. When the answers were processed,
they revealed relatively little variation in the evaluations of
different units with respect to strain and satisfaction in contacts
with other units in the respondent's own organization. This seems
to indicate that the reliability of the questions and their ability
to discriminate were reduced by the respondents' unwillingness to
disclose value judgements about other units. Insufficient reli-
ability has also meant that the answers could not be used to any
great extent in the descriptions of the organizations.

6.11 Validity of the Measurements

One aspect of validity, known as internal validity, has to do with
how well a particular measurement agrees by definition with the
concepts and definitions of concepts in a model (cf. Zetterberg,
1965). I have usually not used clearly specified definitions in
the theoretical outline. This is mostly because the empirical
basis is insufficient. Instead, the measurements and methods of
measuring in themselves can be said to define the concepts. This
refers especially to the concept "value structure". The flow of
the processes discussed in Chapter 10 is based on the theoretical
description of the processes in Chapter 4. This description is
in turn based primarily on research results published by other
authors. Some of the concepts could have been defined much more
clearly by formalizing these theoretical bases very carefully.
This would have increased the possibility of formulating measure-
ments with high internal validity. The reason I did not make use
of this possibility is that I would have been forced to confine
the investigation to perhaps a single process and my aim was to
treat several processes simultaneously. The possibility of a
more profound theoretical treatment would have existed in the
description of the control processes (see Ramström, 1967) and
the reward structure (see Vroom, 1964).

Another aspect of validity has to do with the ability of a procedure
to produce measurements that agree with the "real" situation. This
type of validity is known as external validity. It preassumes that
in addition to the procedure used, there exists a procedure which
would produce a more truthful measurement. An example of this is
that the frequency of contact between two units reported orally
could be validated against the frequency verified by directly
observing the contacts that actually took place.

Different sources of error in methods of observation and the reliability of different measurements were dealt with in preceding sections of this chapter. Sources of error and insufficient reliability always tend to limit the degree of validity the researcher can achieve in his measurements. The main method of increasing the validity in this study has been to let descriptions based on different sources and methods of analysis support each other. This method has been used especially in the description of the values.

Numerical measurements based on answers to the questionnaire have been used in describing the concrete structure and the process indicators. Several measurements have sometimes been used to describe the same aspect of the structure or to obtain indicators of a particular process. If a set of these measurements ranks the organizations in the same order, they can be assumed to be fairly valid. This can be exemplified as follows:

> Assume that the measurement (p) ranks the three organizations in the order A B C. Assume that another measurement (q) for measuring the same conditions ranks the organizations in the same order. Since there are 3! = 6 different ways of ranking the organizations, the chance that this will occur at random is only 1 in 6. If three or four measurements result in the same ranking order, the corresponding probabilities are $(1/6)^2 = 0.03$ and $(1/6)^3 = 0.005$, respectively. These figures could be accepted as approximate estimates of validity for two, three and four corresponding measurements of the same condition, respectively.

In Chapters 4 and 10 I formulate the expected value of a certain process indicator as a function of a set of other variables such as the value structure or the concrete structure. Another indication of the validity of the measurements is obtained when they conform to these expectations.

The validity in this study has also been increased by letting representatives of the organizations check the descriptions. Managers in the organizations read the material and gave me their comments. A number of meetings were also held at which top management in each of the three organizations participated.

6.12   Relevance of the Description

I have posed and tried to answer the question of the reliability and validity of the individual measurements. In this section I would like to raise the question of evaluating the "correctness" of the description and of the model as a whole.

An organization is a complex system of many components which influence each other via different processes. In describing the behavior of this system, the theory and conceptual apparatus used by the researcher has to reflect these systems relationships. I have therefore collected data on many aspects of the system and compiled them into a systems representation. The credibility of the total description increases when a number of aspects such as these can be shown to support each other and can be integrated in a meaningful way.

Other systems models of the organization might have included the same observations and data about the organizations in other, more or less meaningful total pictures. Even if there are relatively few models suitable for total descriptions, a few examples can be mentioned.   Three alternatives are Weber´s "bureaucracy model", Burns´ "organic model" or a "goal programming model" in which various strategic values are the goals and the organization´s personnel and other resources become the restrictions (cf. Charnes & Cooper, 1961 and Charnes, Cooper & Niehaus, 1967, for an example of a goal programming model).

If different models can have equal creditability, then some other
criterion has to be used in choosing between them. I propose the
criterion of the model's suitability for solving a particular
problem. Baysian decision theory (see Edwards, Lindman & Savage,
1963 and also Stinchcombe, 1968) suggests a way of evaluating
suitability. Suitability could refer to the probability that a
group of competent judges assign the possibility that the model
will turn out to be usable in a certain situation or in solving
a certain problem. This probability is altered when the judges
obtain information about the results of attempts to apply a
particular model or when a new model is proposed.

One of the aims of the description in this study is to present
an alternative systems model for organizations which can be used
in evaluating effectiveness. Another aim is to provide judges
with a basis for evaluating the probability of the usefulness
of this approach.

CHAPTER 7.   INTRO

7.1   Intro´s History

Highly unstable and uncertain prices were the main reasons for
establishing Intro during the 1920´s. The products of the firms
in the industry were made to order. A rather long period of time
often elapsed between the date a contract was signed and the
completion of products. During this time, an appreciable change
in the cost of raw materials, for example, could occur. Since
the customers did not permit contracts to contain provisions for
changes in price conditions, the manufacturer could incur a heavy
loss. Intense competition in the industry meant that buyers could
take advantage of the different firms. The firms also felt
threatened by the fact that the government was increasing its own
manufacture of products sold by companies in the industry.

The originators of Intro were a group of respected top executives.
Almost all of them were owners of their companies. The purposes
of Intro were inscribed in the by-laws as follows:

   a) To protect the interests of the members in relation to
      authorities, consulting organizations and the general
      public;

   b) To establish sound principles for business transactions
      by drawing up and providing general terms of delivery
      and standard contracts;

   c) To work for loyal business principles within the industry;

   d) To disseminate information;

   e) To otherwise promote the continuance, development and
      prestige of the industry.

For many years the organization worked with very small resources
and had only one part-time representative (Swedish: ombudsman).

The various individuals who held this job were also associated with the Employers' Confederation at the same time. A large part of the activity during the 1930's was aimed at limiting state participation in the industry. The organization tried to influence Parliament and government authorities. Intro argued that private entrepreneurship under free competition would be more effective than state-owned companies. Even if Intro failed to bring about any fundamental changes in state policy, it was able to get government authorities to - at least sometimes - place orders with private firms.

Although opposition to government industrial activity was one of Intro's main functions from the very beginning, contract and delivery terms also became an important issue. Efforts to establish general contract provisions were very time-consuming and required the coordination of many different parties in the industry. A set of contract provisions were published during the 1930's. These provisions were approved by most of the important parties in the industry but not by the government. Later on Intro assisted in revising these provisions. During the thirties work was also begun on specifying standards for formulating the customers' demands in terms of product design. These specifications were not ready for publication until about 1950 and have gained in importance since then.

World War II brought about a tendency for prices and wages to be forced upwards. At the same time the government had high ambitions of keeping price increases under control. So that its members would not find themselves in the same situation that had plagued them during the twenties, Intro instructed them to incorporate restrictive clauses in their contracts. This time Intro's measures were better understood by the state. Cooperation with government

authorities was begun and gradually led to index-tied contracts
and standard price lists for machine use.

Intro's involvement in contract issues made it seem natural for
the organization to hire a full-time lawyer after the war. The
members greatly appreciated this move. It also resulted in new
applications for membership. More lawyers were gradually retained
and they are at the disposal of the members as consultants and
negotiators. Intro also began to become involved in taxation
matters. The organization's tax experts have collaborated on
special tax regulations for companies in the industry and on
implementing tax laws geared to the industry.

Intro's membership was originally made up of manufacturers with
relatively complex technology, i.e. those involved in light and
in heavy production. The manufacturers in standard production,
who were regarded as speculative and not wholly bona fide,
nevertheless had problems similar to those of the traditional
members. Since most of the standard manufacturers were members
of Contro (cf. Chapter 8), a special unit was formed that would
protect their interests in matters other than employer relations.
This led to a series of difficulties in distinguishing between
Contro and Intro, especially since many Intro members also dealt
in standard production. As a result, this activity was eventually
transferred to Intro.

Strong cooperative firms had entered the standard production
market as buyers and producers. In the forties, local governments
also began to set up their own companies for standard production.
Since the local and central governments controlled the raw materials
vital to the industry to a large extent, this development threatened
the survival of the private standard manufacturers. Their mis-
givings were further substantiated by the fact that the government

seemed to favor cooperative and local government firms with advantageous loan opportunities. Intro tried in various ways to influence the government to give private standard manufacturers the same opportunities. The organization therefore devoted considerable time to investigations and industrial policy activities in matters related to standard production. Intro also took an active part in establishing three associated units in the form of independent firms. The purpose of these units is to be instrumental in improving financing terms and accessibility to raw materials for the private standard manufacturers.

During the 1940´s the government made arrangements to set up technological research in the industry´s field. This initiative permitted the government to influence research in this area to a great extent. Even if the firms themselves financed most of the research, their influence was rather limited. Intro did not succeed in its efforts to convince the government to give more financial support to research in this field.

Several times during the 1950´s, Intro´s board tried to deal with the question of a code of honor that would prescribe the members´ competitive behavior. But unanimity was never reached in this matter. The fifties and sixties were also characterized by other internal difficulties. Involvement in many different activities has made it difficult for Intro to present a clear picture of its operations. Continuously expanding activity has also increased the demands on Intro´s financing. The members have not been willing to raise their dues to the extent the administrative office deems necessary. Nor have efforts to increase the number of members brought about the desired results. Many private firms in the industry have had severe difficulties and many have disbanded. With some exceptions Intro has not been able to show its members very many concrete improvements in, for example,

the government's treatment of private enterprise. Therefore, it has not been easy for Intro's personnel to substantiate its "iceberg theory", i.e. that most of Intro's work has to take place below the surface and only a few of the results are actually visible.

7.2   Intro's Concrete Structure

The structure of Intro includes the Executive Directors, seven departments and an Accounting Department (see Table 7:1). There is also an employee who represents the organization in a distant region. These units will be known as the units belonging to Intro proper. In addition, there are five units in the form of independent companies which Intro helped found and which are associated with Intro in one way or another. There is also a sixth independent legal unit called Forum for Industrial Debate. These six units will be known as units associated with Intro.

The units inside and outside Intro have continuous contact with one another, they have offices in the same building and Intro employees have positions or board duties in the associated units. This distinction is important in order to understand how Intro functions. Intro maintains that the units outside of the organization are independent and separately responsible for the policy they pursue. In other words, Intro's personnel claim that Forum for Debate can state political opinions that will not be ascribed to Intro proper. The functions of the units associated with Intro are also more clearly defined than those of the units belonging to Intro proper.

Unit	Number	Total
Units belonging to Intro proper		
"The Line"		
Executive Directors	2	
Legal Department	8	
Tax Department	2	
Standard Production Department	5	
Machine Department	4	
Regional Representative	1	
Accounting Department	1	23
"The Staff"		
Public Relations Department	1	
Economic Policy Department	2	
Production Engineering Department	4	7
Total		
Number of Employees (excluding office workers)	30	
Office Workers	27	57
Units associated with Intro		
Company 1 (Wholesaling)	2	
Company 2 (Delivery Guarantees)	1	
Company 3 (Raw Material Procurement)	3	
Company 4 (Financing)	1	
Journal	4	
Forum for Debate	3	14
Total		
Number of Employees (excluding office workers)	14	
Office Workers	36	50

Table 7:1.   Intro's Different Units and Their Number of
             Employees.

In Table 7:1 Intro is divided up into line units and staff units.
The line units mainly provide the members with different types of
direct service in the form of consulting and other specific
products. The departments I put under the heading staff are to
a large extent involved in carrying out investigations and
participating in the formulation of the organization's policy.
The division between line and staff more or less corresponds to
a division into two different types of personnel in Intro, i.e.
industry experts and those who are involved in giving service to

the member firms. The executive directors and the department
managers may also be viewed as industry experts. The terms line
and staff are somewhat inappropriate for describing the work of
the various units in Intro. There might be some justification in
saying that the "staff departments", i.e. Public Relations,
Economic Policy and Production Engineering, deal with line jobs
since it can be maintained that industrial policy is the goal of
the organization. The service activities can be regarded as more
supporting in nature. Table 7:2 shows the number of hierarchical
levels inside Intro proper. Intro's hierarchy has fewer levels
in comparison with the employers' organization.

There is a striking number of university graduates among Intro's
personnel. Lawyers make up the largest group. Significant
differences in the educational background of the personnel are
exhibited in the various groups. Lawyers predominate in the
legal and tax departments. Engineers predominate in the standard
production, machine and production engineering departments. Two
persons in the economic policy department, one in the tax depart-
ment and one in the machine department have social science degrees.
The Executive President is a lawyer and the Vice-president is a
civil engineer.

The most important recruitment sources are state authorities and
firms in the industry. Those who leave Intro generally go to
firms in the industry. The various units have distinct sources
of recruitment. The personnel in the legal and tax departments
come from law offices, courts and tax bureaus. There are people
in the standard production department who were previously employed
by companies that are important customers of Intro's member firms.
Persons with experience from firms in the industry work in the
machine department and some with previous experience from govern-
ment investigations work in the economic policy department
(Supplement, Section F).

Line hierarchy			Staff hierarchy		Total
Level	Designation	Number	Designation	Number	
1	Executive President	1			1
2	Vice-president	1			1
3	Department Manager; manager of independent unit	4	Department Manager; manager of independent unit	3	7
4	Co-workers within the units with specialized tasks	17	Co-workers within the units with specialized tasks	4	21
5	Office workers				27
Total		23		7	57

Table 7:2.   Division of Personnel into Different Hierarchical Levels
inside Intro Proper.

7.2.1   Control Structure

Intro´s administrative system has a simple structure (see
Figure 7:3). The executive directors influence the internal
system by means of an exchange of information that occurs mainly
between the vice-president and the department managers.

The executive president is mainly responsible for external
activities, contact with the members, lectures, press releases
and public statements. The managers of the units also participate
in a direct exchange of information with the environment. Many
of the contacts with the environment have become formalized into
committees where the department managers cooperate with the member
firms in discussing and examining different problem areas. The
Public Relations department has contact with the press and is the
channel for conveying information from Intro to the general public.
The organization uses this channel to refute criticism on concrete

issues, to convey results of the organization's activities and to conduct campaigns in various aspects of economic policy. The journal is also intended as a channel for contact between the organization and the outside world. It is supposed to promote good will in general terms towards the organization and its purposes. The journal also gathers information about the outside world through contacts with other journals, newspapers and news organs.

The executive directors were conscious of the fact that there are inconsistencies between values within the organization. They expressed the necessity in their work of balancing different interests so as not to permit these built-in tensions to disrupt the organization. Many of those interviewed in other units observed that there is uncertainty about the targets of the organization's activities. They also emphasized how important it is for the executive directors to serve in a planning and policy-making capacity.

Environment   Members
                         Authorities
                         The other side
                         Other organizations
                         Mass media and general public
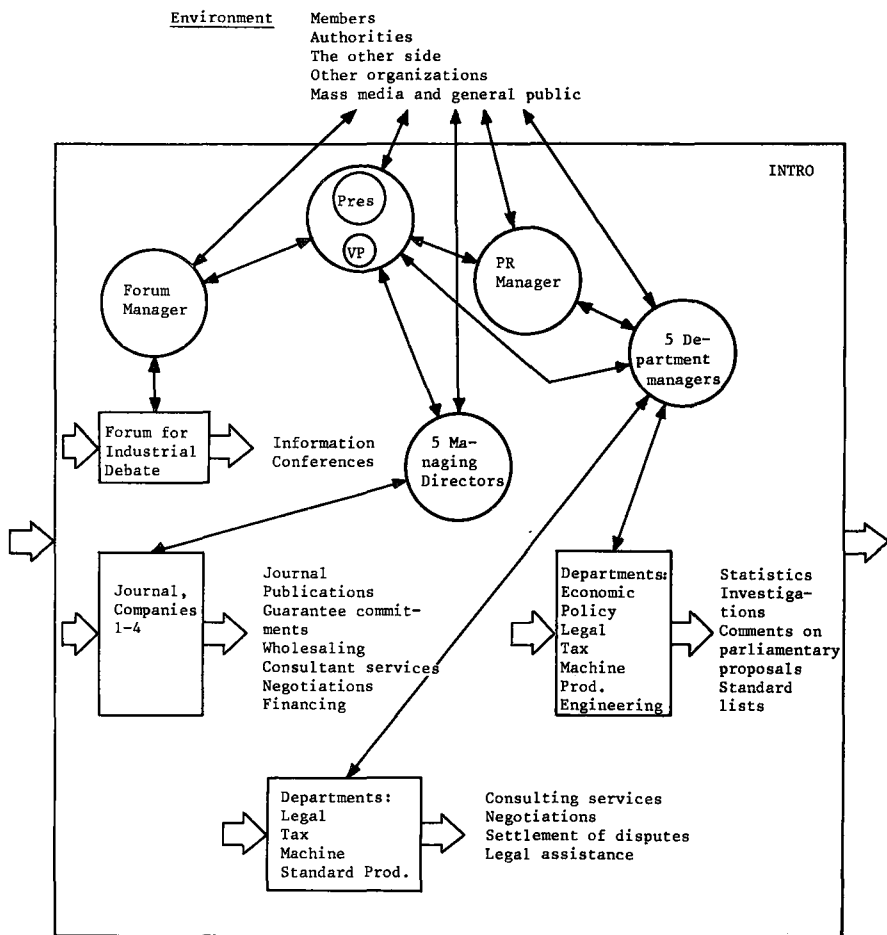
Figure 7:3. Intro´s Control Structure.

Key:

◯   Control unit   ⇨   Production flow between the organization and
                                         the environment

☐   Productive unit   ◀━▶   Information flow

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7.3   Intro's Environment

A review of the board minutes (Supplement, Section D) shows that
the board's most frequent counterparts have been the governme ',
members, the adversary, other organizations in the industry and
various agencies that establish standards and norms for the
industry. The latter two categories have recently begun to appear
more and more as counterparts in the work of the board. The most
tangible results of contacts with these environmental areas are
that standards, norms and a system of cooperation have been set
up within the industry. The environmental area of "the other
side" designates the various groups with which the members have
to cooperate in order to manufacture and sell their product. The
term "adversary" is used to designate groups in society that are
regarded as threatening the existence of the member firms. Board
proceedings have dealt with questions initiated by groups outside
Intro more often than those raised by the board or Intro's staff.
More recently, however, it appears that the organization itself
has begun to take more initiative. Table 7:4 is based on a review
of the history, data about the board and the questionnaire study.
It indicates what I regard as Intro's most important environmental
areas.

Environmental area	Type of Relation
Large member firms	Critical environmental area. Participant. Responsible for a large part of total membership fees, have dominating influence in Board of Directors. High frequency of contact with personnel (rank 1 of 14 environmental areas).
Small member firms	Participant. High frequency of contact (rank 2.5 of 14).
Government	Critical environmental area. Government actions affect competitive balance between member firms and their adversaries. Important counterpart in board proceedings. High frequency of contact (rank 2.5 of 14).
The other side	Participant. Collaborates in establishing a system of cooperation that can increase the industry´s effectiveness. Important counterpart in board work. High frequency of contact (rank 4 of 13).
The adversary	A large part of the resources of the organization is aimed at defending the members´ interests against the adversary.
Industrial organizations and other agencies establishing norms and standards for the industry	Participant. Contributes to the setting up of standards and means of cooperation that can facilitate the activities of the members. Important counterpart in board work.
Contro	Participant. Certain mutual areas of activity that require consultation. Relations have been strained at times.

Table 7:4.   Intro´s most Important Environmental Areas

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7.3.1   Relations to the Members

Intro is an association and the board is its decision-making
body. The board is appointed at a general meeting where each
member has the right to be present. Every member has anywhere
from 1 - 7 votes depending on the size of his firm. Most of the·
large private firms in the industry are members. Firms with
different lines of production are represented. The majority of
the members are in standard production. Most of these firms are
relatively small. The large firms that are engaged in all lines
of production account for a substantial part of the production
value represented by all Intro firms.

Thirteen of the 25 permanent board members represent large firms
with more than 1,000 employees. The majority of the board members
either own or have appreciable owner-interest in their firms.

One of the greatest problems of the organization is its limited
influence on the member firms. The following statements serve as
good illustrations:

> All but fifty of the large firms in the industry are members.
> We have certain membership requirements having to do with
> solvency and reliability. We base their acceptance on an
> analysis of the firm´s most recent annual report.

> We scrutinize the applications for membership because we
> have to develop an organization where the best members
> won´t break away and form a private club of their own. This
> would be catastrophic for the organization. Tendencies in
> this direction have actually been noticed. We are extremely
> careful to compose the board in a certain way. We also try
> to set up committees so that different types of firms will
> be represented.

> There is a complete lack of cohesion in the industry and
> the firms have not delegated any influence to Intro. They
> look at everything much too short-sightedly.

> We should just forget about the participants´ views and
> operate on a policy of our own. Certain decisions are bound
> to go against some of the members. Intro should be run more
> like a business firm.

> Blaming the controls is somewhat double-edged. An efficient
> and progressive businessman has now received a long-term
> contract with the authorities. Of course the smaller firms
> in the region think this is unfair.

These quotations illustrate the inconsistency of pursuing an
active policy without running the risk that important member
groups leave the organization. The interests of the different
member groups also have to be weighed and balanced against each
other.

When the interviewees talked to me about more efficient firms,
they often used terms which implied that their notions of
production planning and assembly-line production are derived from
highly mechanized industry. But a few of the employees believed
that the difficulties in the industry had to do with a structural
transformation, i.e. the small firm, run by its owner, shifts to
become an institutionalized organization with professional
management. It was argued that the personal profit motive is a
valuable asset as well as a liability when it comes to pursuing
an industrial policy.

Intro´s income, amounting to several million crowns annually,
comes mostly from membership fees. The fees are calculated in
proportion to the number of employees in the member firms. A
small share is made up of direct payments for consultation
services. The income is used primarily to pay the salaries of
the personnel at Intro proper and for rent. The units associated
with Intro are also given some economic support. In contrast to
the employers´ organizations, Intro has had to fight against
severe economic problems. The employers´ associations have

maintained a source of steady income through insurance but Intro lacks this kind of special business activity. Funds have been insufficient and liquid assets have remained small. Management has had limited freedom of action in relation to the members, who have been unwilling to accept an increase in their fees to the organization.

7.3.2   Relations to the Adversary

In a limited interpretation, the adversary means the cooperative, state and local government firms that compete with the private firms. But in the interviews and questionnaire study, a more broad interpretation has been implied that includes all other groups which restrict the freedom of action of firms in the industry (such as consultants and firms from competing industries). No matter how the concept of adversary is interpreted, it is remarkable how remote and blurred this adversary seems to most of the employees in the organization. The adversary is more like an obscure plot with social democrats, local government bosses and union leaders as the conspirators. These vague conceptions of the adversary can be due to the fact that in their daily work, the organization's personnel are in contact with representatives from non-private firms, local governments and the state. These representatives do not act as adversaries but as the other side in a negotiation about contracts or the like. There is a contradictory element in the personnel's perception of this environmental area: contacts with the other negotiating party are characterized as positive and free from distrust in all respects. In a few instances the employees even proposed one of the adversary's organizations as a model for their own activities.

7.3.3   Relations to Contro and Servo

The interviewees seldom mentioned relations to the employers'

organizations. Those who did so said that there is a clear-cut division of tasks between the trade and the employers´ associations. According to this conception, the employers´ organizations are concerned with the production factor of manpower while the trade association attends to the marketing side of the firms´ activities. The interviewees also take it for granted that there would be nothing to prevent the employers´ organizations from including adversary firms as members. Most of the interviewees regard this as unthinkable with respect to the trade associations. Some also said that the job of the employers´ side is to find itself in a clearly defined state of opposition to the social democratic trade-union movement at regular intervals. On the other hand, the trade association was regarded as being interested in maintaining good relations with the social democratic camp at all times since their representatives are the members´ foremost customers.

A review of the board minutes (Supplement, Section D) reveals that in recent years Contro has not appeared as the other party in relation to Intro as often as it used to, at least as far as board activities are concerned. Earlier, the main reason for more intensive contact had to do with separating the organizations´ areas of activity. These problems were primarily due to the fact that Contro handled the standard manufacturers´ marketing problems. The employers´ associations and Intro´s personnel come in contact with one another in order to deal with matters such as the evaluation of new machines that can be used in the industry, etc. The executive directors of the organizations consult one another when they have to comment on important parliamentary proposals.

7.4 Strategic Values in Intro

Five categories have been used to classify the statements that were made about Intro´s strategic values. The means-end scheme

(Figure 7:5) shows how these values are related to other values on lower levels in the organizations. The five categories are:

1. Defend members´ interests
2. Influence the industry´s environment
3. Establish and oversee standards and norms
4. Improve the members
5. Provide service to members

Four targets can be distinguished in Intro´s strategy. The first target is the "adversary", i.e. the non-private firms that threaten Intro´s members in various ways. The key idea is to defend the interests of the members against the "adversary". Two means are indicated. One has to do with the firms founded by Intro which can be used collectively by all members. The founders hope that these firms will be strong enough to obtain the same working conditions as the adversary´s firms. The other means consists of criticizing the adversary´s firms on ideological grounds, i.e. by declaring that their structure and values are such that they cannot effectively contribute to the economy of the country. According to this ideology, the private firms are assumed to work under free competition and play an honest game. The adversary, however, is regarded as tied up politically. It is so deeply emerged in the government power apparatus that free competition is jeopardized.

The second target is the "members". There are two key ideas for relations to the members. One involves directly supporting the members by providing them with different types of services. The other key idea is that the members should be improved, primarily by means of advice and information.

The third target consists of "parties in the industry" which
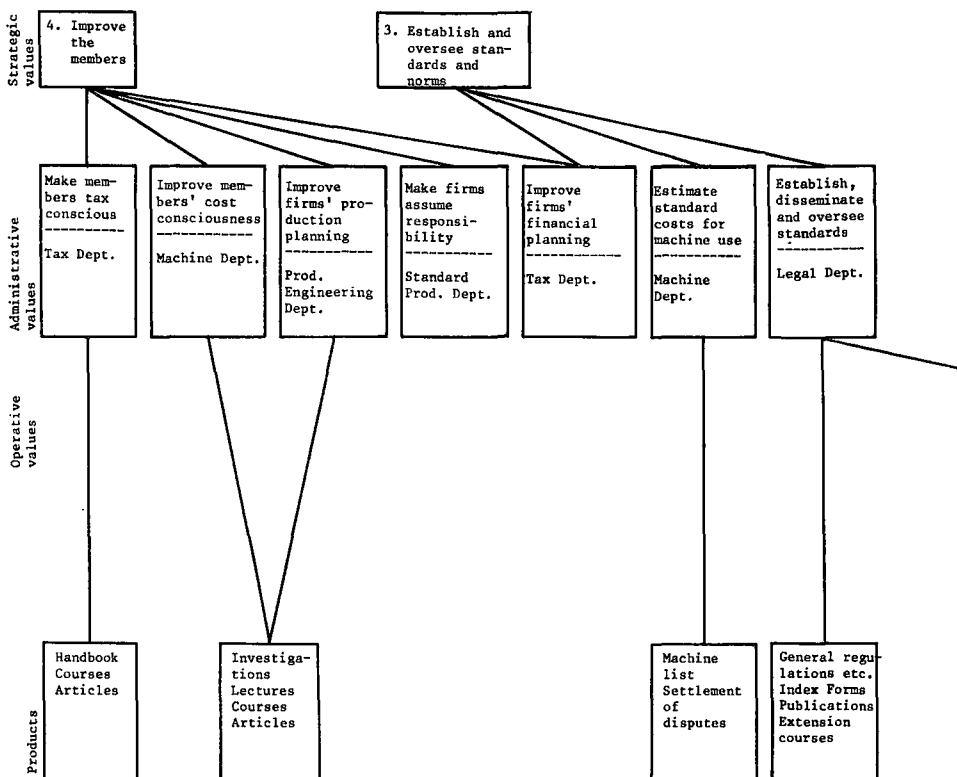
Figure 7:5 Means-end Scheme in Intro.

```
┌──────────┐                    ┌──────────┐              ┌──────────┐
│5. Provide│                    │1. Defend │              │2. Influence│
│  service │                    │  members'│              │  environment of│
│  to      │                    │  interests│             │  the industry│
│  members │                    └──────────┘              └──────────┘
└──────────┘
```

Defense against the adversary	Political debate	Public relations	Have contact with the government	Influence the government, local authorities and production conditions
----------	----------	----------	----------	------------------
Four companies	Forum for debate	Public Relations Dept. Journal	Economic Policy Dept.	Standard Production & Prod. Engineering Depts.

Be legal expert	Tax consulting Service in questions of finance, procurement of raw materials, production, machines	Be a business firm		Train qualified personnel	Business studies and statistics
---------	------------------------	--------		----------	---------------
Legal Dept.	Tax, Machines, Standard Prod.Depts,Four Companies	Whole-saling		Prod. Engineering Dept.	Economic Policy Dept.

Interpre-tations Legal and consulting services	Wholesaling Negotiations with local authorities Raw material procurement Financing service	Journal Information Public statements	Proposals Motions Influence government investigations and authorities Research Pronouncements on industrial policy

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include the various groups in the market that are interdependent through the exchange of goods and services. The key idea is that Intro should be active and inventive in formulating and introducing standards and rules to regulate conditions in the industry.

The fourth target is the "remainder of the industry's environment in other respects". This target is represented primarily by state and local political agencies and authorities and to some extent by the general public. The key idea is to influence the environment of the industry through contact with state and local authorities and the mass media.

Each one of the strategic values will be dealt with more fully in the next five sections (7.5 - 7.9). The discussion is based on the different types of data collected. Two important elements will also be exemplified: How are strategic values related to values on a lower level? How are these values incorporated in the concrete structure and how do they control the activities in different units of the organization?

Figure 7.6 illustrates the seven inconsistencies I have found between the values on the strategy level. In addition, there are a few inconsistencies among values that are not directly connected to the strategy level. The journal, for instance, is supposed to serve as an information channel between the organization and the environment. But it also has its own journalistic aims which are completely independent from the other values of the organization. In most units there was tension between ideology and the necessity of being businesslike. This inconsistency was most noticeable with respect to wholesaling. Several of the member firms deal in wholesaling. Since it also conducts activities in this area, Intro actually competes with its own members. This has created an ideological dilemma for wholesaling management. The management

has tried to solve this dilemma by claiming that the wholesale unit associated with Intro proper does not do business on an ideological basis but that it is strictly businesslike in its relations with customers.

	1. Defend members' interests	2. Influence the environment of the industry	3. Establish and oversee standards and norms	4. Improve the members
2. Influence the environment of the industry	Inconsistency because it is difficult to make claims of standing for objective judgement and at the same time be a contending party			
3. Establish and oversee standards and norms	Inconsistency because the targets "adversary" and "participants in the industry" overlap. Intro is both prosecutor and judge at the same time			
4. Improve the members	Inconsistency in explanations: a) adversaries unfair b) members less effective		Inconsistency because improving the firms makes standards and norms no longer applicable	
5. Provide service to members	Inconsistency between combat ideology and "strictly business" point of view		Inconsistency because service structure is based on knowledge about a certain system of standards and norms. Changes in this system can lead to difficulties for service structure	Inconsistency because an extensive service structure might not discover the members' need to improve themselves until it is too late.

Figure 7:6.   Inconsistencies between Strategic Values in Intro

7.5   Defend the Interests of the Members

One of the employees interviewed made the following observations:

> A criterion for the fact that Intro is needed is that the
> member firms' slice (market share) gets smaller from year
> to year.

Representatives of Intro see themselves - and the concept is also
prescribed in the by-laws of the organization - as advocates of
free enterprise. People in the organization think they can
observe how increasingly difficult it is for free enterprise,
i.e. the members of the organization, to hold their own in the
market. Two main ways of explaining this situation have been
suggested. One is that the industry's environment has developed
in an unfavorable direction, primarily because government
authorities have surrounded the activities of the industry with
different kinds of controls. The values related to this explana-
tion are dealt with under the next heading ("Influence the
environment of the industry"). The second explanation is directly
linked to the heading of this section and claims that the deteriora'
ing position of the members is due to the progress of the non-privat
i.e. cooperative, state and local government firms. Therefore,
as a representative of free enterprise, the organization has to
fight directly against these competitors. It also has to
influence the market indirectly by stressing the merits of its
own members and the mistakes of the other side.

> Now we have to look ahead if we're going to be able to
> offer a technologically advanced counterbalance to an
> extremely aware and highly skilled cooperative movement
> and social democracy.

The most important means of defending the members' interests has
been participation in establishing a number of firms (Companies
1 - 4 in Table 7:1). These companies are expected to be as adept
as the adversary in asserting the interests of the members with

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respect to authorities, suppliers and different customer categories.
Expectations inside Intro are that the joint performance of the
members, as represented by these companies, will induce the
various parties that the industry depends on to give the members
a chance to work under the same conditions as the adversary.
The four companies are also connected with other important
organizations representing business and industry. It is hoped
that they will win confidence by representing broad economic
interests.

Another means in the defense struggle is to attack state and
local government enterprise in the industry on ideological grounds.
It can be implied that the concepts of effectiveness adhered to
by this kind of enterprise are erroneous. These concepts entail
incorrect use of national resources and prevent competition on
equal terms. Ideas of this kind are made public mainly by the
Public Relations department and Forum for Debate. The work of
the Forum is chiefly oriented towards reaching political decision-
makers on the local level, i.e. municipal representatives and
employees. At the time when the interviews were made, the Forum
was in the process of trying to augment the influence of private
enterprise in local planning. The Forum was contemplating
establishing an organization for this purpose that would interest
local commercial and industrial representatives in economic
policy work and educate them in this field.

Some of the interviewees said that the adversary's progress is
partly due to the fact that certain private firms lack social
responsibility or that they have caused suppliers, customers and
other parties in the industry to incur economic losses. By
pointing to their broad social and economic responsibility, it
has been easier for the non-private companies to gain the
confidence of these parties. Several solutions to this problem

were suggested during the course of the interviews. One was that the organization should increase its public relations activities on behalf of the members in order to show the general public and government authorities that the industry is effective and that the firms do feel social responsibility. Another suggestion was to let membership in Intro be a kind of authorization, i.e. membership in Intro would be a guarantee that a firm is efficient, solvent and socially responsible. In this way, Intro´s members could also avoid being confused with other, sometimes less scrupulous, private firms. Another solution was based on the assumption that the member firms are ineffective in relation to the adversary. Therefore, the members have to improve their own technology, administration and marketing. One way of accomplishing this is to make a study of how the adversary operates. Demands that management should balance the interests of the various members have brought about a tendency to direct measures against the adversary or the environment of the industry instead of attempts to change the members themselves.

The fact that the member firms are under pressure is reflected in answers to the open-ended questions about the policy of the organization, where the most common class is "defend the interests of the members" (Supplement, Section E). In one of the pre-coded questions the respondents were asked to weigh the value "defend the interest" against "function as an intermediary in disputes" (Supplement, Section B, Figure B:6). There was some tendency among the members to recommend increased emphasis on defending interest. No such tendency was observed among the personnel.

7.6 Influence the Environment of the Industry

It is customary in Intro to explain many of the members´ difficulties by alleging that the government is trying to

"socialize" the industry. Socialization does not take place
through seizure of private firms by the state but through its
unfair treatment of the private firms. There is too great a
tendency for the government to place orders with state-owned
companies. Another factor contributing to the feeling of pressure
due to socialization is that through legislation, the government
has put restrictions on access to one of the industry´s most
vital raw materials. As a result, most of the production of this
strategic raw material is controlled by a limited number of
organizations which are often politically oriented. People in
Intro see a tendency for these raw material producers to favor non-
private firms.

In Intro the accepted means of counteracting perceived socializa-
tion tendencies is to persuade the state and local authorities
to put a purchasing system into effect that would provide all
producers with an opportunity to compete on equal terms. Price
and quality should be the deciding factors - not political
considerations or one producer´s success in gaining control of
scarce resources. Intro tries to present its viewpoints to the
government by maintaining good contacts with members of Parliament
and by being represented in certain government committees. Intro
also tries to keep contact channels open to government, local
and other decision-making authorities. The value of maintaining
contact with political authorities was stressed especially by
the economic policy, tax and standard production departments.
The economic policy and standard production departments produce
investigations and statistics as a link in this action. It is
considered important to build up the authorities´ confidence in
the organization:

> We´ve tried to be an industrial organization and to avoid
> adopting political positions. The weight of our arguments
> makes people listen to us.

> We try to carry out our intentions on the political level
> but we want to be careful not to politicize. We try to
> influence Parliament and the government and we are represented
> on state committees. All in all we don´t have any trouble
> discussing and keeping in touch with these circles.

Even if the organization tries to lessen the significance of
political ties with regard to orders from large buyers and the
distribution of important raw materials, the member firms are
still forced to work in an environment where political attitudes
and control of raw materials are important elements for the success
of the business. Some of the members have adapted to the environ-
ment by gaining control of the raw materials they need for produc-
tion and by making "political" agreements with large customers
that cause a malfunctioning of the free market mechanism
recommended by the organization. As a result, government
authorities do not have to take the organization´s demands for
an impartial distribution of raw materials completely seriously.
It is easy for the politicians and legislators to see for them-
selves that some members of the organization obtain control of
the raw materials in various ways. They also suspect that private
firms charge their customers unreasonable prices. The organiza-
tion cannot prohibit the producers from having influence on the
use of raw material resources without internal opposition and
considerable internal dissension.

This value conflict is partially resolved by claiming that the
tendencies to destroy free enterprise in the industry make it
legitimate for the members to gain and exercise control of scarce
raw material resources. The principal task of one of the companies
associated with Intro is to put sources of raw materials at the
members´ disposal. This is done by negotiating with holders of
raw materials and financing the purchase of these resources. Top
management and other top employees are also involved in discussions

with politicians who can affect decisions about raw material disposition.

Some office-holders within the organization, however, are apprehensive about the methods used to ensure production for the standard manufacturers. This uneasiness is based on the observation that the development of costs and technology in standard production is such that structural changes are un-avoidable. At present, the production structure of most of the standard manufacturers is very simple. These producers usually do not have design engineers of their own. They have even less recourse to specialized sales personnel and resources for product development. They are generally engaged in unit production according to drawings submitted by the customer. A few years ago certain buyers started ordering products manufactured in con-siderably longer series, i.e. entering into contracts stretching over much longer periods of time than were traditional in the industry. At the same time, the buyers began increasing their demands as to the product's design and function. This has led to the conclusion that the private manufacturer should acquire resources for producing longer series, marketing his product and carrying on research and development. This implies that Intro should influence the different parties of the industry. Important customers and local governments should be persuaded to do their buying on the basis of long-term agreements on long series and leave matters of production methods, product develop-ment and design to the private manufacturer. This might mean that every firm would develop products and production methods with more or less unique features. The customers would choose between different manufacturers on the basis of product design. In other words, the buyer would not decide on a manufacturer as he does today by selecting the one who would give him the lowest price for manufacturing a product according to his drawings.

Arguments of this type, however, are presented somewhat hesitantly. This is because it is still uncertain whether or not estimations of the future prospects basic to these ideas are correct. Latent conflicts of interest between different member groups are also an important factor. By working for values that would give large firms more opportunities to acquire their own development resources and have more advantages than small firms, the organization would come in conflict with the principle that it should protect the interests of all its members, even the small ones.

7.7   Establish and Oversee Standards and Norms

The many different parties that interact in the industry often have conflicting interests. The contracts often involve sizable sums. This might lead to interpretive disputes between customers and producers. The buyers usually call on independent engineering consultants. Since the buyers are not always competent enough to check the consultant´s work, conflict might arise between the consultant and the buyer. The consultant also represents the buyer in relation to the producer by participating directly in planning, inspecting and coordinating production. This might cause conflicts between the consultant and the manufacturer. The industry also makes extensive use of sub-contractors and leasing of important machines. Contracts with sub-contractors are another source of latent conflict. A substantial part of the industry´s products are sold to a few very large customers. This special market structure sometimes causes cutthroat competition to obtain a contract.

An important feature of Intro´s policy has been to forestall these conflicts that are destructive and demoralizing to the industry. By cooperating with organizations representing the

interests of the various parties, Intro has taken part in devising measures to alleviate these conflicts, i.e. by establishing general provisions for how the customer should specify his desires, how the buying should take place and how the contract should be formulated. The organization has also collaborated with government authorities and firms in order to arrive at joint standards and norms. The organization publishes a list of costs for the use of different machines which has a similar normative effect. The legal department is the main participant on Intro´s behalf in the work of setting up standards and norms. The tax, standard production and machine departments are also involved in this activity to a large extent.

The legal department carries out most of the job of seeing to it that the standards and norms agreed upon are adhered to. However, other office-holders of the organization also have means of obtaining information about divergent practices. The legal and, to a lesser extent, the machine departments have a workable system of solving conflicts. The parties accept the judgement of these units in their role as intermediary. On the other hand, all conflicts cannot be channeled into this more formalized system. They are solved in more informal negotiations or by reminders from the organization. Even the organization´s top management can be involved in activities of this kind. The following quotations illustrate the actions controlled by these values:

> I want to emphasize that our general goal is to bring about uniformity within the industry. Here´s an example of what I mean. There are consultants and authorities who feel that they can sidestep the principles agreed upon in terms of how buyers should express what they want when making inquiries for bids. The X-agency recently made an inquiry formulated in a way that was intended to mislead the manufacturers. We got in touch with the agency in order to effect a change. If no corrections are made, then

we'll compose a memorandum for those among our members who
might be interested in carrying out the manufacture of this
order. We'll also recommend what reservations they should
make in bidding and tell them how to proceed in general.

The unique thing about our situation is that we have to
take all these parties in the industry into consideration.
We can solve conflicts between the customers and producers
in the industry as long as they believe in us. In these
matters, the buyers usually confide in us.

We have to make sure the members observe the rules and
regulations in the way they are intended. We should
represent our members accurately and correctly in relation
to authorities and buyers.

The coding of the board minutes (Supplement, Section D) shows
that during the past few years the most common items of business
have had to do with norms and standards and a system of coopera-
tion. On the other hand, the issue of controlling the behavior
of the members has become less common in the board's activities.
The coding of the open-ended questions (Supplement, Section E)
reveals that the establishment of standards and norms is important
to both members and personnel. However, the controlling aspect
of this value was mentioned only by the member firms. The matter of
representing members in their confrontations with other parties
is also related to norms and standards and a system of coopera-
tion. The pre-coded questions (Supplement, Section B) show that
both members and personnel have a tendency to recommend moving in
the direction of the value "represent the members" in relation to
an increased emphasis on service. The members, in contrast to
the personnel, exhibit a slight tendency to recommend that their
interests be asserted more firmly in relation to the adversary.
They prefer this to the more passive function of being an inter-
mediary in disputes. Both members and personnel also tend to
recommend that the organization aim towards improving the firms
rather than establish standards and norms.

7.8   Improve the Members

Although Intro´s by-laws state that "well-reputed" firms should
be accepted as members, the personnel still feel the need for
improving the present member firms:

> The organization´s task is to investigate, predict and
> then inform the members so that they can restructure their
> activity. It is necessary to activate the members by
> writing and talking about their problems.

> We should not influence trends but we should make others
> see them.

Improvement efforts are expressed in many aspects of Intro´s
activity: there are articles in the journal; Intro carries out
investigations and issues publications; the employees give
lectures and take part in various types of teaching; there is an
annual top management conference. The most deliberate measures
have been taken with respect to improving the firms´ ability to
handle their tax problems. There are plans to extend this
activity to other economic aspects of the firms´ operations.
There are also those who advocate that the organization should
work much more actively to improve the firms.

> If we´re going to increase our firms´ share of the market,
> we also have to work towards structural rationalization.
> We shouldn´t be too concerned about the small firms´ access
> to raw materials. Instead we have to make them competitive
> by means of specialization. It´s naive to believe that we
> can act according to the same rules of the game as the
> adversary - by definition the government doesn´t play that
> way.

> We should help the best firms increase their share of the
> market.

> We should work towards a higher degree of automation.

> We have to reorganize the industry, including our own ranks;
> in other words we should work towards more rapid structural
> rationalization.

Among the concrete measures taken within the organization, the value "improve the firms" has had fewer consequences with respect to the work of the organization than the value "defend the interests of the members". The work of some of the units is controlled in varying degrees by this value. These units include the production engineering, tax and standard production departments.

In the past few years, board proceedings (see Supplement, Section D), have devoted more time to items concerning the improvement of the member firms such as education, research and development. The coding of the open-ended questions (Supplement, Section E) shows that answers having to do with the improvement of the member firms make up the personnel's most common response category. Answers to two of the pre-coded questions (Supplement, Section B, Figures B:7 and B:10) show that both members and personnel regard this value as the one that should govern the future work of the organization to a greater extent than it does at present.

7.9   Provide Service to the Members

The personnel usually refer to values 1-4 above as "industry matters". They agree that industry matters are the organization's most important field of activity. In spite of this unanimity, a large share of the resources of nearly all the units are con-sumed for direct service to the member firms. Service is pro-vided for most types of legal issues concerning agreements, for tax and financing matters and for questions concerning contacts with customers and authorities. The personnel indicated three motives as to why the organization should give consulting service. The first motive is that service activities are rational from a division of labor point of view:

    We should do things that can be executed centrally in the

organization so that they don´t have to be performed by
every member individually.

Intro should have experts that the firms don´t have.

The second motive is that the personnel would like to see service
activities as a complement to the association´s "industrial
policy" goal. The personnel come in contact with the members and
other parties in the industry via service activities. This gives
them the practical experience they need as a basis for pursuing
industrial policy. It is also felt that consulting activities
can be used to educate employees who will subsequently deal with
industry matters.

The third motive is that consulting activities are a means of
increasing Intro´s importance in the eyes of the members. This
is deemed significant mainly because many within the organization
think they have insufficient influence on the members:

> How positive the members are can be used as a general
> criterion of success. Many members use and appreciate the
> service activities we have established. This has become
> a real success and a direct indication of the organization´s
> usefulness - especially when you have to explain your raison
> d´être to the members.

The number of items in the board proceedings having to do with
service activities has increased (cf. Supplement, Section D).
These matters are also mentioned relatively often by both members
and personnel in the open-ended questions (cf. Supplement,
Section E). In the pre-coded questions, the members as well as
the personnel have shown that they would like to increase service
activities when only the extent of this activity is discussed.
However, when they have to choose between service activities on
the one hand and public relations activities and efforts to
improve the firms on the other, then these two latter values are
preferred (cf. Supplement, Section B).

CHAPTER 8.   CONTRO

8.1   The History of Contro

At the close of the nineteenth century, employers´ associations
were founded in order to counterbalance the trade-union movements.
One of these employers´ associations was the forerunner of Contro.
To begin with, Contro comprised all types of firms in the industry
and even included various sub-contractors. Contro´s field of
activity was not confined to the labor market; it was also
supposed to protect the firms´ business interests. Despite this
wide definition of its field of activity, the organization did
not have an especially large following. The conflicts during
1908-1909 revealed Contro´s vulnerability. Since agreements with
the workers were made only on a local basis, it was difficult to
establish any kind of coordination.

During the years following the major conflict, Contro was beset
by both external and internal difficulties. A local organization
withdrew its membership in Contro and the manufacturers in heavy
production insisted on forming their own association within the
framework of the Employers´ Confederation. The syndicalists´
wildcat strikes and other "sabotage" against the employers were
constant sources of worry. For many years the activities of the
organization were aimed at disarming the syndicalists. Since it
was evident that Contro was too lax an organization to hold its
own against the workers, its field of activity was eventually
restricted to matters directly involving the employers and its
control over the members increased. Shortly thereafter, Contro -
supported by funds from the Employers´ Confederation - was drawn
into a major conflict that ceased only after direct government
intervention. Contro´s principal gain was the acknowledgement of
nation-wide agreements. This conflict brought about such a severe

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economic crisis within Contro that it was forced to curtail its activities.

During the twenties, the dissident manufacturers in heavy production founded their own association within the Employers´ Confederation by the name of Servo. Negotiations between the two organizations as to how they could collaborate were ineffectual. Servo wanted the big companies to have considerable influence while Contro wanted the small companies to be more influential. The labor side was able to take advantage of this dissension. As a result the two organizations, assisted by the Employers´ Confederation, agreed on an organizational principle according to which all standard and all mixed production would come under Contro´s jurisdiction.

At the beginning of the thirties, Contro was once again involved in a major conflict with the workers. The government took an active part in this conflict also. Only after the Employers´ Confederation threatened to declare a nationwide lock-out did the workers capitulate. The most significant result, with regard to Contro´s area of jurisdiction, was that the terms of the agreement arrived at had to be adhered to by both workers and employers throughout the nation. The individual firm was deprived of its right to make agreements with labor about compensation. If a certain job was not specified in the central agreement, then it had to be performed on an hourly basis or according to a settlement between the local employers´ association and the local labor union. Labor´s efforts to extort private firms were detrimental to the industry as a whole. The purpose of assigning the organizations this heavily centralized control in setting wage rates was to stifle these attempts. In another conflict several years later, labor proposed an agreement that would have completely eliminated the principles of what had been decided upon during the previous

conflict. The employers resorted to a lockout. The Confederation of Trade Unions exerted heavy pressure on the labor unions not to continue advocating this policy because it would in all probability lead to government control of the labor market.

At the close of the thirties, non-manual workers were also included in Contro's jurisdiction area. During World War II the Employers' Confederation and the Confederation of Trade Unions came to an agreement on index-tied wages. These cost of living index clauses dominated collective bargaining during the war years. Around 1940 it was decided that Contro would supervise the administration of certain insurance fees on behalf of its members. This decision had important implications for the subsequent financing of activities. Insurance operations gave the organization a very large income from interest on capital and, for a while, even made it possible to dispense with the usual membership fees.

After the war when the government appeared to show signs of wanting to substantially reduce the private firms' opportunities in the standard production area, a special unit was created within Contro to take care of the economic interests of these producers. The formation of this unit meant that Contro also began to deal with industry matters that had previously belonged to Intro's field of activity. Tasks related to the standard manufacturers' problems were transferred to Intro at the beginning of the 1950's. At the same time there were some groups in Contro that favored a union between Intro and Contro. Other organizational issues were discussed extensively during this period.

There were also misgivings about Servo's system, i.e. that it allowed labor too many advantages. As a result, Contro began to set up its own organization to deal with matters concerning heavy production. An enlargement of Contro's central office was also

discussed. The board was opposed to this and proposed that the
local organizations be reinforced instead. At the beginning of
the sixties the central office was enlarged anyway. The
organization began to investigate and act in a number of areas
outside its more limited jurisdiction. Contro became more involved
in vocational training. It also began informal negotiations with
labor about a wage system better geared to the industry.

Cooperation between the employees of Servo and Contro seems to
have increased during 1960-65. This was partly due to the fact
that important positions in Servo were filled by former Contro
employees. The employees proposed a policy for the actions of
the two organizations that was accepted by the members of the
board. However, another proposal to consolidate Servo and Contro
again met with negative reactions from some of the members. During
the same period, time and motion studies began to be applied as a
basis for setting wage rates. Several alternative ways of setting
wage rates were investigated. A large number of courses for the
firms were started by Contro. About this time Contro also began
to work with Servo to redefine the organizations' fields of
activity. According to this reformulation, the organizations
should concern themselves with personnel service rather than
collective bargaining.

8.2   The Concrete Structure of Contro

The structure of Contro can be described using four distinctions,
i.e. the unit in which the job is located, hierarchical level,
type of function and geographical location. The different units
in Contro are shown in Table 8:1. The most important functions
executed by these units are negotiations and collective bargaining,
the formulation of agreement texts, other legal matters having to
do with agreements and various types of contact with the environment.

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Unit	Number	Total
"Line"		
Executive President	1	
District representatives	19	20
"Staff"		
Consultants (highly experienced negotiators associated with the organization through special contracts)	2	
Insurance Office	1	
Accounting Department	1	
Engineering Department with the following sub-units	3	
Time and motion studies	7	
Registration center	5	
ADP Group	2	
Legal Department	4	
Statistics Department	4	
Manpower Department	8	
Public Relations Department	1	38
Number of employees, excluding office workers and time and motion study personnel	58	
Office workers and time and motion study personnel	67	125
Local associations	approx. 500	

Table 8:1.   Contro´s Different Units and their Number of Employees.

Table 8:1 shows that the Executive President and the representatives have been classified as the "line". The representatives work in four districts, three of which are separated geographically from the central office. The departments classified as "staff" are all located in the central office.

	Line hierarchy		Staff hierarchy		Total
Level	Designation	Number	Designation	Number	
1	Executive President	1			1
2			Vice President, Consultant	6	6
3	District representa-tive	4	Second Vice President	1	5
4	Representative	15	Assistant to Vice President, Manager of sub-unit	8	23
5			Employees with specialized jobs (excluding time and motion study personnel)	23	23
6			Time and motion study personnel	30	30
7	Office workers				37
Total		20		68	125

Table 8:2. Distribution of Personnel on Different Hierarchical Levels in Contro

Line and staff also represent two distinct hierarchies. Status and influence in the two hierarchies are not directly comparable. The line hierarchy is made up of the Executive President, the district representatives and other representatives. The staff hierarchy includes several levels and comprises Vice Presidents and other employees with varying status (see Table 8:2).

There is a conspicuous number of engineers in the educational structure of the organization. Engineers are found mainly among the representatives and in the time and motion study department. The central office has a striking number of university graduates. Many of Contro's personnel are recruited from the local associations. Lately, engineering representatives have been recruited from other industrial firms. None of the top employees, with the exception of the representatives' circle, come from firms in the industry, although three of them do come from other industrial companies. Those who leave Contro generally go to firms in the industry (cf. Supplement, Section F).

8.2.1   Control Structure

Figure 8:3 shows that Contro has a more complex administrative structure than Intro and Servo. The various units can be regarded as belonging to three different functional types. Most of the employees work in the negotiating organization. This apparatus consists primarily of the representatives who have continuous negotiations with the other parties. The engineering department also takes part in negotiations by providing the representatives with supporting data. The legal department is another functional type. It formulates the texts of agreements and works on other related legal problems. Three of the employees in the legal department are also responsible for general coordination and service in Contro. The "engineers" consider them "literate", implying that they should assist in drafting written material sent out by the organization. The third functional type includes the manpower, statistics and public relation units which are all involved in contact with and influence on the environment.

The negotiating apparatus is composed of four regional districts. Each district is led by a district representative who is at the head of a number of representatives. There are also several local associations in each district. If an employer cannot agree with his employees on the right piece rate at the work site, then local negotiations take place between Contro's local association and the trade union representative. Disputes that cannot be solved locally are handed over to Contro's district organization and the labor organization. If the parties do not succeed in settling their dispute, they can go to special central conciliation boards. Any disputes still remaining are settled by arbitration. The complexity of the piece-rate system causes many disputes and the numerous stages in the negotiating apparatus are designed to prevent too many of them from requiring arbitration. The negotiating

apparatus is also a means of checking the local associations'
application of piece-rate regulations. This control is also
supported by the registration center in the engineering department
which publishes accounts of interesting dispute settlements. Owing
to his regional location, the district representative has acquired
considerable freedom of action in relation to the central office.
In order to coordinate regional and central activities, the district
representatives have been made members of permenent committees
headed by the manager of the engineering department. Representatives
of the central office and of the members are also included in these
committees. Their main purpose is to discuss the policy of the
organization with respect to negotiating issues.

Wage-rate setting in the firms is based on a piece-rate list
compiled centrally. Time and motion studies are carried out by
the engineering department in order to arrive at equitable prices.
Negotiations about changes in (or new) piece rates can then take
place on the basis of data from time and motion studies. During
the past few years, Contro has tried to help certain firms obtain
the right to set piece rates based on the individual firm's
production conditions and not on prices specified in the piece-
rate list. Engineering representatives who assist the firms in
setting this type of piece rate are located in the various districts.
Unlike the traditional representatives, these production engineering
representatives are experienced in time and motion studies and in
highly industrialized production technology.

Briefly then, Contro's control structure is characterized by the
production flow of negotiations via the vast negotiating apparatus,
by administrative units that are supposed to change the negotiating
apparatus and by many staff units that support the negotiating
apparatus and carry out various kinds of investigations. All
this implies that one of the top management's most important
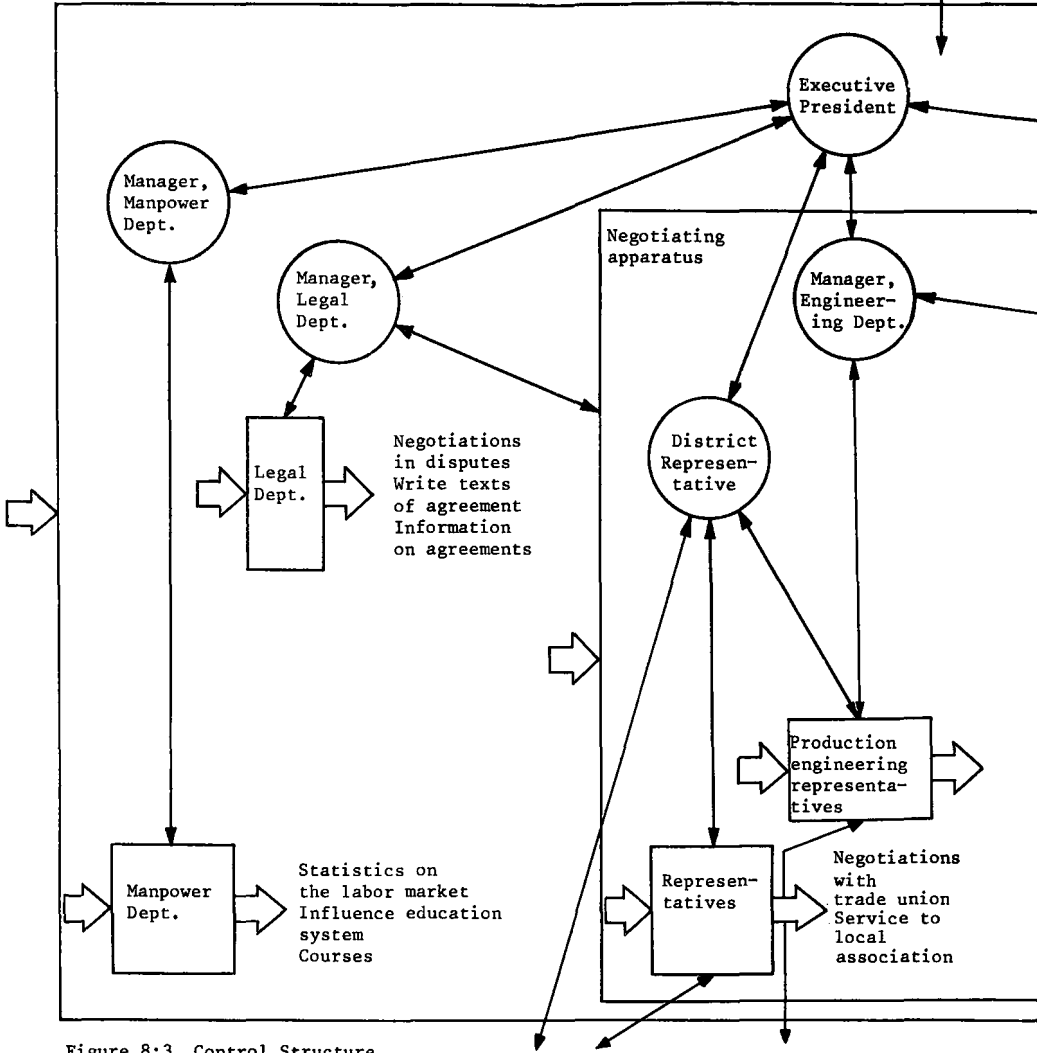
Figure 8:3 Control Structure in Contro
Key:

○ Control unit

▢ Production unit

Local Association Firm

⇨ Indicates a production flow between organization and the anvironment

⟷ Indicates an information flow

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Engineering Dept.

Registra-
tion
Center

Head of-
time and
motion
studies

ADP group

Courses
Information
Dispute settle-
ments
ADP systems

Manager,
Statistics
Dept.

Time and
motion study
group

Bases for
negotiations

New piece-rate
terms
Piece rates for
new materials

Cooperation with
time and motion
study engineers in
the firms

Statistics
Dept.

Statistical
bases for
negotiations
Investigations

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tasks is to initiate and coordinate investigations and projects of a development nature.

8.3   The Environment of Contro

The history reveals that labor has been one of Contro's most important environmental areas. According to the review of the board proceedings (Supplement, Section D), the other side is the board's most common counterpart. The same source shows that the government, the members and the Employers˜ Confederation are other important environmental areas. The local associations are also important counterparts in Contro's work.

Table 8:4 shows what I found to be Contro's most important environmental areas, based on a review of the history, board proceedings (Supplement, Section D), questions about various contacts (Supplement, Section C) and interviews.

Environmental Area	Type of Relation
Labor counterpart	Critical environmental area. Participant. Contro and the other side belong to a highly institutionalized system of cooperation. Most important counterpart in board proceedings. High frequency of contact with most office units (rank 5 of 14 environmental areas).
Member firms	Critical environmental area. Participant. The organization is dependent on large affiliation in order to control wages in the industry. Important counterpart in board proceedings. High frequency of contact (rank 3.5 of 14).
Local associations	Participant. History exhibits several instances of differences in opinion between Contro and the local associations. They are a stabilizing and preserving factor with respect to changes in the wage system. High frequency of contact (rank 2 of 14).
The government	The government is a potential threat to the right of the parties to agree between themselves. It exerts a good deal of influence on the organization's activities. Also influences the fields of activity of the member firms through regulations and legislation. Important counterpart in board proceedings.
The Employers˜ Confederation	A resourceful and powerful parent body in relation to its members. Important counterpart in board proceedings. High frequency of contact (rank 7 of 14).
Intro	Participant. Partially overlapping fields of activity leading to cooperation and competition. High frequency of contact (rank 6 of 14).
Servo	Participant. Coordination with Servo has been a recurring policy issue. Established channels for exchanging service. Very high frequency of contact between certain units (rank 1 of 14).

Table 8:4.   Contro's Most Important Environmental Areas

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Approximately 80 % of Contro´s member firms have less than
50 employees. Even though small firms predominate, the firms
having more than 400 employees account for more then half of
the members´ total number of employees. Many of the members in
the smallest size group are hardly firms in a literal sense. This
group includes persons who are only temporarily active in industry
or firms that have recently disbanded. Many of the small member
firms are engaged in specialized activities that are only slightly
similar to those of the other members. There are no exact
statistics on the production patterns of the firms. Standard
manufacturers appear to predominate among the small firms and
mixed production among the large ones. Some of the large firms
are actually general producers.

The members are affiliated with a number of largely independent
local associations. The members´ influence in the meetings of
local associations and other representative bodies is proportional
to their size.

In turn, the local associations are combined into four districts.
The personnel at the district offices - unlike those at the local
offices - are employed by Contro and financed via Contro´s budget.
The local associations appoint delegates to district meetings,
which in turn elect the board of the organization. This means
that the board is made up of representatives from different regions.
The largest group of board members is drawn from small firms. The
board members are responsible not to the districts which appointed
them but to an annual general meeting. All the members have the
right to be present at this meeting but only the representatives
appointed by the local associations may vote. The number of votes
is proportional to the size of the local association. The purpose

of Contro´s complex representative structure is to afford the
local associations a good measure of autonomy, to guarantee
the influence of different regions and to ensure that the influence
of the large firms is more or less proportional to their size.

Just like its labor counterpart, Contro is a highly consolidated
organization with large capital resources including appreciable
liquid assets. Income amounts to about twenty million crowns
annually. A large part of this comes from insurance services.
These services permit Contro to administer large funds on behalf
of its members. Interest on investments has made it possible to
reserve a significant surplus every year. This means that
Contro´s top management has had considerable freedom of action in
relation to its members. The economy of the local associations is
entirely separate from Contro´s. Local income is derived from a
control fee paid by the member firms and is proportional to the
amount of wages controlled.

Perusal of the board minutes (Supplement, Section D) gives
the impression that relations between members and personnel
underwent changes between 1951-1955 and 1961-1965. During the
latter period, the personnel presented many investigations and
proposals to the board. This meant that the meetings were some-
times characterized by relatively complex technical discussions.
A series of new terms and expressions have appeared to describe
production technology as well as negotiating and employer
activities.

Balancing small and large firms against each other is a touchy
question for Contro. Small firms run the risk of being treated
unfairly by new wage-rate systems. In their daily work, the
representatives also have to worry about the fact that the firms
are not regarded as "loyal". Loyalty in this context signifies,

for example, that a large firm located in the same area as
a smaller firm cannot simply pay wages above the level
sanctioned by Contro in that locality in order to attract
personnel from the smaller company. The loyalty issue has some-
times forced the board to impose fines on firms that break the
rules of the organization.

8.3.2   Relations to the Other Side

A great deal of the organization's work is aimed at negotiating
with the other side. The representatives are continuously in
contact with trade union representatives in order to negotiate
disputes. In the interviews, the representatives did not express
very many general evaluations of the other side. Most of them
felt that proceedings are prolonged unnecessarily because the
other side does not have a sufficient number of representatives.
Employees in the central office had more comments to make on the
subject of relations to the other side.

Industrial safety, education and new wage-rate systems are three
areas which have involved difficulties in relation to the labor
side. Structural changes have occurred in each of these areas.
Control of working conditions has been transferred from the workers
at the job site to other employees in the firm. New materials,
methods and machines, for example, mean that the prerequisites for
industrial safety have to be determined at higher levels. Pre-
planned production processes and increased automation require
workers with an educational background different from that of
traditional craftsmen. The new wage-rate system, where piece
rates are geared to production, necessitates the assistance of
planning experts. Personnel at the central office note that the
representatives of the other side feel threatened by these
developments. This makes it more difficult for the two parties
to arrive at solutions by compromise. On the basis of these

comments, I asked the interviewees what they thought about future
relationships with the other side. Their answers reflected a great
deal of uncertainty. Part of this uncertainty concerns if and when
the ideas of a younger generation penetrate the organization of
the other side. It is also uncertain how much influence the
Confederation of Trade Unions will have on its various member
associations in the future.

8.3.3   Relations to Servo

There used to be a great deal of tension between the employees of
Servo and Contro. There were differences of opinion as to which
organization´s set of agreements should be used in each specific
case. Now that a generation shift has occurred and Servo has
recruited personnel from Contro these conflicts seem to have
disappeared. On the other hand, representatives of Contro´s
negotiating organization are somewhat suspicious of their counter-
part organization in Servo. Firms under Contro´s jurisdiction
sometimes try to come under Servo instead so that they can pay
higher wages. Servo´s and Contro´s representatives cooperate in
averting these efforts. The majority of the personnel are positive
towards a future consolidation of the two offices since "the firms
are only confused anyway when it comes to distinguishing between
the two organizations". Others have remarked that there are
tactical advantages in having two organizations. Servo deals to
some extent with other parties that are regarded as being more
conciliatory than Contro´s counterpart on the other side. This
means that it is easier to try out different wage revisions in
Servo´s area.

8.3.4   Relations to Intro

The contacts between Intro and Contro are limited to certain
employees. Those among Contro´s personnel who are acquainted

with Intro said that there have been controversies between the
two on some issues. These disagreements appear to stem from the
fact that Intro's board feels it is the industry's rightful
representative. The board seems to think that Contro has
interfered in business policy matters.

Intro is also said to be a political body, while Contro is
politically neutral. People at Contro are uneasy about the
criticism directed towards the industry. They wonder if it might
not be possible to pursue business policy more effectively. Several
interviewees mentioned - with respect - the endeavors of Intro's
legal department to establish norms and standards in the industry.

8.4   Strategic Values in Contro

Seven categories are used to classify the statements about Contro's
strategic values. The means-end scheme (Figure 8:5) shows how
these values are related to other values on a lower level in the
organization. The seven categories are:

1.   Defend the interests of the members
2.   Negotiate, produce and oversee agreements
3.   Formulate piece-rate and wage-rate systems
4.   Improve the member firms
5.   Provide service to member firms
6.   Influence the supply and improve the quality of manpower
7.   Influence the environment of member firms in other respects

Three targets can be distinguished among Contro's strategic
values: the other side, the members and the environment of the
industry. "Defend the interests of the members" is one of the two
key ideas for reaching the other party. There is a historic back-
ground to this value. When the organization was started, it was
threatened by a strong external enemy, i.e. the trade union

Strategic values

| 1. Defend the members' interests | 5. Provide service to member firms | 6. Influence supply and improve quality of manpower | 7. Influence environment of member firms in other respects |

Administrative values

Support negotiating activities

Statistics Dept.

Defend against threats

Local associations

Carry out control activities

Local associations

Reduce strain

Local associations

Be legal experts

Legal Dept.

Operative values

Give service to other depts.

Legal Dept.

Produce and disseminate agreements

Legal Dept.

Support the member firms

Local associations

Influence firms' environment and education

Engineering Labor market Depts.

Products

Agreements with the other side Information to members on agreements Wage statistics

Piece rates

Job and course plans Teaching material PR among youth Increased educational capacity Articles Participation in investigations

Take care of agreement disputes

Figure 8:5   Means-end Scheme in Contro

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┌─────────────────┐  ┌─────────────────┐           ┌─────────────────┐
│ 2. Negotiate,   │  │ 3. Formulate    │           │ 4. Improve      │
│    produce and  │  │    piece-rate   │           │    the member   │
│    oversee      │  │    and wage-rate│           │    firms         │
│    agreements   │  │    systems      │           │                 │
└─────────────────┘  └─────────────────┘           └─────────────────┘
```

Control negotia-ting apparatus
─────────────────
Engineering Dept.
Registration
Center

Change the system of agreements
─────────────
Engineering
Dept.

Improve the firms
Influence vocational
training Make the firms
cost conscious
─────────────────
Engineering, Labor, Mar-
ket and Statistics Dept.

Run the negotiating apparatus-
─────────────
Representa-
tives

Produce bases for negotiating
─────────
Time and
motion
study
group

Support local associations
─────────────
Representa-
tives

Contact with the members

─────────────
Represen-
tatives

Work towards piece rates adjusted to production
───────────────────
Production engin-
eering and other
representatives

Piece-rate
lists

Dispute
settlements

New ways of
setting
wages in the
firms

Courses   Method
sheets
Statistics
Investigations
Articles
Education

movement. The large number of firms, often with an emphasis on craftsmanship, in the industry meant that the workers had the upper hand in relation to the disparate firms. Another key idea for reaching this target is "negotiate, produce and oversee agreements". Contro has grown into a strong employers' organization that exerts control over the negotiating activities of individual firms to keep them from making private deals with the other side. Contro has been instrumental in reducing the large number of conflicts in the industry so that the firms have been able to work with few disturbances.

There are three key ideas for reaching the second target, the members. One key idea is that the firms need to be improved. The members would be able to increase their competitive ability and to administrate their own wages. Another key idea is that Contro should work for better piece-rate and wage-rate systems. This idea is based on the fact that the present wage system in the industry is awkward and obstructs new and more efficient working methods. The third key idea is "provide service to the member firms", especially in the area of personnel administration.

The key ideas for reaching the third target, the environment of the industry, are to influence vocational training in society and to influence government regulations and legislation whenever possible.

Figure 8:5 shows how the strategic values are connected to values on lower levels, in which units different values are found and which units are primarily responsible for various products. Each of the strategic values will be treated in more detail in the following sections (8.5 - 8.11).

The three inconsistencies found between the strategic values in Contro are illustrated in Figure 8:6.

	1. Defend the members' interests					
2. Negotiate produce and oversee agreements		2. Negotiate, produce and oversee agreements				
3. Formulate piece-rate and wage-rate systems		Inconsistency between maintaining and changing the existing system of norms and standards	3. Formulate piece-rate and wage-rate systems			
4. Improve the member firms	Inconsistency in bases for explanation a) Malevolent adversary b) Insufficient competence in firms	Inconsistency because negotiating activities make it less imperative that the firms improve themselves		4. Improve the member firms		
5. Provide service to member					5. Provide service to member firms	
6. Influence supply and improve quality of manpower						6. Influence supply and improve quality of manpower
7. Influence environment of member firms in other respects						

Figure 8:6   Inconsistencies between Strategic Values in Contro.

8.5   Defend the Interests of the Members

This value prescribes the organization's task in terms of defending
the members against attacks from an adversary. It is historically
rooted in the out-and-out struggles of the twenties and thirties.
The interviewees who stated this value emphasized that the
organization has a mandate from the members which it must be
careful not to sidestep. According to the most conservative
interpretation, this mandate refers to defending the members
against attacks from the trade unions. A more modernistic inter-
pretation would be to defend against attacks from forces that
threaten free enterprise.

The coding of the open-ended questions (Supplement, Section E)
shows that "defend the members' interests" is the second most
common class for answers from the member firms. On the other hand,
representatives of the personnel hardly mentioned it at all. In
a few instances the members think that Contro's negotiating policy
is much too lax. However, the adversary envisioned is often not
the labor side, but cooperative and public activities instead.

One of the pre-coded questions also indicates a difference between
personnel and firms (cf. Figure B:6 in the Supplement, Section B).
According to this answer, both personnel and members feel that the
organization upholds interests in relation to the other side more
than it acts as an intermediary in disputes. The members tend to
be somewhat in favor of reinforcing the activity that asserts
interests. On the other hand, the personnel exhibit a slight
tendency to recommend that the organization disengage itself from
this position.

In interviews with representatives of different units, the value
"defend the members' interests" has generally been stated only

with reference to the organization as a whole. To some extent, this value controls the work in the statistics department. Between negotiating periods, the statistics department devotes its time to large-scale investigations. These are intended to have a kind of psychological effect on the other side and to bolster the employers' arguments to the general public. This information is also aimed at the other side perceived in a broader sense as the forces wanting to regulate and socialize the industry. The value of defending the members' interests is also important in the recurring negotiations for new collective agreements with the other side. The legal and statistics departments are important to the preparation and presentation of the results of these negotiations.

8.6   Negotiate, Produce and Oversee Agreements

The interviewees stated that, in general, Contro is a party that concludes agreements and that it should represent the members in negotiations with the other side. At the same time, many declared that negotiations with the other side are a necessity for the time being, but that the firms themselves should eventually take over a large part of this function. In the pre-coded questions, both firms and personnel tend to recommend more service to the firms and less negotiating in the future (cf. Supplement, Section B, Figure B:5). In the open-ended questions (Supplement, Section E) this value most closely corresponds to the class "represent the members in relation to the other side". The significance of this value is revealed by the fact that it is very often mentioned by both members and personnel - the third most frequent class among the open-ended questions. The board proceedings (see Supplement, Section D), have dealt with items of this type more often than any others during the past few years.

The "grim experiences during the thirties" are still a distinct

reality at Contro. Therefore, the employees believe that the organization should retain its influence on wage-rate setting. The binding nature of piece-rate lists is closely related to the principal of controlling the setting of wage rates. Many people in the central office doubt that small firms will be able to acquire sufficient resources to control their own wages.

In the open-ended questions (Supplement, Section E), however, the "control"-value was seldom mentioned by the personnel but relatively often by the firms. The firms emphasize the need for increased solidarity and fair play among the members. In several instances the board has discussed and imposed sanctions against disloyal members.

While discussing the organization's negotiating activities the interviewees often stressed the importance of good relations with the other side - even in difficult situations:

> Parting without antagonism after a negotiation is the conflict-solver's greatest satisfaction.

In the engineering department there is a value about controlling the negotiating apparatus. However, this control is aimed at a change more than at handling continuous negotiating activities. The predominant value of the representatives with reference to running the negotiating apparatus is to "bring about fair and impartial solutions based on the piece-rate lists". In general, efforts to effect piece rates based on time and motion study data are also welcomed. The representatives have no great desire to dispense with the piece-rate lists. Controlling the representatives from the central office sometimes presents difficulties:

> The representative must come up through the ranks. Otherwise, the local association will regard him as an amateur. This also means that the district representatives are quite old when they take over.

The district representatives are used to being little kings in their district. They've become accustomed to giving the firms directions, but their education is thirty years behind the times.

The district representative's involvement with the central office has made him feel that his role has changed:

The tasks of the district representative are changing. My work used to consist mostly of contacts with heads of the local associations. I knew all the piece-rate lists. Today, the district representative has no opportunity to make such extensive contacts. Nor can he, except in special instances, take part in negotiations.

They usually ask me: "When are you actually in your district?" With all the work to be done at the central office, there's not much time left over for the district.

In working for the "negotiating" value, the representatives are supposed to support the local associations. Most of the contacts between district and local associations involve the representatives, who answer questions about piece rates. This relationship is often quite formal:

The heads of the local offices have to adhere to strict central agreements. We can give them exemptions. They call me and I say yes or no.

These contacts can also be less formal and consist of a more general discussion of the problems at the local association. Many representatives, however, complain about the structure of these contacts:

The way disputes are solved at the local level should be improved. They shouldn't be allowed to argue about petty things. The local party should investigate everything thoroughly enough for us to be able to decide by phone. Too much time is devoted to service to the employees of the local association - they call without having made a careful investigation.

The representatives' negotiating activites also include agreement disputes that have to do with benefits other than wages, such as

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employment conditions. Disputes of this kind follow the same
pattern of negotiation as the piece-rate disputes, but the results
are centrally prejudicial and the final authority is the Labor
Court. The legal department directs the work concerning disputes
of this kind. There is a value in this context which says that
a legal agreement is complex and therefore handled best by
professionals with special authority in the field. In accordance
with this value, the representatives usually consult the legal
department for instructions.

8.7   Formulate Piece-rate and Wage-rate Systems

The wage-rate system for workers in Contro´s jurisdiction area is
based on detailed piece-rate lists. Every possible operation has
been assigned a certain piece-price through negotiations. The
output produced by workers at a specific firm is regularly
controlled by representatives of Contro´s local association and
the labor association. If a job has no piece rate, representa-
tives of the employer and labor sides should agree in advance on
a special price. Since there are several thousand different
operations to keep track of, the system is extremely complicated.
It is also difficult to alter the system because changes in piece-
rate lists require complex centralized negotiations. The private
employer is formally deprived of every prospect of exerting
influence on the wages he has to pay. Finally, the system easily
lends itself to all kinds of manipulation.

Given this intricate system, people in the organization have
naturally been interested in replacing it with something better
for a long time. They are now trying to create more equitable
piece-rate lists on the basis of studies made by the time and
motion study group. The lists based on these studies constitute
an improved continuation of the old system. The parties taking

part in recent collective negotiations agreed on a new approach.
Firms with modern production technology were given the right to
come to terms with the workers about piece-rates geared to produc-
tion. The improvements in the wage-rate system suggested by the
personnel can be divided into two categories. One camp in the
organization recommends improved piece-rate lists, i.e. that take
into account whether a work operation is performed once or many
times, that correspond to the type of product used in the operation.
etc. The other camp recommends getting rid of the whole idea of
piece-rate lists and letting each firm set piece rates on an
individual basis. Some isolated employees have even advocated
monthly wages:

> We need better piece-rate lists. People in the firms neglect
> us because of our inadequate lists.

> The piece-rate lists have to be developed further with respect
> to type of product, lot size and other related conditions.

> Agreements on piece-rate lists make up an apparatus that is
> much too expensive. Payments should be made according to
> qualification and skill instead.

> I believe in control via the production system more than in
> wages according to performance.

During the past few years, the board (Supplement, Section D) has
dealt more with matters related to formulating standards, norms
and a system of cooperation than it used to. This class was most
frequently commented on by both firms and personnel in the open-
ended questions (Supplement , Section E). It can therefore be
argued that at present, this is regarded as Contro´s most important
value. There are also different opinions among the firms as to
whether new wage-rate systems should be centralized or decentra-
lized. One of the pre-coded questions shows how the firms tend to
wish they were less bound by norms and standards so that they
could have greater freedom to be on their own (Supplement,
Section B, Figure B:7).

The primary defender of the value of changing piece-rate and wage-rate systems is the engineering department. It tries to convince, influence and control the heavy negotiating apparatus so that intentions of changing the system of agreements are not counteracted:

> We reckon that we have succeeded when we have been able to convince district representatives and negotiators that solutions should be based on direct, production technological conditions. Sometimes we get involved with too many norms and standards that are already incorporated into the existing system. We have to get away from interpretations in a strictly legal sense and arrive at agreements based on data.

These efforts often meet with resistance. Several of the representatives pointed out that there were dangers involved in introducing complex technical arguments too quickly. They feared that the firms would not understand the new concepts and that the local associations would adopt a negative attitude.

One of the tasks of the representatives is to interest the firms in new wage forms and to support them in various ways in connection with the new piece rates. The job of engineering representative was recently established and it is this group that is primarily responsible for assisting the firms in this context. Two of the representatives said that the purpose of their activity is:

> To interest the members in the new piece-rate system geared to production and to clarify the requirements and bases for these rates.

> To give advice for following up the production planning of other things besides wages. The fact of the matter is that we need this kind of post-operation evaluation for piece rates geared to production. We should support the production engineers in the firms in order to introduce these piece rates.

8.8 Improve the Member Firms

One reason why the personnel in the organization want to improve
the way the firms operate is that Contro has not been too success-
ful in maintaining a reasonable wage level in the industry - at
least in the opinion of the surrounding society. Those who
advocate improvement hope that the firms will eventually be able
to handle wage controls by themselves. Another reason for wanting
to improve the firms is that the industry has been criticized for
being ineffective in quite general terms. People at Contro felt
that this criticism is somewhat justified. They want the member
firms to live up to the norms and standards that apply to the
rest of the industry:

> The firms are going to have to assume greater responsibility
> in the matter of relationships between employees and the firm.
> We get mixed up in too many things that shouldn't concern us.

> We should work very hard to promote better organization and
> planning on the job.

> Facilitate modernization of the industry - not by negotia-
> ting but by convincing our own members. We're too much like
> craftsmen and not enough like an industry. There is less
> danger of political interference if we become a real
> industry. We can deal with these questions more informally
> inside the organization than in the official arena.

The coding of the open-ended questions shows that the value
"improve the member firms", which includes research and development,
was mentioned much more often by the personnel than by the member
firms (Supplement, Section E). During the past few years the board
has dealt with matters of this type much more than it used to
(Supplement, Section D). This value was also revealed in the pre-
coded questions. The respondents were asked if they felt that
the main task of the organization was to act in an advisory capa-
city or if it should actively influence the firms through develop-
ment work. The firms regarded the organization as mainly advisory

while the personnel felt that it was actively engaged in influencing the firms. Both groups recommended active influence on the member firms in the future (Supplement, Section B, Figure B:3).

Since the ability to utilize improved technological and administrative methods probably varies according to the size of the firm, the balance between large and small firms is a touchy question. The central office has taken a stand which is illustrated by the following quotations:

> We should support all members who are active and who take initiative. Besides, the latest agreement indicates that we should give well-managed and bona fide firms as much freedom as possible. The organization shouldn´t be a drag on its members.

> Most of the small firms don´t listen. But there are people at the large, progressive and some of the middle-sized firms who want to hear our arguments.

The representatives usually take a somewhat different stand:

> Think about the members´ welfare. The large firms sit up front but we have to take care of the small firms too.

The value "improve the members" also controls a great deal of the work in the engineering department. This is expressed, for instance, in efforts to change the system of agreements. But this value does not only mean that the firms should learn to set piece rates by themselves; it also means that they should improve production technology. The engineering department has organized courses for this purpose. Employees on all levels in the firm may attend. The department has also set up courses that can be administrated directly by the firms. The data group tries to develop systems for using data routines in the firms. The data and statistics groups combined are also trying to set up a system for data-processing the tasks on which piece-rate wages are based. The object is for the firms to use these bases in their planning.

The time and motion study people are primarily involved in work assigned to them by committees. The group conducts studies that can be used as basic data in central negotiations. Since a time and motion study man is also educated to make method improvements, he often feels dissatisfied:

> We don´t influence development. We only record. Shouldn´t we also be able to act as consultants? We could help the firms´ planner with rationalization. Data we obtain could be channeled through Contro anyway. It could use our data in a sensible way. We obtain a lot of experience about methods from the work of the time and motion study group.

In order to utilize this know-how, the organization has begun to publish a "method and data report" that is sent out to the firms. The statistics department also expressed ideas about the value "improve the firms":

> We want to be a built-in conscience by advocating economic reasoning. We want to make sure that the members don´t fall for ideas about subsidization.

The unit supports this idea via lectures, investigations and articles. The firms also receive reports on wage statistics and special analyses of wage data.

8.9   Provide Service to the Member Firms

The most common type of service mentioned in the interviews is that the organization ought to inform the firms about what is happening, especially in the area of personnel administration. Another important service function consists of reporting to the firms on wage statistics. Employees of the organization in comparatively long-established jobs, especially the traditional representatives and lawyers, do not think it is the organization´s duty to provide more service than this. On the other hand, those

in newer positions regard service as one of Contro's independent goals. They say that:

> We should satisfy the members' predictable needs.
>
> We should meet the members' demands for special functions that that they can't handle by themselves.
>
> We should provide service to the members, expecially via the local associations.

In the open-ended questions, the service value was often mentioned by the personnel but hardly at all by the firms. The personnel, as opposed to the firms, felt that Contro provided extensive service. The firms did indicate, however, that service should be expanded in the future. In choosing between the extent of service in relation to the value "improve the firms", both the member firms and the personnel emphasized improvement (Supplement, Section B, Figure B:4).

8.10   Influence the Supply and Improve the Quality of Manpower

The question of vocational training has lately been linked to the problem of controlling the wage situation in the industry. On the basis of investigations, Contro has come to the conclusion that wage drift cannot be controlled to any great extent by administrative means. Most wage adjustments outside of the rates agreed on can be explained by environmental factors - especially the supply of manpower. The guild-like structure of the industry and the apprenticeship system affect the manpower supply. By first expanding vocational training and then all non-academic education in the country, the pre-conditions for recruitment have changed in this and other industries. This involvement in the education system has even begun to erase old dividing lines between guilds. This also means that more modern production technology can be applied.

Reviews of the board minutes (Supplement, Section D) and the coding of the open-ended questions (Supplement E) show that "procure resources for the industry" is an important value in the organization. Most of the work related to this value is done by the labor market department. It tries to have an effect on education in society by collecting information about labor market trends and by exerting influence on manpower planning in government agencies. This unit has also participated in the work of various government education committees. The manpower department also tries to influence education in the industry by arranging for vocational students to get practical, on-the-job training, etc. An advisory organization for this purpose is in the process of being formed with the cooperation of the local associations.

8.11   Influence the Environment of the Member Firms in Other Respects

Isolated comments were made during the interviews about policy that has to do with influencing the member firms' environment. This policy might be to influence regulations or to improve coordination between the different parties in production processes. Comparatively few among the personnel indicated this way of influencing the environment as an independent policy for Contro's activity. Nor are answers with similar content especially common in the open-ended questions. Historically speaking, Contro has sometimes dealt with matters concerning the environment of the industry. On these occasions, however, Contro has ended up in discussions with Intro about where to separate the jurisdiction areas of the two organizations. This value partially controls management's work in the organization as well as that of the engineering department. Influencing the environment in a broader sense has occurred via participation in journals, industrial and government investigations, etc.

8.12   Values in Contro's Local Associations

Top management in 12 of the local associations was interviewed.
The associations varied a great deal as to the environment they
worked in, the problems they had, the proposed solutions they used
and how well they succeeded in their activities. Examples of the
types of problems encountered - previously or at present - by the
local associations investigated are described in Table 8:7. The
type of solution they chose or are trying to choose is also
indicated. Some of these solutions have proved effective, others
not.

The values related to the policy of the local associations will
be dealt with under the following four headings:

1.   Perform a controlling function
2.   Support the member firms
3.   Reduce friction
4.   Defend against threats

It should be noted that the examples do not necessarily apply to
all the local associations. The values in a specific association
generally depend on the special environment in which the association
works.

Local Assoc.	Type of Problem	Type of Solution Attempted
1	Poor control over the firms.	Form closer ties with the firms. Increased educational capacity. Good contacts with Contro.
2	To have frictionless coopera-tion at the job site despite dif-ficult relations with the other side.	Negotiating apparatus with con-siderable control over the members. Independence in rela-tion to Contro.
3	Region is a low-wage area close to a heavily expanding region.	Allow the firms to set "realistic wages". Conflict with Contro's rules.
4	Public relations for the association.	Succeeded in contributing to a solution to the manpower problem. Influences the other side to a great extent.
5	Close ties with Contro have made adjustment to the local situation more difficult.	Improvement of the association's internal efficiency.
6	Poor relations with the members.	Good contacts with authorities and lower-level personnel in the member firms.
7	Insufficient resources. Lack of influence on the members.	To a large extent able to settle conflicts with the other side.
8	Stagnating region.	Actions on the county level. Planning service to the firms.
9	Unsuccessful in controlling the members' wage-rate setting.	Improvement of the quality of employees so that they can provide service to the firms.
10	Tendencies towards cartelism among the members.	Effective intelligence activity. Members closely tied to the orga-nization.
11	Unemployment in an isolated region.	Action in coordination with the other side to assert the interests of the region.
12	Limited contacts with members and poor relations with Contro.	Efforts to improve recruitment to the industry. Increased control of the firms.

<u>Table 8:7.</u>   Examples of Problems and Solutions in Various Local Associations

8.12.1   Perform a Controlling Function

One of the values expressed in the interviews is that the local
association should see to it that the firms do not begin to compete
for manpower. Another policy is that the members´ labor costs
should be controlled. This could be achieved by letting the local
association, on the firms´ behalf, agree with labor on setting
piece rates. Other types of values classified as controlling
functions include several statements about the local association´s
ability to control that not too many firms compete for the same
order. The association should also see to it that unfair competi-
tion does not take place. It should be mentioned in this context
that some of the associations disclaimed strict controls and
indicated that the local associations should be service organiza-
tions exclusively.

8.12.2   Support the Member Firms

Two types of support to the firms were mentioned in the interviews.
One had to do with improving the environment of the firm, i.e.
influencing the labor market by means of an increase in the man-
power supply; by having an effect on regional planning with regard
to factors other than the labor market; etc. The second type of
support consists of performing different business administrative
activities. The most important activity involves running the
firms´ wage administration. All the associations have some form
of information and conference activity, at least for supervisors
in the firms. Other types of education for supervisors are also
arranged at frequent intervals. Many associations do some type
of personnel planning for the firms. The associations often
regard it as their special duty to give the supervisor the support
he does not get from top management in the firms. One local
association manager expressed this in the following way:

One of our important tasks is to support the supervisor at the job site. He should be able to come to us and ask about different things such as agreements and piece rates. We should be able to help him and suggest a working method that would involve the lowest wage costs. We should also help him give information to the other fellows.

8.12.3   Reduce Friction

This value involves friction that arises in relation to the members and to the other side. The following statement is indicative of the two types of activities aimed at reducing friction between different parties:

We have had to learn how to get around Contro's norms and standards. Laws and agreements should be adhered to in moderation.

Emphasis was made on the fact that the local associations are completely dependent on good cooperation with the other side. The other side clearly shared this value of more or less frictionless cooperation with respect to some of the associations. This could lead to the formation of coalitions with representatives of the other side. Decisions could then be made informally before the real negotiations began. I also found examples of coalitions with the trade union that went as far as direct influence on the internal affairs of the association.

8.12.4   Defend against Threats

Defense against threats means that the local association manager wants to defend groups he identifies with against threats from the surrounding environment. Figure 8:8 is an attempt to illustrate the association manager's pattern of identifications. Contro is farthest out in this pattern which also consists of the manager himself, the association and the local environment. The association manager's need to construct a defense against internal or

external threats becomes greater, the more central the position in this system.
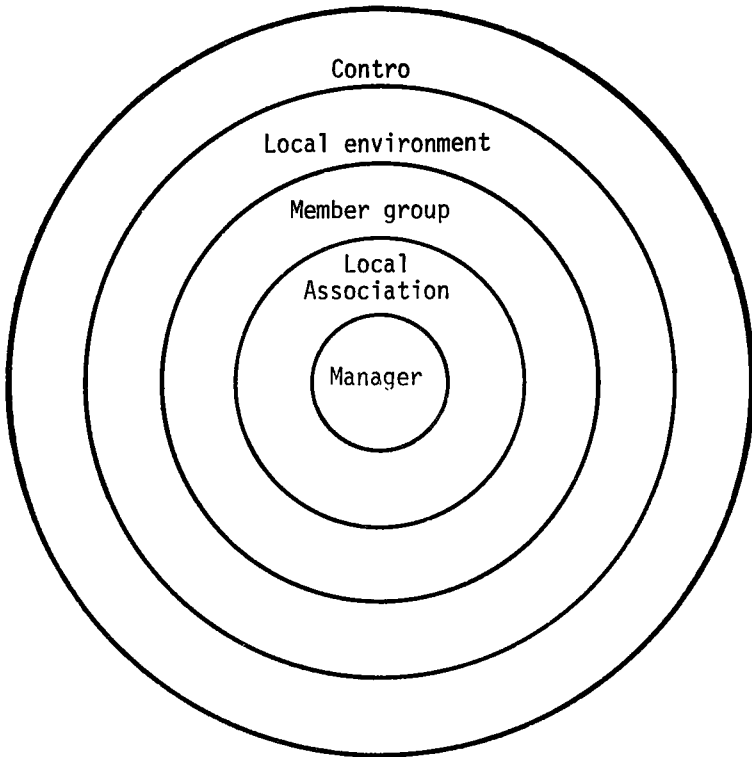
Figure 8:8. Local Association Manager's View of the System He has to Act in.

The activities of an association manager are controlled by his need to defend his own position against threats. One type of threat stems from the board of the association which tries to reduce his freedom of action in many instances. The managers often feel that the existence of the association itself is threatened. These feelings may be due to the fact that the members do not utilize the association to a great enough extent or that Contro regards the association with suspicion. The member

group can be threatened by other firms in the region which do not belong to the association and which can work under more favorable conditions. The local environment can be threatened by a small labor supply or economic stagnation.

Contro is a serious threat. It expects the local associations to carry out its intentions. The local association managers generally have a positive attitude towards these intentions, even if they naturally have doubts about some of Contro´s many activities. But in order to be able to work for these intentions at all, the local association has to have a certain amount of influence on the member firms. To acquire this, the association has to manifest itself as useful from the member firms´ point of view. And in order to be useful, the local association has to be prepared to deviate from the strictness of Contro´s standards and regulations. All this is probably a partial explanation for the local associations´ problems - they are loyal to Contro´s policy but are unable to adhere to it entirely. If they did, they could not influence the firms in the desired direction. In order to cope with this dilemma, the association manager has to become more or less independent in relation to both Contro and the member firms.

CHAPTER 9. SERVO

9.1 Servo's History

Servo was founded in the early nineteen-hundreds. Like most
other employers' organizations, it was a counter-organization to
labor's trade-union activity. Part of its program consisted of
informing members about piece-prices, wages and blacklisted
workers. Despite good adherence from manufacturers in heavy
production, the organization was weak when it had to confront
labor in conflict situations. After World War I, Servo was
drawn into a conflict that had an unfavorable outcome. This
was because Servo had accepted members whose activity usually
came under Contro's jurisdiction. As a result, Servo's wage
negotiations were affected by Contro's. During the years that
followed, Servo and Contro entered into deliberations about
where to draw the dividing line between their respective juris-
duction areas. Servo's jurisdiction was eventually defined as
extending over most heavy production. The aim was to give each
organization a counterpart area of activity on the other side.
About twenty years later, however, the other side was reorganized.
Consequently, Servo again had the same counterpart as Contro in
many parts of its jurisdiction area.

Labor's defeat in the general strike of 1909 weakened its organiza-
tions. During the next decade, the employers gained the upper
hand. Owing to the diminished effect of the Confederation of
Trade Unions, the syndicalists grew stronger. For a number of
years Servo took part in the struggle against the syndicalists.
Servo's policy consisted of not acknowledging the syndicalists
as a negotiating party because they did not accept agreements
with the employers' side as binding. Instead, Servo indicated
its willingness to negotiate with the other side through the

Confederation of Trade Unions. At first Servo entered into
so-called local agreements, i.e. special agreements stipulated
for each job site. The first agreement to cover a whole county
was concluded during the thirties. More and more of these
agreements were subsequently made and they eventually led to
nationwide agreements. The county-wise agreements had a
stabilizing effect on working conditions and helped contribute
to industrial peace.

The manufacturers in heavy production, who make up the majority
of Servo's members, have a much more mechanized productive apparatus
than the standard and mixed producers who comprise most of Contro's
membership. A fundamental value in Servo's activity has therefore
been to make agreements that do not obstruct the introduction of
new equipment and methods. There were several disputes during
the forties that illustrate this basic value. Labor demanded
that the trade union representatives be given the right to
negotiate about piece rates on behalf of the workers. A compromise
was eventually arrived at according to which both employers and
labor were allowed to be assisted by negotiators.

Labor also demanded fixed piece-rate lists patterned on the lists
in Contro's area of jurisdiction. These lists would allow the
parties to make central agreements about piece rates stipulated
by different kinds of work operations. Servo finally had to
accept fixed piece-rate lists. Then it had to establish a unit
to inspect the quantity of work performed. The piece-rate lists
turned out to be of limited importance in most parts of the
organization's field of activity. This was mainly because
conditions at the job sites were so unique that special piece
rates had to be constructed anyway. The special piece-rate
inspection unit never functioned on a large scale. It had
already been disbanded at the time this study was made.

During the fifties people in Servo discussed how vocational
training should be organized. A personnel administration expert
was also hired and decisions were made to educate time and motion
study engineers. A staff department for labor market and personnel
service was set up. Four district offices were created. Their
job is to support the various member firms with advice and
negotiations in all matters related to the association´s area
of activity. There was a resumption of efforts to establish
cooperation between Servo and Contro. The organizations did
agree to share the services of certain experts. Together with
Intro, Contro and Servo approached the government about its
control of the industry´s activities. A former Contro staff
specialist was also hired as Servo´s executive president.

9.2 Servo´s Concrete Structure

Unit	Number	Total
"The Line"		
Executive President	1	
Negotiation Department	11	12
"The Staff"		
Number of employees excluding piece-rate inspectors and office workers	17	
Piece-rate Inspectors	3	
Office workers	15	35

Table 9:1. Servo´s Different Units and their Number of Employees.

Table 9:1 shows that in addition to piece-rate inspectors and
office workers, the organization employs only 17 people. Twelve
of these can be classed as the line. Line tasks consist of
producing agreements and negotiating. The remaining five

employees can be classified as the staff. The primary tasks
of the staff include investigations, education in personnel
administration and health and safety in the firms. Even though
there are comparatively few employees, the line hierarchy is
made up of eight levels. The staff hierarchy consists of three
levels below the Executive President (cf. Table 9:2).

Level	Line Hierarchy		Staff Hierarchy		Total
	Designation	Number	Designation	Number	
1	Executive President	1			1
2	Manager, Negotiation Dept.	1	Manager, Staff	1	2
3	Association Representative	1	Administrative Expert	2	3
4	Assistant Association Representative	1	Administrative Adviser	2	3
5	District Representative	4			4
6	Representative	4			4
7	Piece-rate Inspector	3			3
8	Office workers				15
Total		15		5	35

Table 9:2. Division of Personnel into Different Hierarchical
Levels in Servo.

The executive president and the staff and line managers form a top
management group. This group, as well as most of the other employees,
work at a central office in the capital. The negotiating organiza-
tion is divided into four districts. These district offices are
located in different regions.

The members of the top management group are all university graduates. Another graduate is associated with the staff department. Most of the remaining employees have a lower technical education. Servo´s two main sources of recruitment have been firms in the industry and, to a lesser extent, various interest organizations (cf. Supplement, Section F).

9.2.1 Control Structure

Figure 9:3 signifies Servo´s relatively simple administrative structure. The picture becomes somewhat more complicated because many of Servo´s employees are in frequent contact with representatives of Contro (cf. Supplement, Section C).

The members of the top management group have different types of contacts with the environment and discuss various issues among themselves. The executive president, the manager of the negotiation department and the association representatives are jointly responsible for the planning that goes into periodical collective negotiations with the other side. The association representatives and the four district representatives attend to negotiations for individual member firms. The representatives also give the members service in connection with various agreement matters. The staff department handles information to the outside world via courses, investigations, etc. The manager of the negotiation department is also responsible for various coordination and administrative tasks in the organization.

9.3 Servo´s Environment

The review of the board minutes reveals that the other side has been the most common counterpart in board proceedings. Negotiations with the other side representing non-manual labor have recently begun to increase in importance. Other frequent counterparts in
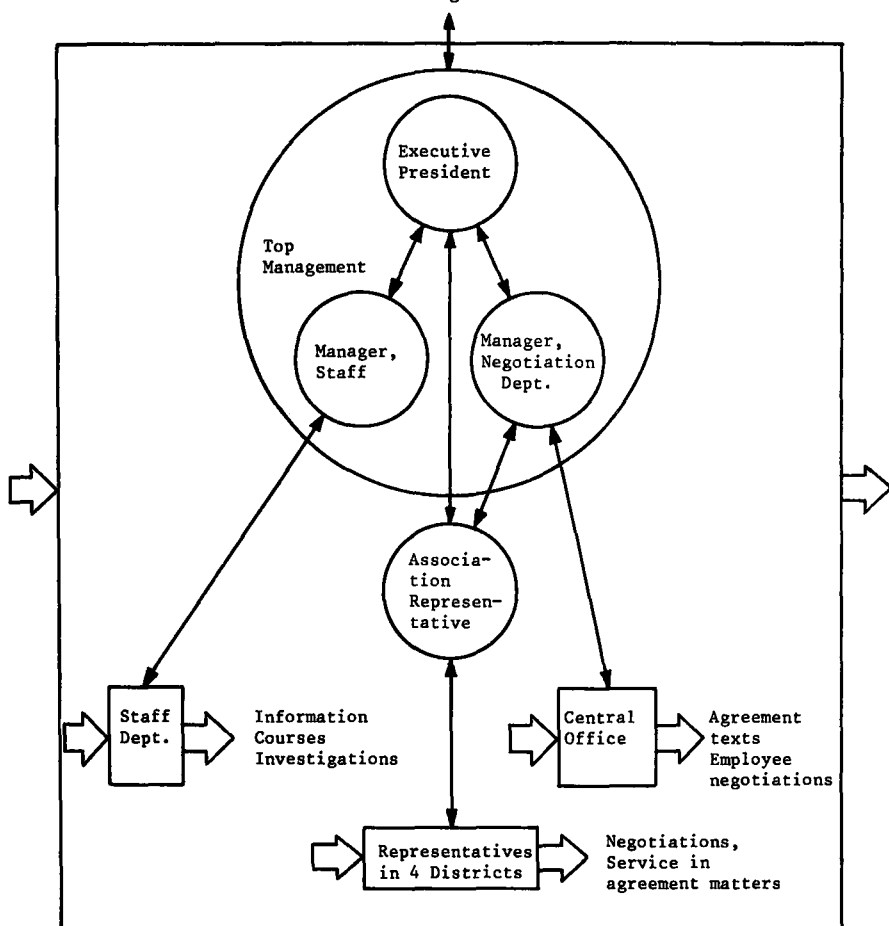
Figure 9:3   Servo's Control Structure

Key:

○   Productive unit

□   Control unit

⇨   Indicates production flow between the organization and the environment

⟷   Indicates information flow

board proceedings include the members, the government, Contro
and Servo. The Employers´ Confederation used to appear as a
counterpart more often during the early stages of Servo´s
existence than it does today. Previously, many of the items
dealt with in Servo´s board proceedings were initiated by the
Employers´ Confederation.

Table 9:4 shows what I found to be Servo´s most important environ-
mental areas. This evaluation is based on Servo´s history, an
analysis of the board minutes, questions about contacts with
different groups and interviews (cf. Supplement, Sections C
and D).

Environmental Area	Type of Relation
Large member firms	Critical environmental area, participant. Servo was founded by and consists mainly of large manufacturers in heavy production. Have dominating influence in the organiza- tion. High frequency of contact with the personnel (rank 1.5 of 14 environmental areas).
Contro	Participant. High frequency of contact (rank 5 of 14). Important counterpart in board proceedings.
The other side (Labor)	Participant. High frequency of contact with the negotiation department. Most common counterpart in board proceedings.
The other side (Non-manual labor)	Participant. Amount of time devoted to non-manual labor items gradually increasing in board proceedings. Servo also handles Contro´s non-manual labor matters.
Government authorities	Important counterpart in board proceedings. High frequency of contact with the staff (rank 5 of 14).
Small member firms	Participant. High frequency of contact with representatives.
Employers´ Confedera- tion, Central Office	High frequency of contact (rank 1.5 of 14). The Employers´ Confederation is a superior body with considerable resources and power.
Other associations in the Employers´ Confederation	High frequency of contact (rank 3 of 14).
Intro	Many joint members. High frequency of contact with the personnel (rank 5 of 14). Important counterpart in board proceedings.

Table 9:4. Servo´s most Important Environmental Areas.

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9.3.1 Relations to the Members

Servo has some hundred members. The 15 firms having more than
1,000 employees account for more than half of the members' total
number of employees (cf. Supplement, Section F). The reason for
the relatively large average size of the firms is that most of
Servo's members are manufacturers in heavy production. The
degree of mechanization is much higher than in mixed or standard
production and therefore, due to financial and other reasons,
requires larger operating units. The production programs of
Servo's largest members, however, generally include both standard
and mixed production, i.e. they are general producers. The small
member firms are often engaged in some specialized aspect of
heavy production and are usually sub-contractors for larger firms.
All the members have the right to participate at the general
meeting of the organization. The board is elected at this meeting.
Each member is allotted a certain number of votes in fixed
proportion to the number of employees in the firms. The board
has six directors who are all Executive Presidents of their
respective firms. Five of the six represent large firms with
more than 1,000 employees.

The most important firms in the organization are represented on
the board. As a result, the board's decisions reflect the views
of the large-sized members to a great extent. This also means
that top management has a good opportunity to keep in close
contact with the members. This enables Servo to interest the
member firms in applying new methods and ideas.

Servo's annual income amounts to several million crowns. Direct
membership fees account for about half of the total income. Most
of the remainder comes from the insurance service set up by
Contro which also serves Servo's members. This income has

permitted Servo to build up its own reserves of capital. The organization can therefore be regarded as thoroughly consolidated financially in relation to its size.

Many of the interviewees mentioned that Servo's membership structure makes it an organization of large firms. On the other hand, the employees at one of the regional units thought that more attention should be paid to the small firms. The value "improve the firms" is advocated especially by the staff, the central negotiation department and top management. I found that the representatives strongly adhered to the value "support the firms by giving service". Several of the representatives, however, said that there is an inconsistency between the values "improve" and "give service". The large firms have the best opportunity to use the services of the organization. In other words, the representatives' contacts tend to be limited to a small circle of large firms:

> I'm isolated from most of the firms and work primarily with the large ones that don't really need us.

The significance of trustful cooperation between Servo and its members was often stressed. The representatives do not want the firms to conceive of them as inspectors:

> We have to maintain the firms' confidence. We can't go behind their backs and discover "cheating" that we're not supposed to see.

> The firms want a certain amount of freedom. They feel confined and so they try to sneak behind our backs. Their attitude towards us has been: "We can manage this by ourselves". This year is the first time, for instance, that regulations about minimum piece-rate compensation have been included in the agreement.

The representatives sometimes feel that they work in a vacuum with the foremen at the firms. They think Servo should try to convince the higher levels in the firms to become more interested

in personnel administration.

9.3.2 Relations to the Other Side

Servo's personnel emphasize the importance of being an honest
negotiator:

> The representative should exhibit correct behavior based
> on facts. It doesn't pay to exploit temporary advantages.

On the other hand, the personnel feel that the other side is
not always honest. But they did say that the employers' side
can assist in correcting this behavior. The personnel also
mentioned that:

> The trade union has to be treated in such a way that its
> authority is not diminished. In other words, Servo has to
> make sure that the members' confidence in their trade union
> is maintained.

The personnel think that Servo's relationship with the other side
is better than Contro's. They feel that previously, Contro
sometimes tried to exploit the other side's mistakes and weaknesses.
Servo attributes political motives to some of the actions of
Contro's counterpart on the labor side:

> The trade union works against the wishes of the individual.
> Its primary concerns are to maintain its own power and the
> image of collective labor.

Servo's tasks include working on health and safety matters in
Contro's area as well as its own. Cooperation with the other
side must be based on mutual values.

> The way things are now, we can't cooperate with the other
> side. We'd like to look at it as something other than a
> big, black, ugly thing.

Relations with the other side in terms of non-manual labor have

been good thus far although many people in Servo are apprehensive. This is mainly due to a feeling that a successive deterioration is occuring.

9.3.3 Relations to Contro

People at Servo emphasize the fact that there is a decided difference between Servo and Contro with regard to piece-rate policy. Servo prefers letting the firms negotiate by themselves instead of making central piece-rate agreements. Contro´s system, on the other hand, involves fixed piece-rate lists. Servo´s personnel would like to see Contro devote more of its resources to providing the firms with the same type of wage-setting service Servo now gives its members. In several cases the personnel suspect that Contro´s engineering department is not primarily service-oriented but that it is a means of controlling the member firms. Servo´s staff department, which is actually supposed to work on Contro´s behalf, finds it difficult to assert itself inside Contro:

> In spite of everything, they think of me as a Servoite.

Even though there is some criticism, Servo personnel have a staunchly approving attitude towards Contro. There has been no mention of any conflicting relations. But the attitude towards Contro´s local associations is highly critical:

> The local associations are no longer concerned about the employers´ interests, the industry´s interests or any rational interests whatsoever.

> Contro and the representatives of the local associations think they are little kings with the institutional status of a court. Their attitude is that they should decide. Of course we feel that the representatives should be consultants.

> There´s a constant tug of war between ourselves and the local associations about which agreement to apply.

9.3.4 Relations to Intro

The interviewees very seldom mentioned relations to Intro. The
top managements of the two organizations maintain contact in
order to discuss important industry matters. There is also
contact between the personnel on the subject of new machines
that can be used by the members. It was emphasized, however,
that there have been some disputes about which side should
investigate time and motion study problems.

9.4 Strategic Values in Servo

Servo´s strategic values have been classified under five headings:

1.   Work for industrial peace
2.   Produce agreements
3.   Provide service
4.   Influence supply and improve quality of manpower
5.   Improve the firms

Three targets can be distinguished among Servo´s strategic
values: the members, especially the large member firms; the
other side; and the labor market in a wider sense.

One of the key ideas for reaching the members is to produce
agreements that give the firms considerable freedom of action
(to incorporate new methods, for example). Another key idea
is to provide service to the members when they need it and
to dissociate from controlling the firms. A third key idea
is to improve the firms so that they can acquire the ability
to control their own labor costs.

The key idea for reaching the other side is to work for industrial
peace and for cooperation that is as frictionless as possible.
In order to reach the labor market, the key idea is to improve

Strategic values

| 3.Provide service | 2.Produce agreements | 1.Work for industrial peace |

Administrative values

Oversee agreements

Representatives

Minimize strain at job sites

Representatives

Operative values

Provide service to the organization

Central negotiation Dept.

Service in piece-rate matters

Central negotiation Dept.

Negotiate and provide service with respect to piece rates and agreement
----
Representatives

Produce and disseminate agreements

Central negotiation Dept.

Products

Planning Assist in setting wage rates

Piece rates Dispute settlements

Collective agreements Comments on agreements Conferences Interpretations

Figure 9:5   Means—end Scheme in Servo

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5.Improve the firms	Defend the members' interests (a value found in Contro)	Influence supply and improve quality of manpower

Solve the supervisor problem ---------- Central negotiation Dept.	Promote performance wages ---------- Central negotiation Dept.	Promote better personnel administration ------------ Staff Dept	Health and safety in the firms ----------- Staff Dept.	Vocational management education ---------------- Staff Dept.

Promote performance wages, production planning and better personnel service
----
Representatives

Discussion groups Advice	Investigations Expert advice Wage engineering Management meetings	Research & development Publications Conferences Forms	Courses & conferences Statistics Work groups Health examinations	Teaching plans Teacher education Educational material Re-education

the quality of manpower by means of education aimed at eliminating
the guild-like structure of the industry.

Figure 9.5 shows how the strategic values are connected to values
on lower levels. The units that are primarily responsible for
the different values and turn out various products are also
indicated. The strategic values and the way they are linked to
other values are discussed in detail in the sections that follow
(9.5 - 9.9)

The only inconsistency I found between Servo´s strategic values
is shown in Figure 9:6. This inconsistency can be described as
follows. A service-oriented representative organization is
dependent on giving advice on subjects about which it is more
knowledgeable than the firms. On the other hand, the improve-
ment value signifies that the firms themselves should assume
these functions and develop their own abilities. I also found
several inconsistencies between the strategic values and values
on lower levels. For instance, Servo acts on Contro´s behalf
with respect to health and safety matters. This mean that there
is a certain amount of pressure on Servo employees to work for
Contro´s value of defending the interests of its members in this
area. But this value is inconsistent with Servo´s value of
industrial peace and frictionless cooperation. Some of the
representatives also recommended another value, "control the
firms". This value is inconsistent with the strategic value
that Servo should serve its members in an advisory capacity
only.

	1. Work for industrial peace	2. Produce agreements	3. Provide service	4. Influence supply and improve quality of manpower
2. Produce agreements				
3. Provide service				
4. Influence supply and improve quality of manpower				
5. Improve the firms			Inconsistency because service can lessen the need for improvement	

Figure 9:6. Inconsistencies Between Strategic Values in Servo.

9.5 Work for Industrial Peace

The personnel conceive of industrial peace in terms of frictionless cooperation between the member firms and labor:

The primary task involves industrial peace for the members.

Servo should settle disputes before they get out of hand.

This value corresponds most closely to the class "represent the firms" in the coding of the board minutes and the open-ended questions. This class occupies the foremost position in the board minutes (Supplement, Section D). Historically speaking,

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Servo has tried to avoid conflict with the other side so as to give the firms as much freedom of action as possible. This has sometimes led to disagreements with Contro. In the board minutes, this value is also reflected in discussions about how foremen should be treated so that they feel more like members of the firm than of the trade union. During the past few years matters related to supervisors´ and foremen´s problems are also discussed more often in the board proceedings than they used to be. In the open-ended questions, the firms showed a high frequency for the class "represent the members" (Supplement, Section E). Several persons at the central office also mentioned this class. When asked to describe the organization on the scale "mediate in disputes - defend interests in relation to the other side" in the pre-coded questions, both firms and personnel felt that Servo leans more towards "defend interests". The personnel tend to say that the organization should become more of a mediator in the future, while the firms tend to put additional emphasis on defending interests (Supplement, Section B, Figure B:6).

The interviewees from the various units said that the representatives´ primary task was to see that work at the job sites did not come to a standstill but continued without friction according to production plans drawn up by the firm. In other words, "keep things moving". If the representatives are successful, then the firms rely on Servo to carry out additional tasks. As a result, the firms´ demand for the services of a representative is an important link in evaluating his negotiating skill. The representative himself feels he is successful if the firms begin to use his services more often.

9.6 Produce Agreements

A series of documents produced at Servo during the sixties dealt

with various measures that would put a stop to the overheated
expansion in the industry and ensure balanced growth. The
organization regarded several of these measures as feasible.
Among these were wage-setting techniques aimed at increasing
manpower capacity. The personnel mentioned other measures:

> Make collective agreements geared to production.
>
> Coordinate rules and agreements to regulate the coexistence
> of workers and employers.
>
> Arrive at agreements that can really be kept and help the
> firms stick to them.

There is a strong value in Servo's history to the effect that
wage-rate systems should not prevent technological advances
in the firms. In the forties, the organization reluctantly
acquiesced to labor's demands for fixed piece-rate settlements
according to the pattern in Contro's jurisdiction area. Fixed
piece-rate agreements have now almost entirely disappeared, as
has the piece-rate inspection unit.

The second most common class according to the board minutes is
the one that comes closest to the value "produce agreements",
i.e. "standards, norms and a system of cooperation" (Supplement,
Section D). Matters such as work evaluation and methods of
employement have been dealt with during the past few years.
Problems related to wage drift and the development of different
piece-rate methods have also been discussed. The board has
proposed that Intro abolish its index agreements with the
industry's customers. Otherwise, they might make the firms
feel less responsible for keeping their wage costs under control.

Both firms and personnel made many comments about "standards,
norms and a system of cooperation" in the open-ended questions
(Supplement, Section E). People in the firms said:

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Be increasingly preoccupied with personnel matters, even
in the case of management; start to hire semi-skilled
workers on a monthly basis.

Work towards setting wage rates that coinside with changes
in production methods.

Another important value concerns the wage-rate system. It should
assist the firms in achieving higher production and not be an
instrument for control:

We don´t want to be policemen, we want to convince the
firms.

The centrally located part of the negotiation department makes
arrangements for collective agreements. It informs the member
firms about agreement texts and supports them in interpreting
agreements. Even if Servo prefers that its representatives
serve the firms in an advisory capacity at negotiations, it
does happen that they act as authorized representatives,
expecially for a small firm. The same thing can occur in order
to assist a supervisor whose previous experience had been limited
to Contro´s area of jurisdiction. Representatives also negotiate
at the request of their local counterparts in especially big
piece-rate settlements. When negotiations become deadlocked the
representatives take part in central negotiations. An important
value in Servo, however, is to let as few negotiations as possible
reach the central level.

Top management emphasized that Servo should not control the firms.
But at the district offices I encountered statements to the effect
that Servo should oversee agreements and that Servo´s top manage-
ment should help the firms´ executives increase their control:

We· should make certain that the firms apply the agreements
in the right way so that the other side doesn´t discover   ·
any mistakes.

We have to keep wages on a reasonable level and discourage
guaranteed hourly wages.

Most of the representatives did not put much emphasis on this
value about control. Instead, they advocated the principle of
information. Exceptions were found in two of the district
offices where working conditions appeared to make the control
value more important.

9.7 Provide Service

A recent memorandum on policy covered various methods of improving
the firms. It also proposed that the firms develop their own
personnel administrative activities and that "in this way Servo's
work would move towards development and consultation in the
personnel area as a whole". Some interviewees said that the
firms should be in the center with the organization supplementing
them in areas where they need help:

> We should constitute a service function to the firms.
>
> Consult in personnel matters.
>
> A certain amount of service in following up wages and
> productive capacity in connection with the new piece-rate
> system.

Service activities did not originate until fairly recently.
Servo has usually had one or several representatives to help
the firms in negotiations with the other side, but there has
never been any more comprehensive service. The control organiza-
tion necessitated by the actions of the other side forced Servo
to increase its personnel. This control apparatus is now dis-
continued and instead, top management is trying to indoctrinate
a service attitude.

Service has not been dealt with to any great extent in the board
proceedings (Supplement, Section D). In several instances,
however, the firms' need for increased service has been used as
an argument for enlarging the central office.

There were many comments about service from both firms and personnel in the open-ended questions (Supplement, Section E). Several firms made comments like this:

> Increase the size of Servo´s representative staff in order to give the firms the service they demand.

However, one firm said:

> Take care of industry matters instead of assisting individual firms in their own miscellaneous business problems.

Answers to the pre-coded questions (Supplement, Section B) show that both firms and personnel regard the organization today as more oriented towards service than towards its external environment. On the other hand, both groups want a more comprehensive attitude towards the environment in the future. The personnel feel that the service is highly comprehensive but the member firms do not. The personnel also want to increase the range of service (cf. Supplement, Section B, Figures B:1-B:5).

The value "provide service" largely controls the work of the central negotiation department and the representatives. The firms used to have to consult Contro´s local associations about organizational or piece-rate matters. People in Servo now think the organization has succeeded in developing what they call "Servo-service". The firms should be able to turn to Servo for immediate answers to their questions.

9.8 Influence the Supply and Improve the Quality of Manpower

There has been a great deal of cooperation between Servo and Contro with respect to labor market issues. The organizations have a clearly formulated policy that measures that regulate the

behavior of the counterparts in the labor market are not sufficient to keep the market balanced. The organizations also have to find ways of influencing the supply and quality of manpower. Judging from the board minutes, this value was not actively formulated until recently. It is seldom discussed by the board or in the open-ended questions (Supplement, Sections D and E).

The staff is the group in Servo that does the most work for the value "influence the supply and improve the quality of manpower". Efforts in the field of vocational training include planning training programs, educating teachers and instructors and preparing various types of teaching material. Standards have been worked out in collaboration with Intro for training qualified mechanics. Some persons also wanted the other side to be actively involved in education.

The work done by Servo's staff department with respect to labor's health and safety is also related to the value "influence the supply and improve the quality of manpower". The aim of this activity is to "establish good conditions for the production factor manpower". Servo would like to conceive of labor safety - or industrial health as they prefer to call it - as a means of increasing manpower productivity rather than as an area for negotiations. Contro's involvement in industrial safety inside its own area has not been regarded as wholly successful. A system of regional safety representatives has turned into a platform for trade union activities. The member firms claim that the structure of industrial safety operations has contributed to a reduction of the firms' - and an increase in the trade unions' - control of the activities of supervisors. This results in increased wage costs and decreased potential for efficient production. Servo's staff department is also responsible for most of the labor safety and health activities in Contro's

jurisdiction area. This dual responsibility is aimed at refor-
mulating the objectives for labor safety in Contro's area so
that they coincide with Servo's formulation. According to this
formulation, the firms should bear the responsibility. The term
labor safety should also be replaced by the broader concept of
industrial health. The purpose of industrial health is to
increase manpower productivity by cutting down on absenteeism
due to accidents, on-the-job injury, illness, disinclination
to work, etc.

9.9   Improve the Member Firms

Several of the interviewees illustrated this value in drastic
terms:

>The size of the organization should remain small. We should
>make ourselves superfluous.

This value is based on two factors: Servo's management does
not whole-heartedly belive that an employers' organization can
control wage patterns and it wants the member firms to become
more effective. The organization conceives of itself as a
representative of the large and efficient firms and wants to
assist in making them more effective.

>We want to try to awaken and convince the executives.
>We are going to develop special personnel administrative
>techniques that we'll let the firms apply.

The strong emphasis on the improvement value leads to a negative
attitude towards the way Contro's local associations carry on
control activities. The interviewees made many negative
comments about the activities of these local associations, which
Servo regards as unproductive.

Several years ago the importance of this value was accentuated

when the organization hired a high-level employee experienced in personnel administration. During the past few years the board has also discussed the fact that the organization should stimulate more effective research in the industry. Investigations were started in reference to how the firms can make use of ADP.

In the open-ended questions, it is noteworthy that "improve" is the most frequent class for the personnel but has not provoked many comments from the firms (Supplement, Section E). This could mean that the personnel have much more confidence in their ability to influence the firms' efficiency than the firms themselves.

In the pre-coded questions, both firms and personnel think that the aims of the organization are characterized more in terms of service than improvement. However, both groups favored a shift towards improvement. Members and personnel were also in favor of a shift from "establish standards and norms" towards "improve" (Supplement, Section B, Figures B:4 and B:7).

The central negotiation department is trying to help the firms assume responsibility for their wage costs. One way of achieving this is to come to an agreement with the other side about minimum wages. Some persons claimed that minimum wages do not require the same type of police organization as standard wage rates. Awkward details in the agreements on employment conditions should be done away with. The employer should also be permitted to exert a great deal of influence in assigning working hours. People in Servo say they want to propose a technique that would assist the firms in setting their own piece rates. Servo also tried to spread the idea of setting piece rates by letting wage engineers from the firms observe the work at district offices for a few months.

The staff department's endeavors to promote better personnel administration in the firms are closely related to improvement efforts. A certain amount of development work is carried on in the organization. Contact has been established with researchers in the field of personnel administration. The organization is also in contact with personnel officers who already work in the firms. Propaganda for improved personnel administration is disseminated in various ways.

The representatives are expected to take part in promoting performance wages, better production planning and better personnel service in the firms. Even though the representatives share this value, they have unmistakable difficulties trying to put it into practice. This is partly because they regard themselves as having a certain amount of skill as negotiators. They also feel that they possess a good deal of knowledge about piece-rate setting. But they are less sure of themselves when it comes to modern planning methods or active personnel service. When working in this area, the representatives become involved in selling ideas developed inside the organization. This sometimes involves giving lectures at the firms. As a result, "selling ability" becomes an additional criterion for a good representative - and not all of them think they can fulfill this requirement. Another reason why the representative has difficulty working for the improvement value is a feeling of powerlessness in relation to the firms. The representatives are primarily in contact with the foremen or possibly the production managers. It sometimes seems difficult to influence these people when the firm's top management is not especially interested in the problems. Another reason for the difficulties the representatives encounter is that they do not feel they have sufficient contact with what goes on centrally in Servo. In a few regions there are many small firms. The representatives

doubt whether the organization's policy meets the needs of
these firms.

The central negotiation department also carries on negotiations
for both Servo and Contro in matters related to non-manual labor.
The organization has had some problems in this area. These
difficulties are partly due to unsystematic personnel service
in the firms. As a result, there is a tendency to say:

> Create a spirit in the firms so that people feel at home
> there - not in the trade union.

A cooperative group made up of representatives of the large
member firms has been established to discuss matters concerning
non-manual labor.

CHAPTER 10. EFFECTIVENESS IN THE THREE ORGANIZATIONS

In this chapter I relate the five organizational processes discussed
in Chapter 4 to empirical observations. The data used are derived
from two main sources: the descriptions of the organizations in
Chapters 7, 8 and 9 and the measurements presented in the
Supplement. Sources of error and questions of reliability were
discussed in Chapter 6. In contrast to the three descriptive
chapters which generally reflect a certain point in time, this
chapter is intended as a process description. Therefore, this
chapter contains a greater share of subjective interpretation than
previous chapters. It was mentioned in Chapter 6 that alternative
interpretations can be made on the basis of recorded observations.
My aim, however, is not to make alternative interpretations of the
data but to give a systems representation of the organizations,
in which descriptions of different processes complement each other
and illustrate various aspects of the organizations´ effectiveness.

10.1 The Institutionalization Process

According to Chapter 4, the institutionalization process consists
of the activities through which the organization becomes an
indispensable part of a larger social system. This process has to
do with the organization´s ability to fulfill needs that enable
other systems in the environment to function and survive. This might
imply that the organization furnishes a certain type of service,
produces a special type of output, processes a specific type of infor-
mation or makes a certain type of decision - all of which are impor-
tant to other areas in the environment. Distinctive competence has
been proposed as an indicator of the institutionalization process.
If an organization is to attain distinctive competence, it must
have values to guide its activities in the direction of what is
important for other areas in the environment. In order for the
institutionalization process to go on, the concrete structure

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should include an important element, i.e. a <u>leadership function</u>.
Leadership helps single out the environmental areas that should be
regarded as important and the needs in these areas that the
organization should try to fulfill. Another task of leadership is
to sensitize the personnel to the values that regulate relations
to these areas and to create a concrete structure that embodies
these values. The other areas eventually adjust their activities
to the fact that some of their needs are met by the organization.
In this way, they become more dependent on the continued existence
of the organization. Since the institutionalization process tends
to stabilize the mutual expectations of two or even more organiza-
tions, it usually has a very long time range.

The organization's role in relation to the other areas in its
environment is dealt with in the next five sub-sections (10.1.1-
10.1.5). The discussion concentrates primarily on the <u>critical</u>
<u>environmental areas</u> (cf. Chapter 3, Section 3.10). The organiza-
tion depends more on the critical areas than on others in order
to continue its operation. An organization and its critical
environmental areas can be involved in many kinds of relations.
An environmental area can contain resources that are vital to the
organization or it can have a considerable effect on the organiza-
tion via sanctions. An evaluation is made of the extent to which
the organizations are capable of meeting the needs of the critical
environmental areas. The members are critical environmental areas
in each of the three organizations. The ability to satisfy the
members can be assumed to be related to how closely the organiza-
tions' purposes coincide with the members' problems. Therefore, a
comparison is made of how well the values of the organizations
conform to those of their members. Readings on the process indica-
tors conclude this section on the institutionalization process.

10.1.1 Intro

Two areas in Intro´s environment can be regarded as critical: the large member firms and the government. The large member firms affect Intro´s continued existence via their membership fees and their influence in the work of the board, various committees, etc. The government controls legislation and puts other constraints on the industry. Consequently, it also controls Intro´s opportunities to work for its strategic values. An evaluation of Intro´s distinctive competence can be made on the basis of how Intro is related to the critical environmental areas and other subsystems in society.

Many respondents said that the business position of Intro´s members has been hurt by the adversary´s firms. The government seems to give advantages to the adversary and to inflict difficulties on Intro´s member firms. Many of Intro´s members and personnel said that free enterprise is threatened. This description of the environment is illustrated by Figure 10:1.
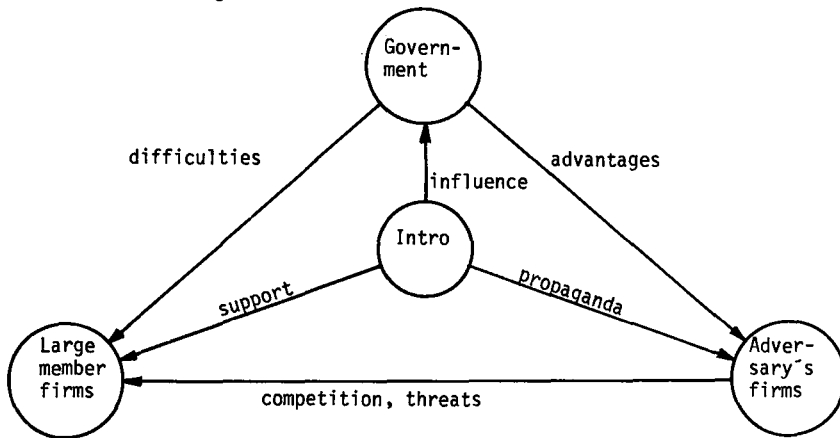
Figure 10:1. The Large Member Firms are Threatened by the
              Adversary´s Advances

The figure also shows that persons in Intro have identified a need to support and defend the large member firms against the adversary.

Intro should work on behalf of free enterprise, fight the adversary and propagandize for the industry. In the concrete structure, the value "defend the members´ interests" is represented by the establishment of several companies. These companies are supposed to attain the same legal status as the adversary and should therefore be able to help the members obtain the same advantages in relation to the government. However, the values of political struggle have not fully penetrated the organization. This is partly because Intro tries to remain more or less non-partisan in relation to the two opposing camps - liberalism and socialism. There are also competing values in the organization as to what should be done. This is reflected by the fact that most of the resources are not used to defend the members´ interests against the adversary but to provide service to the members and establish standards and norms. The organization has not been successful enough in the struggle against the adversary to be regarded as having attained distinctive competence in relation to its members.

Figure 10.2 shows that the members have also been subjected to demands for adaptation from what is summarily termed "the technological environment".
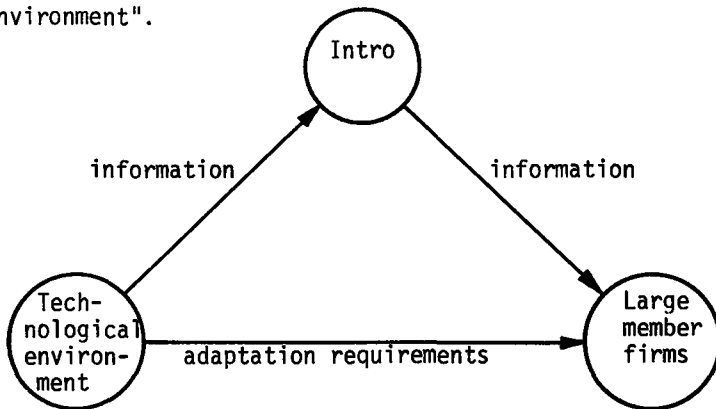
Figure 10:2. The Large Member Firms have to Adapt to Technological Development

Because of technological advances and the increased importance of active marketing, the member firms have had to engage in different types of research and development work. The firms' needs in this respect correspond to a value in Intro that the firms should be improved. But this value is not fully accepted officially. This is because the consequences might make the organization seem partial towards certain firms. Nor has the organization allotted large resources or done any systematic planning with respect to activities that could lead to the firms' improvement. In concrete terms, this value has been converted into investigations and some management and technical courses. Different types of firms would probably not evaluate the desirability of Intro's activities in this field in the same way. Many large firms have come a comparatively long way in the areas of financing, development and marketing. This has increased their competitive ability in relation to other firms. As a result, they might regard the organization's work in these areas as a waste of expensive membership fees. It might be more natural for these firms to refer Intro to supporting activities, such as efforts to convince the government to work towards more favorable conditions for efficient production. Consequently, Intro has not been able to attain distinctive competence in relation to the member firms by trying to improve them.

The firms in this industry began to employ staff experts much later than other industrial firms. They have therefore had a need for service. Intro has discovered these needs and has hired different types of experts to give service to the firms. The personnel have mixed opinions about the service Intro provides. Most of them think that other, more important activities are deprived of valuable time. Even if the service has been used by many members, it cannot be regarded as having given Intro distinctive competence (cf. Figure 10:3). Consultants or the large firms themselves could actually replace Intro in this area.
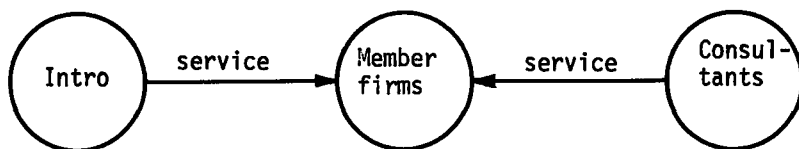
Figure 10:3. Intro Tries to Meet the Member Firms' Service Needs

Intro's environment is depicted in Figure 10:4 as a number of parties
dependent on one another. However, they have conflicting interests.
This creates the possibility of innumerable conflicts. When Intro
was founded, one of its values was to participate in formulating
standards, norms and contract provisions that could lessen the
risk and limit the consequences of such conflicts. This value is
still very much alive in Intro. The Executive President, for
instance, is a distinguished legal expert. The value saying that
the organization should deal with the formulation of standards and
norms and mediate in disputes is expressed concretely in the work
of the legal and machine departments. In addition, many representa-
tives of the personnel and the members work in cooperative
committees for formulating standards and norms. The establishment
of standards, norms and a system of cooperation is the one area
where distinctive competence might be said to exist. Work in this
area has corresponded to a clear-cut need in the environment. This
need exists in both the large member firms and the government. In
this particular area, the organization can probably count on
support from the critical environmental areas and many other parts
of the environment.
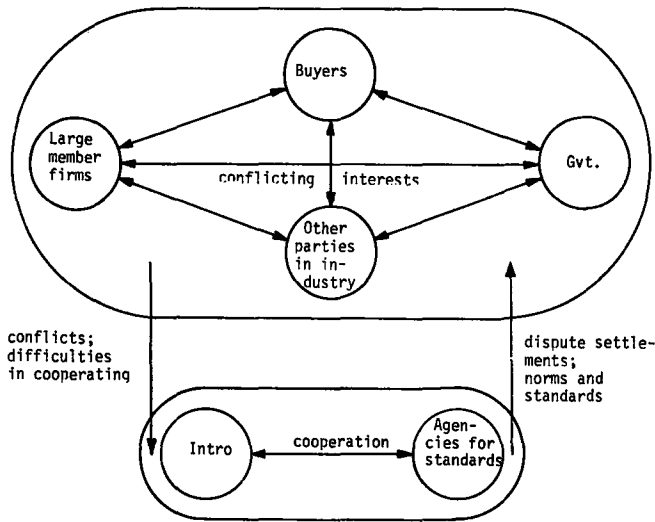
Figure 10:4. Intro Works with other Agencies that Establish Standards in Order to Improve Cooperation in the Industry

Figure 10:5 illustrates another type of relation between the government, Intro and the surrounding system. Standard production is a politically sensitive area. The government wants to prevent private profit interests from gaining too much influence in this sector and therefore recommends combined central and local government control. In addition, the government requires a high degree of productivity in the industry, primarily in terms of high production per man hour. Other efficiency requirements include low prices, flexibility in adapting the industry´s volume of activity to current market conditions and high quality according to standards and norms specified by the government. Intro´s actions are guided to a large extent by a conception that the government and other socialist forces are attempting to socialize private enterprise. Owing to bureaucracy and a lack of understanding, the government is said to prevent the industry from increasing its efficiency. The state is also blamed for letting goals other than efficiency control measures

which are directed towards the industry. There is a value in
Intro that the government should be influenced to assume a more
favorable attitude towards an efficient and free business system.
This value is embodied in the concrete structure by the economic
policy and standard production departments. They try to keep up
with government measures by commenting on proposals, participating
in government investigations and attempting to influence the
government through political channels. But these values about
influencing the government do not coincide to any large extent
with the government decision-makers´ needs to control production
in the industry. This means that Intro cannot be regarded as
indispensable to the government with respect to fulfilling its
goals for the area affected by the industry.
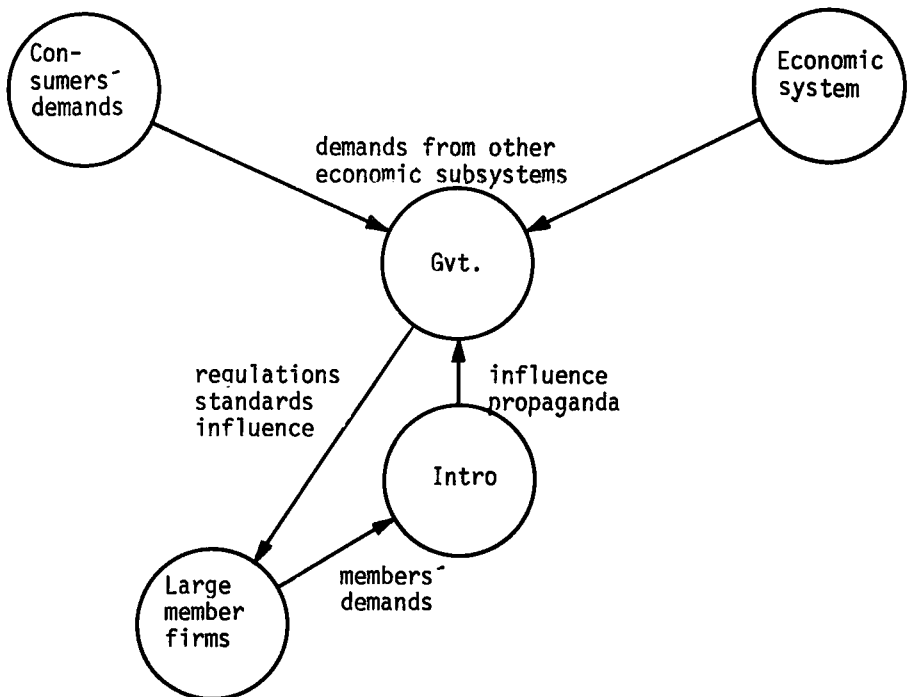
Figure 10:5. The Government Requires Consideration of other Social
Subsystems which Conflicts with Intro´s Desire to
Protect the Interests of the Industry

Briefly then, the institutionalization process in Intro has not resulted in distinctive competence in anything other than a limited area. For these reasons I do not think Intro can be regarded as an indispensable part of either the government's or the large member firms' environment.

10.1.2 Contro

Contro has two critical environmental areas: the member firms and the other side. Figure 10:6 illustrates how Contro, the member firms and the other side are included in a larger system. Labor and employers in the industry belong to different associations which, in turn, are parts of the two principal organizations (the Employers' Confederation and the Confederation of Trade Unions). This struc-ture of the nation's labor market is highly institutionalized. When measures are taken that upset the established system of cooperation between the two principal organizations, strong forces are immediately mobilized to defend the continued existence of the system. One of the key principles of the system is that the government should not be allowed to dictate the contents of labor market agreements. Another is that the associations on both sides should be organized as much as possible according to industrial rather than occupational principles. Neither Contro nor its main counterpart on the other side incorporates the whole industry. But since they are the largest organizations, they will probably be the frameworks of future organizations structured on the industry principle. Owing to its status in the national labor market, the system of cooperation between Contro and its counterpart on the other side can be regarded as highly institutionalized.

The other side also has specific needs that it tries to satisfy within the structure of the institutionalized system of cooperation. One of the important goals of a labor organization is to procure high wages for its members. The other side has managed to

exercise a high degree of control over its members while Contro´s
members have sometimes shown a lack of uniformity. In addition,
the industry is expanding rapidly. All these factors have made
it possible to attain high wage levels. There is reason to
assume that the other side will want to preserve control over its
members, the dissension among employers and wage systems that
maintain a high level of earnings. The Confederation of Trade
Unions wants the employers to offer employment security to labor.
But a high degree of employment security in the industry would tend
to unite labor with the firm and dissolve its ties with the trade
union. If the other side prefers high wages instead of employment
security, then it has to put up a certain amount of opposition
to the main policies of the Confederation of Trade Unions.
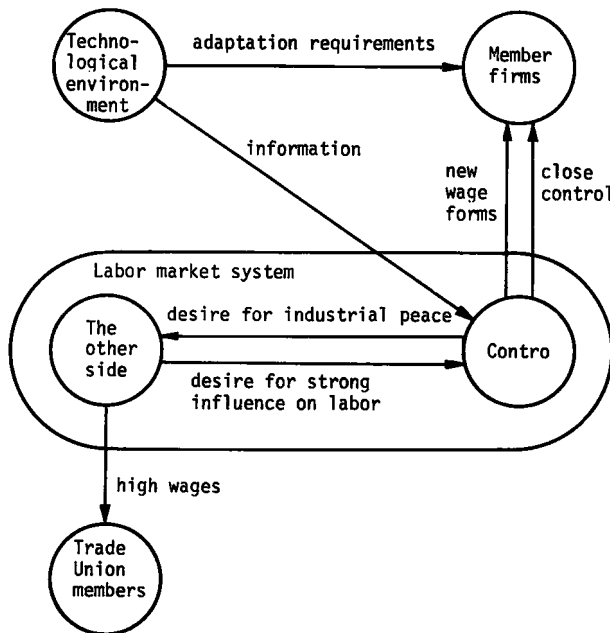
Figure 10:6. Contro´s Relations to the Other Side and its Elaborate
Control Organization Make it Difficult to Meet the
Firms´ Needs for New Wage Forms

Contro represents its members in relation to the other side. The negotiating apparatus constructed for this purpose is supposed to provide Contro with considerable influence on the way wages are set by the members. At the same time, this apparatus allows the other side a great deal of control over its members. This means that Contro can be said to have attained distincitve competence in relation to its counterpart on the other side. In the interviews, some of the personnel were of the opinion that the other side´s influence on the workers should be lessened. This could take place via guaranteed employment. However, these opinions are not generally accepted. The most common value mentioned in connection with employment conditions was that the industry is subject to such large fluctuations in work load that guaranteed employment would not be a realistic alternative for most firms.

The historical account in Chapter 8 showed how Contro´s member firms were threatened by the trade-union movement and by internal dissension. Control activities, executed via the local associations, nation-wide agreements and piece-rate lists, have made it possible for Contro to offer its members somewhat more tolerable ways of cooperating with the other side. As technology developed and the firms acquired special production systems, Contro´s centrally negotiated and rigid wage-rate system has made it more difficult for changes to occur in the firms. Therefore, an important value is that Contro should work for better wage systems. A complement to this value is that Contro should help the firms improve their ability to adapt to technological develop-ment and market changes. But the well-established system of negotiating with the other side can only be changed gradually. This means that Contro´s efforts to meet the firms´ need for a more adaptable wage system exhibit a lack of uniformity in both values and measures.

The structure of the labor side has hindered Contro from satisfying
the large member firms' need to develop their own specific produc-
tion and marketing systems. The labor side is to some extent still
structured according to the old guild system which is unsuitable
for modern production methods. Contro has tried to meet the firms'
needs in this area by working for the value "influence the quality
and supply of manpower". The task of the manpower department is
to influence the school system to educate the types of workers
and engineers the industry requires. The contributions in the
manpower area are evaluated by people in the organization as having
led to improvements for the firms.

The discussion about the institutionalization process in Contro has
revealed that Contro works in an environment which puts contradic-
tory demands on the organization. Via the negotiating apparatus
and the values that control it, Contro has attained distinctive
competence in relation to the other side. This competence means
that Contro's existence is not threatened. But distinctive
competence in relation to the other side does not imply that
relations are unproblematic. In fact, the relations between Contro
and its counterpart on the other side seem in many respects to be
more strained than in most other industries. Contro's relations
to the other side make it difficult to help the member firms
which need new wage systems. This implies a certain distinctive
incompetence in relation to many members who do not feel they
receive sufficient benefit from the work of the organization.

10.1.3 Servo

Servo's critical environmental area consists of the large member
firms. The large manufacturers in heavy production have to be able
to use technological advances in the form of new machines and
techniques. There has been a value in Servo for a long time that
corresponds to this need. This value says that the firms should be

allowed to set their own wages without interference from representatives of the organization. In concrete terms, this value is reflected in agreements with the other side that guarantee the firms the right to set wages by themselves. On several occasions both the other side and Contro have put pressure on Servo to adhere to a more centralized system of agreements similar to Contro's. Servo adapted this way of thinking for a while. The organization began to set up a control apparatus. At present, however, it has been discontinued. The personnel in the organization are opposed to the idea of Servo as a control organization. The value that agreements should not obstruct the firms' production has been supplemented by another value that the wage system should stimulate performance and agreements should be in accordance with production requirements. Servo's personnel feel that in order to set piece rates which stimulate production, the firms have to improve their personnel administration. These values are expressed in concrete terms through the work on new wage forms carried out by the staff and through the representatives who advise the firms on setting piece rates.

The other side is not a critical environmental area for Servo as it is for Contro. But Servo is also part of the highly institutionalized system of cooperation between the Employers' Confederation and the Confederation of Trade Unions. This means that the negotiating function which Servo fulfills will not disappear. On the other hand, the industry principle exists as a strong value in the labor market system. This makes it seem probable that pressure will eventually be exerted on the organizations in the industry to consolidate. If this were to occur, Servo would become a part of Contro since Servo is the smaller of the two organizations. The formal and real decision would rest with Servo's large member firms.
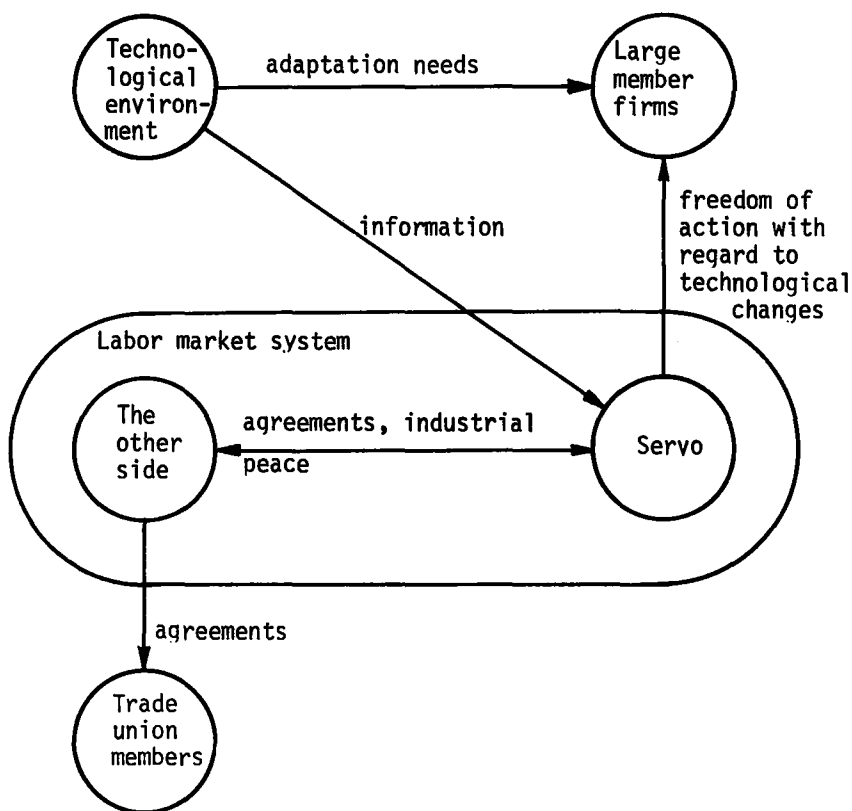
Figure 10:7. Via its Relations with the Other Side, Servo has
been able to Facilitate the Member Firms´ Adaptation
to Changes

All this implies that Servo has taken care of its members´ need
to act relatively freely with respect to wage-rate setting and,
as a result, to adapt to production technolgy. Servo can there-
fore be said to have attained distinctive competence in relation
to its members. As a result, it is likely that Servo´s members
are prepared to defend the continued existence of the organiza-
tion and will not unconditionally permit Servo to become a part
of Contro.

10.1.4 Correspondence between the Values of the Personnel and the Members

The members are critical environmental areas for each of the three organizations. An interesting question is the degree of reciprocity and correspondence in the values of the members and the personnel. This can be investigated by using the coding results of the two open-ended questions about the organization's tasks and future policy that were included in the questionnaire (cf. Appendix B).

Organization / Type of item	Intro Memb.	Intro Pers.	Contro Memb.	Contro Pers.	Servo Memb.	Servo Pers.	Mean rank order Memb.	Mean rank order Pers.
1. Defend against the adversary	1	4.5	3	9	7	7	3	8
2. Influence environment of the industry	8	6	8	6	4.5	7	7	7
3. Public Relations	4	2.5	9	8	8.5	7	8	6
4. Procure resources for the industry	9	7	5	4.5	8.5	5	9	5
5. Establish standards, norms and a system of cooperation	3	2.5	1	1	1.5	2	1	2
6. Represent members in relation to the other side	7	8	2	3	3	4	4	4
7. Improve member firms	6	1	5	2	6	1	6	1
8. Control member firms	2	9	4	7	4.5	7	2	9
9. Provide service to member firms	5	4.5	7	4.5	1.5	3	5	3

Table 10:8. Value Profiles of Different Groups. Rank order on the basis of how often an area is mentioned in the open-ended questions about the policy of the organization (cf. Supplement, Section E).

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Table 10:8 shows the rank order of how often different areas were
mentioned by various groups according to the content
analysis. The number of comments in a certain class can be assumed
to reflect the respondent group´s ideas about which values the
organization should work for. Table 10:8 can then be seen as an
expression of different groups´ conceptions of the organizations´
values. The degree of similarity between the profiles can be esti-
mated with the help of coefficients of rank order correlation.
Table 10:9 shows the results of these calculations. The similarity
between the two profiles increases, the closer a correlation is
to + 1. This holds true under the assumption that Table 10:8 is
a valid and reliable representation of the respondents´ attitudes.
The limitations of this assumption were discussed in Chapter 6,
Section 8.

		1	2	3	4	5	6
1	INTRO-M	-					
2	INTRO-P	.12	-				
3	CONTRO-M	.17	-.18	-			
4	CONTRO-P	-.26	.15	.31	-		
5	SERVO-M	.09	-.03	.33	.44	-	
6	SERVO-P	-.06	.36	.24	.76	.39	-

Table 10:9. Rank Order Correlations (Kendall´s tau) Between
            the Value Profiles of the Different Respondent Groups

On the basis of a method indicated by Coombs (1964, pp. 444-495),
this correlation matrix has been transformed into a two-dimensional
space in Figure 10:10. The similarity between the value profiles
increases, the closer two points are to each other in this space.
The figure shows how the value profiles of the members differ
from those of the personnel. There is also a higher degree of
correspondence between the three organizations as perceived by
the personnel than by the members. The organizations with the

most and the least correspondence between the conceptions of the members and the personnel are Servo and Intro, respectively. The views of Contro personnel agree more with those of Servo´s member firms than Contro´s. The shortest distance found in the figure is between the profiles of Contro´s and Servo´s personnel

M = Member firm
P = Personnel

O CONTRO-M

O SERVO-M

O INTRO-M

X CONTRO-P

X SERVO-P

X INTRO-P
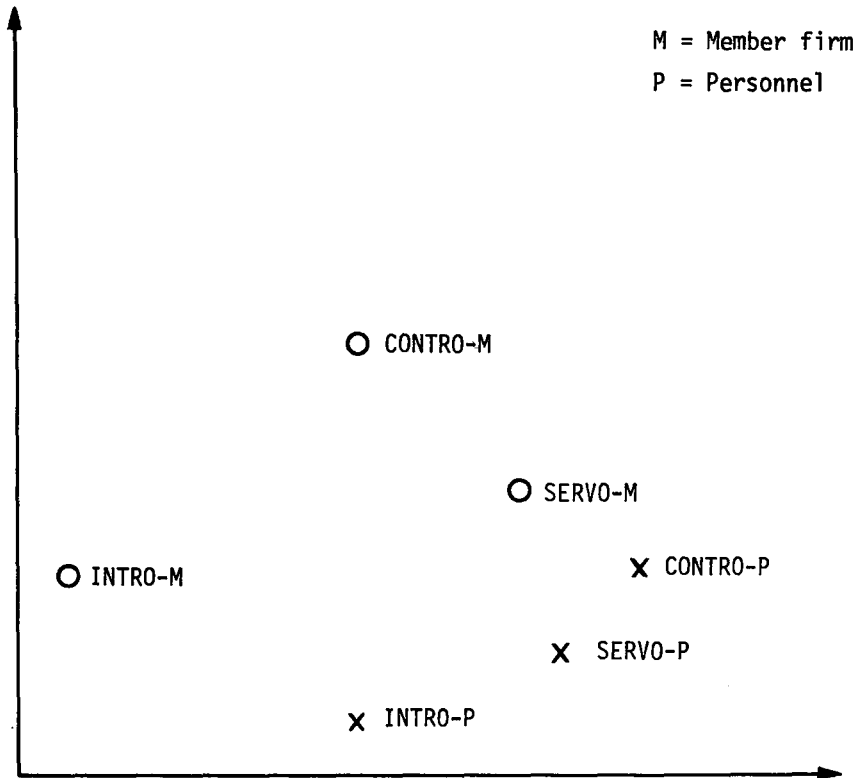
Figure 10:10. Illustration of the Distance Between the Values of Different Groups

The pattern of correlations suggests systematic differences between the value profiles of the personnel and those of the member firms. This is illustrated by Figure 10:11 which is based on the mean rank orders in Table 10:8, column 4. The common field of interest contains standards, norms and a system of cooperation and the organization´s task of representing the members in relation to the other side. In addition, the personnel´s comments have to do with improving and providing service to the firms. The member firms talk about the organization´s controlling function and its task of defending against the adversary.

Personnel´s view   Members´ view

Improve   Norms   Control
member   standards &   member
firms;   system of   firms;
Provide   cooperation;   Fight
service   Represent in   against
             relation to   adversary
             the other
             side
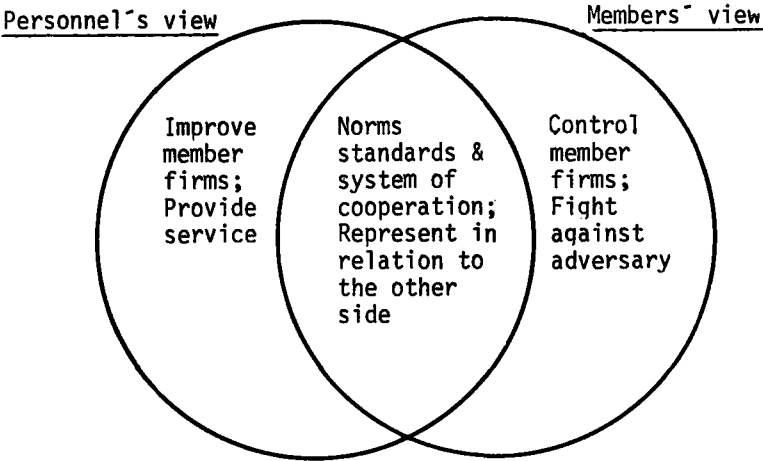
Figure 10:11.   Overlapping and Differences in the Values of the
                Personnel and the Members

10.1.5 Indicators of the Institutionalization Process

So far, in discussing the institutionalization process in the three organizations, I have made several claims. One was that the institutionalization process in Intro has not progressed so that important needs in critical environmental areas could be met. Another is that Contro´s basic values and the concrete structure

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formed during the twenties and thirties have made it difficult for
the organization to meet its members´ more recent needs. As for
Servo, its institutionalization process has gone on in such a way
that the organization can be regarded as having attained distinctive
competence in relation to its members. Table 10:12 shows the
answers to the three questions used as indicators of the institu-
tionalization process. The first two questions are intended as
expressions of the degree to which the respondents identify with
the organization. The purpose of the third question is to measure
how much the respondents agree with the organization´s policy.
The table shows that the attitudes of the personnel and the members
are similar, although the personnel are consistantly more positive.
According to these indicators, Servo has been the most successful
in the institutionalization process. Attitudes towards Intro and
Contro are less positive but the percentages do not show much
difference between these two organizations. As for different
personnel groups, the managers in Intro give much more positive
answers to the indicator questions than the rest of the personnel.
There do not appear to be any marked differences between member
categories (cf. Supplement, Section A, Tables A:3 and A:4).

		Intro	Contro	Servo
a. The organization is developing into an end in itself	Memb	|38.6	|47.8	68.8^x
	Pers	|73.1	|73.6	93.3
b. The organization is much too formal	Memb	61.4	58.4	77.1
	Pers	73.1	73.6	100.0
c. How well does the present policy of the organization correspond to what you think it should be?	Memb	68.4	|69.0	75.0
	Pers	80.7	|94.4	100.0

Table 10:12. Readings on the Indicators of the Institutionalization
Process (Percentage of positive answers; the higher
the figure, the more positive the evaluation; x denotes
a suggestive difference between organizations; | denotes
a suggestive difference between members and personnel.)

Table 10:13 shows that the readings on the three indicators coincide with the distance between the value profiles of the personnel and the members discussed in the preceding section.

Measurement	Servo	Contro	Intro
Mean position according to the indicators of the institutionalization process (cf. Table 10:12)	1	2	3
Distance between the value profiles of the members and the personnel (1 - $\mathcal{T}$, cf. Table 10:9)	0.61	0.69	0.88

Table 10:13. Comparison of the Value Profiles of the Members and the Personnel and Position of the Organization According to the Indicators of the Institutionalization Process

The discussion about the institutionalization process illustrates the assumption that an organization´s ability to attain distinctive competence has to do with its ability to perceive the needs of important environmental areas. These needs are affected by the interacting roles of different environmental areas and by the nature of the interaction between these different areas. Intro´s place in its environment is described primarily by its defense of the members´ interests in relation to a successful adversary. Similarly, Contro´s role is that of an organization aimed at negotiations with the other side in a highly institutionalized system. However, these role descriptions do not meet the needs of all the important groups in the environment. As a result, the organizations´ positions in the environment can be described as unstable. This means that the course of the institutionalization process is also uncertain. Adaptation to the technological environment has been an important need of Servo´s members. By facilitating this adaptation, Servo has been able to attain

distinctive competence in relation to its members.

10.2   The Adaptation Process

In Chapter 4, the adaptation process was said to be related to the
organization's ability to change its strategy in response to changes
in the environment. The ability to detect changes in the environ-
ment is dependent on the search structure. Strategy changes have
to be preceded by definitions of new environmental areas and new
ideas have to be invented for reaching them. The ability to
invent new solutions is related to the development structure.
Changes in the value structure and the concrete structure are
prerequisites for making strategical changes. Whether or not these
changes will take place is contingent on the power structure.

The first part of this section is devoted to describing the three
aspects of the adaptation structure: the search structure, the
development structure and the power structure. This is followed
by a discussion of two types of environmental changes that have had
far-reaching consequences for the organizations during the past
few years. One type of environmental change involves government
intervention and competition from non-private firms. The second
type has to do with marketing changes and technological develop-
ment. The organizations' ability to adapt to these changes is
dealt with primarily on the basis of their respective value
structures. In conclusion, I summarize this discussion in
relation to each of the three organizations and present some
readings on the indicator of the adaptation process.

10.2.1   Search Structure

In Chapter 4, the structure via which the organization can detect
changes in its environment was called the search structure. The
ability to receive information was assumed to increase along with

a rise in the number of information channels between the organization and its environment. The number of information channels was determined on the basis of answers in the questionnaire about the contacts of the different units. This number was set equal to the number of groups in the environment with which at least one unit in the organization had reported a high frequency of contact. Measured in this way, Servo had 11, Contro 9 and Intro 9 channels (see Supplement, Section C). The capacity of the channels was measured roughly by counting the total number of highly frequent contacts between units in the organization and the different given areas of the environment. Intro had 24 such contacts, Servo 22 and Contro 18. The reliability of the channels was measured by comparing the share of the members who regard the personnel as sufficiently well-informed about the firms' real problems. This figure was 54 % for Servo, 31 % for Intro and 19 % for Contro (cf. Supplement, Section A, Table A:2, d).

A particular feature of the questions on which these measurements were based should be kept in mind. The questions were formulated in such a way that the answers probably refer to the continuous information exchange between the organizations and groups in the environment. Thorngren (1969) reports on results that indicate large differences between channels used for matters involving development work and those used for routine exchanges of information. This would mean that different sets of questions are probably required to distinguish between "channels for searching" and "channels for continuous exchanges of information".

Search resources are related to the number of employees whose principal tasks consist of maintaining contact with the environment as a means of searching for information about changes. An estimation of this kind was made on the basis of interviews with the personnel (excluding office workers). This estimate gave the

following results: 8 in Contro (engineering, statistics and man-
power departments 2 each, executive president and legal depart-
ment 1 each); 4 in Intro (top management and PR department 1 each,
economic policy department 2); and 3 in Servo (executive president
1, staff 2). Investigation services commissioned externally are
not taken into account in these estimates although they can also
entail searching in the environment. Owing to their stronger
economic position, the two employers' organizations buy more of
these services than Intro does.

10.2.2 Development Structure

The development structure is said to incorporate research and
development resources and the internal information structure.
Research and development resources can be estimated in terms of
the number of persons inside the organization whose principal
tasks consist of developing new products or technologies for the
organization and its work. Contro was the only one of the
three organization where I found resources of this kind. The
engineering department in Contro is engaged in activities such
as the development of new wage forms.

It was also assumed in Chapter 4 that the adaptation process is
affected by the ability of the internal communication system to
disseminate information and allow for information exchanges
between different units. The probability of new combinations
that lead to new solutions is assumed to grow when the number
of units that exchange information with each other increases.
An easy way of measuring the degree of differentiation in the
communication structure or the ability to disseminate information
to many units, is to calculate the mean number of highly frequent
contacts that each unit has with every other unit. This measure-
ment is dependent on the number of units in the organization and on
the density of the communication network. The mean for Contro

was 4.0 highly frequent contacts per unit, Intro 2.2 and Servo
2.0. Even though all of its units had contacts with each other,
Servo´s contact system was the least differentiated of the three
because of the small number of units.

The quality of the internal communication structure can be measured
roughly on the basis of the personnel´s answers in the questionnaire
that refer to the information they recieve about the organization´s
goals and plans (see Supplement, Section A, Table A:2, e). The
kind of information which is probably most important with respect
to development work has to do with goals and plans (cf. Burns &
Stalker, 1961, pp. 93, 121, 233-234). An additional assumption
in the use of this measurement is that the quality of the different
types of information in an organization is correlated. Knowledge
about the quality of one type of information can provide indications
of the quality of other types.

All of Servo´s personnel, 51 % of Contro´s and 42 % of Intro´s
were satisfied with the extent of the information they received
about the organization´s goals and plans.

In all probability, the questions about the internal information
structure also reflect continuous contacts. However, it might
have been better to distinguish between continuous contacts and
contacts concerning development and change.

10.2.3 Power Structure

The power structure in Intro is characterized by the fact that all
units had relatively little power. This was partly due to their
limited freedom of action in relation to the board. The most
influential employees and units supported the established value
structure. The most important values in this structure are to
defend the members against an adversary, to provide service to

the members and to establish standards, norms and a system of
cooperation. There are no influential or even clearly distinguish-
able groups or units in the organization that work for new types
of values.

There is a traditional value in Contro that the organization´s
task is to represent the members in negotiations with the other
side. This value is embedded in the influential negotiation
department. There is also a more recent value which says that
Contro should improve the firms and establish new wage systems.
The influential engineering department is the main defender of
this value. The manpower and statistics departments also have
a certain amount of influence in the organization and work for
these new values.

Traditional values in Servo are to limit the organization´s efforts
to certain central negotiating tasks and to assist the members in
other types of negotiations. New values have appeared in the
organization during the past few years. These values have to do
with improving and providing service to the member firms and
are advocated mainly by Servo´s top management and the Executive
President.

10.2.4 Government Intervention and Competition from Non-private Firms

The organizations´ means of adaptation were described in the
preceding sections. I now turn to the first of two serious problems
of adaptation experienced by the organizations during the past few
years (see also Section 10.2.5).

The non-private firms´ share of the market has been increasing
for many years. The standard and, to a lesser extent, the heavy
production areas have been affected the most by this trend. Capital

and raw material supplies have been regulated by the government.
The private firms that are the member cadres of the organization
often do not meet the conditions associated with obtaining
access to these resources. The government's actions are often
motivated in socio-economic terms, i.e. the government decision-
makers cannot depend on private enterprise to provide consumers
with satisfactory products at reasonable prices.

Intro has always worked in accordance with a value which says that
government enterprise is an evil for its members and an obstacle
to the welfare of society. Various instances of government inter-
vention have been interpreted as attempts to socialize the industry.
This value has made it difficult for Intro to contribute to the
attainment of government's goals for the industry. The incon-
sistency between the values "defend the members' interests" and
"influence the environment" probably arose out of this development
in the environment (see Table 7:6). Another illustration of how
prevailing values affect adaptive ability is the problem of the
manufacturers in standard production. They were gravely threatened
by the adversary but could not acquire membership in Intro. This
would have been inconsistent with the value that Intro should
only include well-reputed firms. When they were finally accepted
in the early fifties, their affiliation was partly motivated as
being a way for Intro to increase its income. Intro's ability
to help the member firms become more competitive is limited. In
spite of Intro's measures, the market share of the private firms
has decreased. The limitations have to do with the type of
defensive measures directed towards the adversary after the
acceptance of the standard producers. These measures are based on
cooperation between Intro's member firms. In addition, Intro's
service facilities cannot be regarded as having contributed to
the development of more competitive firms. A large share of
the service provided to the member firms is intended to help them

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cope with government regulations.

There are no values deeply embedded in Contro that determine the actions of the organization in relation to the government or non-private firms. There has been some antagonism because Intro has defined many of its relations to the government as part of its jurisdiction area. This prevents Contro from taking measures outside its traditional labor market area which are directed against the government. Since the non-private firms are to some extent associated with the other side in negotiations, it has been difficult for Contro to adapt to the advances of these firms by accepting them as members. As a result, some of the non-private firms have been able to execute employer policies that are more flexible and more effective than Contro´s.

There are no values in Servo about defending the members´ interests against the government or non-private competitors. The value that the members should be allowed to construct their own wage systems has not restricted the firms´ opportunities to adapt to competition. It should be noted, however, that the government has put fewer restrictions on the manufacturers in heavy production than on the standard producers. In addition, the non-private firms do not compete as heavily on the market for heavy products as they do on the standard market.

10.2.5 Market Changes and Technological Development

A second noticeable environmental change during the past few years has to do with demand. The products of the member firms are being demanded in longer series. This makes it possible for the firms to increase the degree of automization. There has also been a speedup in technological development due to initiative and various forms of support from the government. Customers have begun to demand more complete and fully-developed products then

previously. In order to adapt to these new circumstances, the firms have to grow, increase their technological know-how and become more active in marketing and product development. The demand for larger production units has also led to many mergers in the industry. Larger and supposedly more effective units have appeared and many small firms have disbanded. Nevertheless, the industry has not been able to avoid severe adjustment difficulties. There has been overcapacity in the industry during the past few years which has resulted in heavy pressure in terms of prices. Even some of the most efficient firms have incurred a certain amount of loss.

Intro has found it difficult to adapt to these environmental changes. The basic values of the organization arose during the first three decades of the organization´s activity. At this time, the member firms were relatively small, undeveloped in the sense of technology and marketing and did not require large amounts of capital. The firms´ difficulties have long been attributed to external factors. The organization also counted on its own service facilities to support the firms. Some attempts to adapt to technological development have been made via information, education activities and investigations carried out by the production engineering department. But Intro has only been able to do a limited amount of research on behalf of the firms. There are also problems of communicating research results to the firms. The legal department works for the value "establish standards and norms" in areas such as the formulation of new contract provisions. By contributing to the development of new standards and norms, the department has been able to assist the organization in adapting to market changes. The work of the legal department is guided by the value of impartiality, i.e. the large firms should not be favored at the expense of the smaller firms. However, this value makes it difficult for the department to participate actively in speeding up market changes.

There are values in <u>Contro</u> also which are based on the assumption
that the member firms are still small and lack resources for many
managerial functions. The value that Contro should negotiate
with the other side on its members' behalf is embedded in the
rigid concrete structure of the local negotiating apparatus.
This concrete structure corresponds to a similar structure on the
labor side which, in turn, renders Contro's structure even more
rigid. On the other hand, there is a parallel value to the one
that obstructs adaptation which says that the tasks of the
organization should be changed (cf. Chapter 8). This value is
supported in the concrete structure in the form of different
departments in the central office. But adaptation is very
gradual and there have still not been any major changes in
the wage system. Another of Contro's values involves influencing
the education society offers to manpower and the firms' educa-
tional activities for increasing managerial competence. The
less rigid structure in the area of education has resulted in a
higher degree of adaptation than in the case of wage systems.

<u>Servo</u> has strong values which say that the firms manage best by
themselves and that the structure of the organization should not
prevent structural rationalization in the industry. In other
words, these values constitute a "policy of non-intervention"
and imply that Servo's values and structure have not been exposed
to any serious problems with respect to adaptation. Servo has,
however, tried to improve the firms in the area of personnel
administration. Active personnel work has been started in
several firms but there are not yet any clear signs as to whether
these efforts have had any positive effects.

10.2.6 Indicator of the Adaptation Process

The discussion of the adaptation process in the three organiza-
tions can now be summarized as follows:

Intro   The organization has serious adaptation problems. The
         search and development structures are not very advanced.
         There are values that make it difficult to adapt to changes
         in the environment. There are no competing values suppor-
         ted by influential groups. The organization can therefore
         be said to have only slight adaptive ability.

Contro   The organization has serious problems in adapting to its
         environment. It does have some resources for search and
         development. There are well-established, traditional
         values in the organization as well as newer, competing
         ones. Both of these types of values are supported by
         highly influential groups. Prerequisites for organic
         adaptation can therefore be said to exist.

Servo   Because of its relations to the environment, Servo has
         not had many serious adaptation problems. The search and
         development structures are limited owing to the size of the
         organization. On the other hand, there are hardly any
         values or components in the concrete structure that
         obstruct adaptation. Power is concentrated in the
         hands of the employees who advocate change-oriented
         values. As a result, the organization can be said to
         have the ability to achieve planned adaptation. How-
         ever, the concentration of power means that Servo's
         future ability to adapt may be somewhat uncertain.

Table 10:14 shows the readings on the question used as an indicator
of the adaptation process. Of all the questions included in the
questionnaire, this is the one where the evaluations of the
personnel and the members differed the most. In the opinion of
both personnel and members, Servo's ability to adapt is better
than that of the other two organizations.

		Intro	Contro	Servo
Indicator of the Adaptation Process				
f. An organization is constantly required to adapt its activity to changes that affect the industry such as new technolo-	Memb	|42.6	|37.2	| 58.4^x
gical methods, changes in demand, government interven- tion, etc. How much do you think the organization is	Pers	|76.9	|73.6	|100.0
capable of adapting in this respect?				

Table 10:14. Personnel's and Members' Evaluation of the Organizations' Ability to Adapt (Percentage of positive answers; the higher the figure, the more positive the evaluation; x denotes a suggestive difference between organizations; | denotes a suggestive difference between members and personnel.)

10.3 The Exchange Process

According to Chapter 4, the exchange process consists of activities that involve the exchange of contributions and inducements between the organization and the environmental areas, which are called participants. The exchange takes place via established exchange channels. The proposed indicators of the exchange process have to do with maintaining a contribution-inducement balance. This balance exists if a participant thinks he gets as much in exchange from the organization as he has contributed. In order to reach a contribution-inducement balance in relation to different partici- pants, scarce inducements have to be distributed among them. Distribution activities are often characterized by conflict, negotiation and decision-making. These activities are regulated by institutions for solving conflicts.

In order to serve as a guide for measures in an organization, the exchange process has to be described separately for each participant group. This is done in Sections 10.3.1-10.3.3.

The participant groups dealt with are those included in Tables 7.4, 8.4 and 9.4 in the descriptions of the environments of the three organizations. I have not used any formalized methods of measurement to determine the contributions and inducements that are exchanged with a participant. The contributions and inducements are described on the basis of the general descriptions of the organizations in Chapters 7, 8 and 9. The description is also affected by my impressions of the environments of the organizations from listening to top management discussions and from participating in "hearings" with members of the various participant groups.

Exchange channels refer to the concrete structure in which the exchange with participants takes place. In this description, exchange channels are designated as those units in the organization which, according to the communication questions (cf. Supplement Section C), have the most frequent contacts with the respective participant group. The exchange between the three organizations themselves is based on three questions about how they coordinate different activities (cf. Supplement, Section A, Table A:2, g-i). The answers to these questions were used to evaluate the quality of the exchange channels.

No formalized measurement has been used to describe the institutions for solving conflicts. Instead, I depict them on the basis of interview material and descriptions of accepted practice found in various types of documents.

Resources for calculation as a part of the concrete structure were discussed in Chapter 4. They make it possible for the organization

to distribute available inducements in a rational way. These resources are not included here because I did not make any special attempt find out about them in the investigations.

Various measurements have been used as indicators in evaluating the contribution-inducement balance. The members' evaluations of the organization's goal fulfillment were used as an indicator (cf. Supplement, Section A, Table A:2, k). Three questions about attitudes towards the local associations could also be used with respect to Contro (cf. Supplement, Section A, Table A:2, 1-n). The units' mean satisfaction in contacts with different partici- pant groups could be used as a general indicator (cf. Supplement, Section C). Indicators of the course of the exchange process that I was able to obtain from interviews and documents are included in the "contribution - inducement column". I have also tried to summarize the evaluations of different indicators as "positive", "balanced" or "negative". Positive means that I believe the participant group feels it receives more than it gives the organization, balanced means that the contributions correspond to the inducements and negative means that the parti- cipant contributes more than he receives in exchange.

10.3.1   The Exchange Process in Intro

Participant	Contributions	Inducements
Large member firms	Very high fees from the largest firms (the largest pay six-figured fees, the smallest three-figured fees). Support to the organization (which would be demaged considerably if a large firm were to leave).	Political support in action against the state and the adversary. A system for coope-ration between different parties in the industry. Some control of unfair competition among the members.
Small member firms	Increase the size of the organization. Contribute some income, mainly through use of service units.	Technical and legal service. Special companies in Intro assist in business activities such as raw material procure-ment. Membership in Intro means a kind of authorization. General protection for free enterprise and small business.
The members´ customers. (They constitute the most important group on the other side. They can also repre-sent agencies that estab-lish standards and norms since the organization has similar relations to them.)	Recognition of Intro as an agency that establishes standards and norms and of Intro´s right to represent the firms. Commitments that increase Intro´s and the member firms´ security and define premissible competitive means and areas.	The other side can depend on the customers´ commitments to a large extent. Planning on the other side becomes easier.
Contro	Political backing and support via resources for investigation.	Support to Contro on important issues.

Exchange channels	Institutions for solving conflicts	Contribution-inducement balance
Frequency of contact 4.4 (rank 1 of 14). Contact channels: legal, tax, standard production and machine (i.e. all service) departments.	Almost all board members belong to large firms. Direct access to the executive president. Hold the most important positions in the organization's policy groups.	Satisfactory contacts. Evaluation of goal fulfillment: slight. Negative.
Frequency of contact 3.9 (rank 2.5 of 14). Contact channels: legal, tax, standard production and machine (i.e. all service) departments.	Some representation on the board and at annual meeting. Personnel in the organization who are in contact with the firms expected to represent their views.	Satisfactory contacts. The smallest firms' evaluation of goal fulfillment: good. Balanced.
Frequency of contact 3.5 (rank 4 of 14). Contact channels: top management; PR, legal and machine departments.	A number of committees and agencies that establish standards and norms. Recurrent negotiations and deliberations. Arbitration courts and law courts.	Satisfactory contacts. Relations on the whole described as very good. Positive.
Frequency of contact 2.9 (rank 5 of 14). Contact channels: top management; business policy, legal and machine departments. Poor coordination between the two organizations.	Direct negotiations or informal contacts between employees and board members.	Not very satisfactory contacts. Organization has repeatedly had difficulties in cooperating. Negative.

10.3.2   The Exchange Process in Contro

Participant	Contributions	Inducements
Labor counterpart	Industrial peace. Provide work for the negotiating apparatus and income for the organization.	High level of earning for labor. Considerable influence on labor. Work and income for the organization of the other side.
Large member firms	Income. Freedom of action such as possibilities for wage-technical development work.	Industrial peace and agreements with the other side. Effective control of manpower. Access to well-educated manpower.
Small member firms	Give the organization the opportunity to control wages in its jurisdiction area. Large part of Contro's income. Prerequisite for the continued existence of the local associations.	Industrial peace. Assistance in setting wage rates. Influence in Contro via local associations.
The local associations	Control and negotiating work in the firms. Some participation in vocational training.	Income and opportunities to work for various aims. Influence in Contro.
Servo	Opportunity via Servo to test new solutions. Joint use of staff resources. Joint action in labor market area.	Joint use of resources and results. Avoid competing in Servo's area of jurisdiction.
Intro	Support action on important issues such as government controls or research.	Contro's resources for investigations. Contro's political influence.

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Exchange channels	Institutions for solving conflicts	Contribution-inducement balance
Frequency of contact 3.1 (rank 5 of 14). Contact channels: negotiation and legal departments, time and motion study group.	Negotiating apparatus. Arbitration board. Labor court. Organized agreement negotiations on national level. Activity coordinated by Labor Market Board.	Fairly satisfactory contacts with the other side. Relatively high level of disputes. Balanced.
Frequency of contact 3.3 (rank 3.5 of 14). Contact channels: negotiation, engineering and legal departments.	Representative system has three successive levels for solving conflicts. Board is forum for negotiations with the most important members. Members participate in some committees.	Satisfactory contacts with member firms. Firms´ evaluation of goal fulfillment: relatively low. Large firms critical of local associations. Negative.
Frequency of contact 3.3 (rank 3.5 of 14). Contact channels: representatives; time and motion study group; legal department. Also high frequency of contact with local associations.	See above under large member firms. Small firms also have influence in the board via the representative system.	Not very satisfactory contact. Evaluation of goal fulfillment: relatively low. Evaluation of local associations: relatively positive. Balanced.
Frequency of contact 3.5 (rank 2 of 14). Contact channels: representatives; engineering and legal departments.	Contro´s representative system. Can also introduce matters directly to Contro´s board.	Not very satisfactory contacts. Local associations´ evaluation of goal fulfillment: low. Tend to have a negative attitude towards Contro. Negative.
Frequency of contact 3.9 (rank 1 of 14). Many different units are involved in the contacts. Evaluation of coordination with Servo: good.	Emp.Conf. as mutual superior body. Contacts between employees. Continuous contact improved during the past few years.	Satisfactory contacts with Servo. Positive.
Frequency of contact 2.6 (rank 6 of 14). Contact channels: engineering, legal, statistics and labor market departments; executive president. Not very good coordination with Intro´s activities.	Direct negotiations or informal contacts between employers and board members.	Not very satisfactory contacts. Previous difficulties in cooperating still exist. Negative.

10.3.3   The Exchange Process in Servo

Participant	Contributions	Inducements
Large member firms	Large part of income direct via fees and indirect via insurance. Prestige - the large heavy producers' organization. Freedom of action.	Industrial peace and agreements. Opportunities to introduce new production methods.
Small member firms	Association of many firms provides better opportunity to control wage develop-ments.	Industrial peace. Assistance in negotiations. Support in personnel administrative matters.
Labor counterpart	Industrial peace. Favorable attitude towards technologi-cal changes.	Industrial peace. Support against other trade-union organizations.
Non-manual labor counterpart	Compromise settlements without aggresive partisan action.	Willingness to discuss problems other than salaries. Prepared to support management against labor. Educational and infor-mation activities aimed at getting supervisors to parti-cipate in management.
Contro	Investigation and other resources. Deliberations concerning joint action on various matters. Joint ac-tion in labor market area. Freedom from interference in Servo's own jurisdiction area.	Opportunities to try out new settlements via Servo without partisan interference. Joint use of staff resources.

Exchange channels	Institutions for solving conflicts	Contribution-inducement balance
Frequency of contact 4.6 (rank 1.5 of 14). All units are points of contact.	Dominating influence in the board.	Relatively satisfactory contacts with large member firms. Evaluation of goal fulfillment: positive. Positive.
Frequency of contact 3.2 (rank 9 of 14). Contact channel: staff department.	Small member firms have limited formal influence in the board owing to their small no. of votes and the dominance of large firms.	Not very satisfactory contacts with small member firms. Evaluation of goal fulfillment: relatively positive. Positive.
Frequency of contact 3.3 (rank 7.5 of 14). Contact channels: negotiation department and executive president.	Negotiating apparatus divided into two parts: regional and central negotiations. In addition, arbitration court and labor court. Deliberations organized by the gvt. for planning the firms' investment activity.	Satisfactory contacts. Not very many disputes. Some difficulties due to the fact that the other side is divided into two associations. Balanced.
Contact channel: manager of negotiation department.	Disputes can be dealt with any time outside of the regularly recurring central negotiations. Board has also been involved in this type of settlements.	More or less frictionless contacts with non-manual workers' organizations, although they have developed a more aggressive attitude during the past few years. Positive.
Frequency of contact 3.6 (rank 5 of 14). Main channels: top management and staff department. Evaluation of how well the two organizations coordinate activities: negative.	Empl.Conf. is mutual superior body. Informal deliberations between managers.	Varying evaluations of the satisfactoriness of contacts. Definite improvement in comparison with the past. Evaluation of Contro's local associations: negative. Balanced.

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10.3.4 Indicators of the Exchange Process

Table 10:15 shows the evaluation of the contribution-inducement balance for the different participants in the organizations. It has already been noted that the exchange process should be analyzed separately for each participant. This means that conclusions about how well the processes go on in the organizations cannot immediately be drawn from the table. Naturally, the number of participants included in each selection affects the number of positive, balanced and negative evaluations. In addition, relations to the different participant groups are not of equal importance. It can be maintained that Intro's negative balance in relation to the large member firms is a much more serious problem than its negative balance in relation to Contro.

A description of this nature can be used to look for potential improvement in the contribution-inducement balance. There are various ways of bringing about such improvements. The organization's expectations regarding the amount of contributions from a certain participant may be lowered. An example from Intro is that the organization tried to reduce the share of income that had to come from the large firms. Another alternative is to make changes in the way available inducements are distributed among the participants. An example from Contro is that, for the large member firms, the importance of the inducement "negotiating activity" decreased while that of the inducement "better wage forms" increased. Resources for calculation can be used to help make these redistributions. This entails the ability and resources to investigate alternative actions. Still another alternative is to improve the contribution-inducement balance in relation to a participant through better or increased use of institutions for resolving conflict. There are examples of this in each of the organizations in the form of groups for information and consultation with different participants.

Organization	No. of partici-pants covered	Evaluation of the contribution-inducement balance		
		Positive	Balanced	Negative
Intro	4	1	1	2
Contro	6	1	2	3
Servo	5	3	2	0

Table 10:15. Evaluation of the Contribution-inducement Balance in the Organizations' Exchanges with their Participants

10.4 The Control Process

The control process is an expression of the need to coordinate activities in the organization. In this study I am primarily interested in the coordination of information processing activities. Different units were described in Chapter 4 in terms of how they influence each other's activities by transmitting information. An account of the appearance of the communication structure is an important element in the description of the control process. The administrative structure also affects the control process.

In Chapter 4, the control process was said to function well if the actual outcome agreed with the result anticipated by the controlling unit. If different units have poor conceptions of each other's values, the information transmitted between them is not likely to have the intended effect. The Michigan group (Georgopoulos & Mann, 1962 and Wieland, 1965) has shown that these kinds of defects in the control process are expressed in terms of increased strain in communication between the units. I have therefore used strain and satisfaction in the contacts between different units as indicators of the control process.

Flexibility has also been used as an indicator. This refers to
the organization's ability to cope with sudden variations in the
amount of work. This quality is assumed to be related to the
ability to exchange information rapidly and to the units' ability
to alter their behavior program in response to information
received. Effectiveness in the use of the organization's scarce
resources is also assumed to be directly related to the control
process. The better the control process functions, the less
scarce resources are wasted. For this reason, some questions about
the units' and the organizations' effectiveness have also been
included as indicators of the control process.

10.4.1 The Communication Structure

The communication structure affects the control process. Numerous
studies have been devoted to developing measurements to describe
the communication structure in organizations (see e.g. Massarik,
et al., 1953; Weiss & Jacobson, 1955; Glanzer & Glaser, 1959;
Ramström, 1967; Thorngren, 1967 and Shaw, 1964). Graph theory
is regarded as one alternative for developing a formalized
language to describe communication structures (see Harary et al.,
1965). I have not tried to make any systematic evaluation of the
measurements proposed for describing the communication structure.
The measurements are discussed mainly for illustrative purposes.

The degree of centralization or decentralization in the exchange
of information between units is a measurement that can be used
to give a summary description of the communication structure.
Decentralized information exchange is considered preferable when
the tasks of different units are highly interdependent and when
existing time restrictions permit information exchange. A
centralized exchange seems more suitable when there is only
serial interdependence (cf. Thompson's concept of "long-linked
technology", 1967) or when heavy time restrictions prevent

decentralized information exchange.

In the three organizations investigated, the units themselves are expected to initiate and execute projects. In addition, these projects are supposed to be compatible with tasks carried out by other units in the organization. This means that a decentralized communication structure, where each unit gathers information from several other units but makes independent decisions, is assumed to be preferable in these organizations. The degree of decentralization has been estimated by calculating the variance in each unit's mean frequency of contact with other units in the organization. The lower this variance, the higher the degree of decentralization. This measurement reveals that Intro has the lowest degree of decentralization (see Table 10:16).

Concentration of influence is another measurement that can be used in a summary description of the communication structure. Scattered influence is assumed to be preferable to influence concentrated to a few key units in organizations with tasks similar to the ones discussed in this study. This is because units in these organizations have to safeguard and work for different types of values. For this purpose, they need freedom to work out their activities by themselves. The necessity for dispersed influence is also emphasized by the way the different units are manned. In the organizations investigated, the personnel in a unit are usually supposed to have a professional background and education that facilitate working for certain types of values. Many studies have shown that effectiveness in professionalized teams is higher when the members of the group have a fair amount of influence in working out their own tasks (see, e.g. Stinchcombe, 1959; Blau, 1955 and Blau, Heydebrand & Stauffer, 1966).

The degree of influence of each unit in the organizations was measured in terms of the average importance all the groups attribute to each particular unit. The variance in the units' importance was then used to estimate the degree of concentration of their influence. The lower the variance, the less the concentration of influence. Table 10:16 shows that the differences between the organizations are relatively small. Influence is concentrated the most in Intro and the least in Servo.

The communication structure is determined to a large extent by the administrative structure. A number of questions about the administrative structure were included in the questionnaire (the wording of these questions was influenced by Georgopoulos & Mann, 1962). They refer to control and leadership, how the administration supports the execution of the employee's own tasks, how different work areas are adapted to each other and how planning and coordination are worked out. Table 10:16 shows that there is no perfect correlation between these measurements. On the average, the most negative evaluations were found in Contro.

If the units have very different expectations of each other's behavior, the control process cannot be said to function very well. Different expectations mean that the information transmitted does not correspond to the needs of a particular unit. In addition, plans already decided upon might have to be discarded repeatedly. The extent to which expectations coincide can be estimated on the basis of the number of inconsistencies in the organization's values. Estimates of the number of inconsistencies in values on the strategic level were made in Figures 7:6, 8:6 and 9:6. According to these estimates, Intro had 7, Contro 3 and Servo 1 of these inconsistencies between strategic values.

	Intro	Contro	Servo
Decentralization (Variance in the different units´ frequency of contact)	0.6 (3)	0.1 (2)	0.0 (1)
Concentration of influence (Variance in the importance attributed to contacts with different units)	0.3 (1)	0.2 (2)	0.0 (3)
Control and leadership in work (percentage of the respondents´ positive evaluations)	92% (2)	93% (1)	87% (3)
Administrative support of the employee´s own tasks (percentage of positive answers)	85% (2)	83% (3)	93% (1)
Mutual adaptation of different work areas (percentage of positive answers)	62% (1)	36% (3)	47% (2)
Planning (percentage of positive answers)	42% (2)	34% (3)	73% (1)
Coordination (percentage of positive answers)	50% (1)	26% (3)	40% (2)

Table 10:16. Measurements of the Communication and Administrative Structures (the figures in parentheses refer to the rank order of the organizations; cf. Supplement, Section A, Table A:2,o-s)

10.4.2 Indicators of the Control Process

A list of the indicators used to estimate how well the control process goes on in the three organizations is shown in Table 10:17. The indicators do not reveal any full measure of agreement between the three organizations. On the average, Servo is first and Contro last. The expectations stated in the discussion about the communication structure conform to the general trend of the indicators. Thus the results give some support to the assumption about a connection between the communication structure and indicators of the control process.

Indicators	Intro	Contro	Servo
Average strain in contacts between units	1.5 (2)	1.6 (3)	1.2 (1)
Average satisfaction in contacts between units	3.4 (2)	3.2 (3)	3.6 (1)
Flexibility (percentage of positive evaluations)	85% (2)	83% (3)	87% (1)
Unit´s contribution to the fulfillment of the organization´s objectives (percentage of positive answers)	77% (3)	77.3%(2)	86.6%(1)
Unit´s effectiveness (percentage of positive answers)	80.7%(1)	47.1%(2)	46.7%(3)
Organization´s effectiveness (percentage of positive answers)	73.1%(1)	56.6%(2)	60% (2)

Table 10:17. Indicators of the Control Process (the figures in parantheses refer to the rank order of the organization according to respective measurements or indicators; cf. Supplement, Section A, Table A2:t-x).

The results, however, are uncertain. One reason for this is the unreliability of the measurements used (cf. Chapter 6, Section 9.3). Another reason is that the theory and the measurements used are somewhat incongruent. The observation that Contro, which is the largest and most differentiated organization, has the most problems with respect to the control process while Servo, which is the smallest of the three, has the least problems, suggests an alternative explanation of the results. This observation could be inserted into the scheme used by Lawrence & Lorsch (1967) to explain differences between organizations. They maintain that communication difficulties in an organization become greater as the differentiation between the tasks of the various units increases. They also say that increased differentiation involves

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greater demands on the communication structure in terms of a higher degree of integration.

In Chapter 1, I mentioned the fact that the matter of inconsistencies in the value structure was of considerable importance when I began to plan this study. I assumed that the existence of value conflicts would cause communication difficulties. According to the estimates, Intro has the highest number of value conflicts. Despite this, the control process functions best in Intro in many respects according to the personnel. I do not have enough data to give any further explanation as to why the anticipated relationship between value conflicts and communication difficulties could not be observed. I can only suggest a few possible explanations. One is that the methods used to measure value conflicts and/or communication difficulties are unreliable. Another is that the personnel are not necessarily aware of the fact that there are conflicting values in the organization (cf. Rhenman, 1969b). Still another explanation is that the defense value in Intro has such high priority that the necessity of weighing it against other values never even arises.

10.5 The Reward Process

In Chapter 4, the reward process was said to consist of activities that involve rewarding or sanctioning the behavior of the personnel. This process aims at reinforcing the personnel to behave in accordance with the organization's values and to exert energy in their work for the organization. The willingness to exert energy in a job situation, i.e. the degree of motivation, depends on several factors. One of these factors is the individual and his needs. Another is the rewards and sanctions in the job situation. The individual's motivation to work is also affected by whether or not he thinks there is any connection between his behavior in the work situation and his chances of obtaining different kinds of rewards. An additional factor has to do with whether or not

the individual thinks his needs can be satisfied by the rewards
made available in the job situation.

This section deals with some of the characteristic features of
the organization's reward structure. First, behavior aimed at
achieving conformity with certain symbols is compared with behavior
aimed at attaining more proximate kinds of need fulfillment.
Then the different sources of satisfaction and dissatisfaction
that, in the opinion of the personnel, exist in the organization
are discussed. This is followed by a brief account of the
promotion system which is an important component of the organiza-
tions' reward structure. The last part of this section deals with
the results of the two questions used as indicators of the reward
process.

10.5.1   The Importance of Common Symbols

In Chapter 5 it was noted that, using Etzioni's terminology, the
organizations investigated have elements of "normative organizations".
The personnel in organizations of this kind are assumed to be
prepared to exert energy so that their behavior conforms to certain
symbolic expressions instead of directly satisfying their needs.
The extreme instance of this type of motivation is the disciple
who becomes a martyr for an idea (cf. also von Bertalanffy's dis-
cussion, 1967). In organizations structured on this type of
reinforcement there is generally no mention of recruitment in
the usual sense but of a "calling". The rules for choosing are
usually highly selective in order to sort out those without a
calling.

Considerable importance was attributed to certain symbols in the
three organizations. It was taken for granted that recruitment
functioned so that the personnel would be made up of individuals
who advocated a non-socialized economic system. There were

other examples of the importance of symbols and special norms.
Since the employers´ organizations participate in setting wages
for others, it is assumed that the organizations´ own personnel
are uninterested in their salaries. Several of the interviewees
in the employers´ organizations mentioned a norm according to
which they were not supposed to talk about their own salaries..
This norm was motivated in the following way. The negotiator´s
impartiality would be lost if he became so interested in his own
salary that he let the other party receive a raise just so that
he could ask for one himself. These symbols and norms appeared
to make new personnel highly uncertain as to how they stood in
relation to other personnel categories in the organization and
as to how they could improve their status.

10.5.2 Sources of Satisfaction and Dissatisfaction

The content analysis of two questions can provide some idea of
the reward structure in the three organizations. In the question-
naire, the personnel were asked:

- What do you find most satisfying about your job?
- What do you find most dissatisfying about your job?

The answers to these questions were sorted into a number of
categories constructed on the basis of previous investigations
about job satisfaction and dissatisfaction (cf. Chapter 6,
Section 8.4). The classification scheme was revised in terms
of what seemed relevant for the personnel in the organization.
Table 10:18 classifies the results of the content analysis
of these questions. Each of the categories are commented on
below.

In many investigations, the category relations to others proves to
be an important motive with regard to understanding the behavior
of the personnel. Relations to others might say something about

which groups the personnel identify with and whose expectations
they try to meet. Behavior on the factory floor, for instance,
has been explained by the fact that the employees identify more
with their fellow-workers and with the labor movement than with
the management of the firm (cf. Lysgaard, 1961). In hospital
systems, it has been shown that some professional groups obtain
satisfaction in their jobs from contacts with patients while others
find relations to their colleagues more important (cf. Rhenman,
1969a, Chapter 6).

Category	Sources of satis-faction			Sources of dissatis-faction		
	Intro	Contro	Servo	Intro	Contro	Servo
Relations to others	47	40	41	36	30	42
Nature of job	24	37	37	40	19	32
Work results	12	15	15			
Indirect satisfaction	18	9	7			
Structure and policy of the organization				14	30	11
Information				11	16	16
Other					5	
Total	101%	101%	100%	101%	100%	101%
No. of answers	51	104	27	28	76	19

Table 10:18. Sources of Satisfaction and Dissatisfaction in Work
among the Organizations' Personnel. Percentage of the
total number of answers. The majority of respondents
gave one answer to each question, but when two or
more sources were indicated, these have also been
counted as answers.

Table 10:18 shows that according to the questionnaire, the most
important source of satisfaction in the three organizations is
relations to others. Cooperation with others in the organization

was mentioned most often in this context. The "relations to others" category is also an important source of dissatisfaction in each of the organizations. The personnel in Intro and Servo think that relations to the member firms are the most dissatisfying. Contro's personnel regarded relations to others in the organization and to the other side as the most dissatisfying.

Answers that have to do with satisfaction or dissatisfaction obtained from the job as such have been placed in the category called nature of job. Results of many investigations show that the less repetitive and more independent the job, the more it serves as a source of satisfaction to the individual who performs it (see Walker, 1962 and Ford, 1969). The nature of job was second on the list of categories most frequently mentioned as a source of satisfaction. The most common answers in this category emphasize varying or interesting tasks or independent work. The kind of job is also a source of dissatisfaction in Intro and, to some extent, in Servo. Intro's personnel stressed that their work loads were much too heavy. Servo's personnel indicated tasks they did not feel they could cope with as sources of dissatisfaction.

Answers put in the work results category have to do with the satisfaction of taking part in achieving results. Work results were mentioned to some extent as sources of satisfaction in each of the three organizations.

Sources of satisfaction that can be assumed to lie outside the immediate job situation were assigned to the indirect satisfaction category. The most common answer was a good salary. This source of satisfaction was mentioned more by the personnel in Intro than in Contro or Servo.

<u>Structure and policy of the organization</u> can be conceived of as
restrictions on the individual's freedom of action. At the same
time, this category defines the individual's tasks in the organiza-
tion. Since the organization's policy and structure make up the
conditions that surround the individual's work, they are not usually
sources of satisfaction. On the other hand, policy and structure
can lead to dissatisfaction when there are defects in the system
(see Herzberg et al., 1959). <u>Information</u> can also be regarded as
an aspect of the organizational structure. The lack of informa-
tion was mentioned as a source of dissatisfaction so frequently
that it has been assigned a category of its own in Table 10:18.
"Structure and policy of the organization" was mentioned the most
in Contro as a source of dissatisfaction. But then, of the three
organizations, Contro's administrative structure is the most
complex.

In sum, the answers to the two questions about job satisfaction and
dissatisfaction give the impression that personal contacts are
of decisive importance to the satisfaction of the personnel in all
three organizations. Certainly, this cannot be explained merely
by the employees' personal dispositions. The organizations'
technology and the rewards they offer also have to be examined.
Technology in the three organizations is not aimed at producing
tangible things as it is in a manufacturing firm. Nor is it meant
to produce information as it is in a research institute. Activity
is to a large extent aimed at producing good relations with
different parties. There are often no operational ways of
measuring the success of a particular individual, unit or organiza-
tion as a whole. Feelings of satisfaction therefore become depen-
dent on how the member firms, colleagues or the other side conceive
of what has been achieved. In addition, the organizations are
structured so that the individual has a relatively large amount
of freedom in executing his job. This also yields a feeling of

satisfaction. There is still not much of an administrative apparatus in Intro and Servo that appears to be in conflict with personal freedom.

10.5.3 The Reward System

The job hierarchy depicted in Figure 10:19 gives a rough picture of how differentiated the organizations are with respect to the prestige attributed to different jobs. The hierarchy also contains information about the reward system since the possibility of increased prestige can be a motivating factor. The organizations´ ability to reward their employees by promotion differs from one personnel category to the next. The top jobs in each of the three organizations are actually only open to university graduates. There are several career levels to which the university graduate can advance in the employers´ organizations. He can also switch from his own association to other units in the Employers´ Confederation. University graduates can advance in Intro as well although the total number of positions is less. In addition, graduates in all three organizations probably have good chances of being hired by other organizations or firms.

The reward situation for non-university graduates is quite different. These other job-holders usually have a specialized type of job in each of the three organizations. They are negotiators, experts on standard production, piece-rate inspectors, etc. Owing to Contro´s complex negotiating apparatus, a representative can advance several levels. Servo´s organizational hierarchy is hardly rational from a division of work point of view but is structured in order to provide promotion opportunities. However, the possibility for employees without a university degree to advance to central posts is very limited.

Their chances for advancement outside the organizations are also limited by the specialized nature of their jobs. One possible effect of this reward structure might be opposition to changes which curtail the usefulness of special know-how. Personnel groups that are treated unequally by the reward system will also tend to have widely different values.
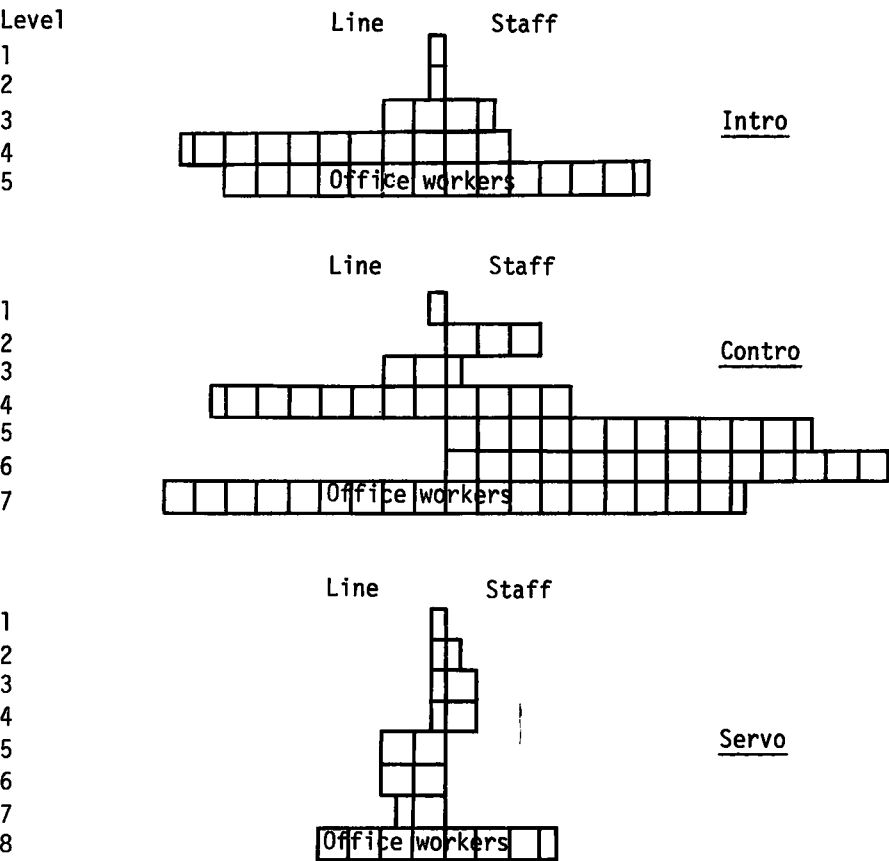

= 2 persons

Figure 10:19. Hierarchical Structure of Intro, Contro and Servo

10.5.4 Indicators of the Reward Process

The discussion so far suggests that the reward process is more or
less similar in the three organizations. There is no reason to
assume that the process indicators will show any pronounced
differences between the organizations. The reward process can be
expected to function better on the higher hierarchical levels in
the organizations than on the lower levels. The two questions used
as indicators of the reward process are shown in Table 10:20.
The first is an attempt to measure how attractive the organization
is to the personnel by asking whether they think the different
employees are well-qualified for their jobs. The second indicator
is represented by a question about the degree of recognition and
appreciation. The table shows that the readings on the indicators
are fairly similar in all three organizations. The differences
between managers and others are also relatively small (cf.
Supplement, Section A, Table A:2, y-z).

	Intro	Contro	Servo
Do you think the different jobs in the organization are held by persons with the right education and qualifications?	84.6	73.6	100.0
How much recognition and appreciation from others in the organization do you think you receive in your work?	50.0	35.9	46.7

Table 10:20. Indicators of the Reward Process (percentage of the
personnel who gave positive answers to the question)

10.6 Summary

I will now summarize the main results of the discussion about the
five processes.

10.6.1 The Institutionalization Process

The description has shown that it does not suffice to depict the
organization´s role in society in terms of bilateral relations to
different environmental areas. The organization´s ability or
inability to become indispensable to its environment is linked to
the possibility of maintaining relations with several environemtal
areas simultaneously. These other environmental areas have
different types of relations to each other. The role of a particu-
lar organization in the surrounding society becomes important when
its activities fit into and complement patterns in the larger system.

Many strategic values in each of the three organizations emerged
during their first few decades of existence. The organizations
have - in varying degrees - fulfilled a function in relation to
their environments. Some parts of the environment have changed
considerably since the organizations were founded. This applies
especially to what can be called the "technological environment"
and the "political environment". The basic values in Intro and
Contro have made it difficult for these two organizations to define
their roles in this changed environment. This is primarily
because the organizations have not been able to play a role that
would support their members and other environmental areas
simultaneously.

10.6.2   The Adaptation Process

The organizations´ ability to change their strategy was dealt with
in connection with the adaptation process. Each of the three
organizations has very different methods of adapting. Their
ability to adapt also varies. Contro appears to have the most
resources for adaptation. There is a great deal of power in
groups that work for traditional values as well as in units that
support new values. Contro is therefore regarded as having the

ability to achieve "organic adaptation". In Servo, considerable
power is concentrated in the hands of management, which works for
a number of new ideas. Servo can therefore be said to have the
ability to achieve "planned adaptation". In Intro, most of the
units lack substantial influence. In relative terms, those which
are the most influential support the established values of the
organization. Moreover, the development resources of the organiza-
tion are limited, so that it seems to lack adaptation ability.

10.6.3 The Exchange Process

The best way to study the exchange process is to examine each
participant separately. The analysis of contributions and
inducements could produce ideas about how defects in the exchange
balance could be corrected.

10.6.4 The Control Process

The discussion about the control process resulted in some un-
answered questions. The value of developing detailed measurements
of the communication flow between units is perhaps rather
limited. More comprehensive measurements of communication
systems and control requirements should probably be used instead.
This was exemplified by the explanations of the control process
proposed by Lawrence and Lorsch. Their approach involves
the concepts "differentiation" and "integration". The usefulness
of concepts of this type is supported by the observation that
Contro, which is the most differentiated and complex of the three
organizations, has the greatest problems with the control
process.

10.6.5 The Reward Process

The three organizations are rather similar with respect to the
rewards they offer their personnel. The special reward system
that characterizes the three has elements of a "normative organiza-

tion". This means that the personnel derive satisfaction from
working in accordance with certain symbols and ideals. Contacts
with others and the opportunity to perform tasks independently
are also important sources of satisfaction. There is similarity
not only in the nature of the rewards in the three organizations,
but also in the readings on the indicators of the reward process.

10.6.6 Internal and External Effectiveness

The institutionalization, adaptation and exchange processes were
said to be related to external effectiveness. The control and
reward processes were said to be related to internal effectiveness.
Most of the organizations' difficulties seem to originate in the
institutionalization and adaptation processes. I did not find
the control process to be characterized by any serious communica-
tion problems. Nor could I see signs of a widespread lack of
motivation. The conclusion drawn from these observations is that
the organizations' problems – especially with respect to Intro
and Contro – are related to external effectiveness.

CHAPTER 11. SUMMARY AND CONCLUSIONS

In this final chapter, I will try to summarize the discussions
and conclusions in this study. In a section on the purpose
of the model presented, I state some requirements that I think
should be met by a model suitable for diagnosing the effective-
ness problems of organizations. Experiences associated with
concepts used and methods of collecting data are presented in
another section. A concluding section suggests how the proposed
model can be improved.

11.1 The Study as a Learning Process (Chapter 1)

It is argued in Chapter 1 that the study has two main purposes. The
first is to develop a "model" or "language" suitable for describing
organizations and discussing their effectiveness problems. The
second purpose is to give a fairly detailed description of three
organizations. The study is also said to have two bases which
developed into a more integrated frame of reference as the study
progressed. The first basis was that the organization is regarded
as a system aimed at reaching definite goals. The second basis
was that the organization is regarded as a system aimed at survival
and adaptation. The introductory chapter also contains an account
of the concepts and expectations about relationships between
concepts which were parts of my initial frame of reference. I
also indicate how my frame of reference changed and evolved as a
result of new knowledge gained from data and contact with the
research of others. This study is similar to most empirical
studies in that it was a learning process through which it became
possible to acquire new knowledge.

11.2 Suggestions for a Systems Model (Chapter 3)

A systems model for organizations is presented in Chapter 3.

Organizations can be described as open, goal-directed systems.
The boundary between the organization and its environment can
be defined in different ways. An organization has different
types of relations with its environment. Resources and information
that are necessary for the continued existence of the organization
are supplied from the environment. Exchanges with the environment
take place via certain processes. Other processes consist of
activities which go on in the concrete structure composed of
people, machines and the relations between them. The processes
are controlled by the value structure, which is an expression
of the purposes different individuals set up for their own and
others' activities in the organization.

The survival of the organization is threatened in many ways:
Changes take place in the environment which render the processes
inadequate. The concrete structure can give rise to internal
communication difficulties. The value structure often contains
inconsistencies.

The structure of the organization is differentiated and developed
through different processes so that its tensions and tendencies
towards disintegration are counteracted. The processes can
therefore be regarded as conditions of existence for the organiza-
tion. This means that the effectiveness of an organization cannot
be summarized through the use of a single comprehensive measure-
ment. It is suggested instead that indicators be formulated that
show the degree to which each of the required processes goes on
satisfactorily. Readings on these indicators make it possible
to determine if and in what respects a particular organization
functions unsatisfactorily. Certain guides to the type of measures
required to improve the way the organization functions can also
be obtained.

It is also argued in Chapter 3 that there is generally a certain margin for choosing the goals an organization should work towards. The choice of goals puts certain restrictions on the processes and consequently, on the possibility of achieving effectiveness. But the correctness of goals can never be determined by analyzing the effectiveness of the organization. Desirable goals have to be stipulated by those who want to use the organization as a tool. Conversely, this conclusion means that those who, owing to their position, can use an organization as a tool have reason to contemplate the purposes for which the organization is being used.

11.3 Five Essential Processes (Chapter 4)

Five processes are discussed more elaborately in Chapter 4 on the basis of the literature on organization theory. Determination of the processes which are essential to the survival of the organization probably depends on the situation in which a particular organization finds itself. Results of empirical research indicate that the processes chosen are important in the kind of organization and environment investigated in this study.

1. The institutionalization process consists of activities through which the organization becomes an indispensable part of a larger social system.

2. The adaptation process consists of activities through which the organization changes it strategy. This take place via the search for new targets and the invention of new key ideas.

3. The exchange process consists of activities which involve the continuous exchange of contributions and inducements between the organization and its participants.

4. The control process consists of activities which result

in coordination of different parts of the organization.

5.   The reward process consists of activities which result in
     the reinforcement of individual behavior.

Values and elements in the concrete structure that are essential
to the different processes are dealt with in this chapter.

11.4 The Description Depends on What is being Described (Chapter 5)

Different typologies can aid in describing a specific organization
and its problems. But each organization is composed of so many
different elements that it has to be described as a system with
many unique aspects. The language developed in Chapters 3 and
4 can therefore be regarded as having been influenced by my
intention to describe the three organizations investigated.
This means that, without alterations, the language cannot be
applied directly to descriptions of other organizations.
Chapter 5 also contains a brief presentation of the three
organizations.

11.5 Methods of Observation and Data Collection (Chapter 6)

The ways in which data were collected, processed and used in the
descriptions are accounted for in Chapter 6. Data were gathered
through personal interviews, questionnaires and documents. Content
analysis was performed on material from the interviews, open-ended
questions and documents. The multiple-choice type questions were
processed on a computer in order to compare different groups.

It is argued that the relevance of the model presented and the
descriptions made is influenced by two factors. The first is
whether other models exist which are suitable for solving the
same type of problem. The second factor is whether competent

judges regard the proposed model as usable in a certain situation.

11.6 Intro (Chapter 7)

The three organizations studied are described in Chapters 7-9.
The first of these, Intro, originated in order to protect the
interests of the member firms in negotiations with buyers, the
government, etc. A large part of the activity of the organization
has been affected by the fact that a number of cooperative,
municipal and state-owned firms compete with Intro´s members.
An important value in Intro is that the interests of the members
should be defended in relation to "the adversary". This value
is expressed in concrete terms by special units. Since many
representatives of the adversary also appear as respected
counterparts, as in negotiations about standards, norms and a
system of cooperation, there is some contradiction in Intro´s
relations to its environment. Many of Intro´s personnel
resources are aimed at providing the member firms with direct
service. As for relations to the members, the matter of giving
consideration to member firms of different size and competitive
ability is a delicate question.

11.7 Contro (Chapter 8)

Contro is an employers´ association. To begin with, the organiza-
tion´s field of activity was widely defined. Many of the values
and concrete patterns found in the organization today originated
at a time when the national labor market was highly disorganized.
In order to gain more control over its members, Contro built up
a network of local negotiating organizations. The individual
employer was also deprived of the right to make agreements with
the labor side. More recently, the organization has become
involved in efforts to establish more flexible wage-rate setting,
where wages in each firm can be adjusted to the firm´s own

production conditions. The organization is also faced with the problem of trying to limit wage increases in the industry. One way of doing this has been to influence the supply and quality of manpower through participation in the formulation of new educational systems.

11.8 Servo (Chapter 9)

Servo - like most other employer organizations - was founded in order to counterbalance the growth of trade unions. The activities of Servo´s members are similar to those of Contro´s member firms. Contro is also the larger of the two organizations. Over the years, these factors have led to many conflicts between the two. Because its member firms utilize comparatively heavy production technology, Servo has tried to work in accordance with values which say that wage and negotiating systems should put as few obstacles as possible in the way of technological improvements. Supplementary values in Servo are that the organization should support the members with advice and service and improve the firms.

11.9 Evaluating the Effectiveness of the Organizations (Chapter 10)

In Chapter 10, the observations are used to discuss the effective-ness of the organizations. The observations are organized with the aid of the language proposed in Chapters 3 and 4. Readings on different .indicators are accounted for with reference to each of the five processes.

The institutionalization process is a process through which an organization becomes an indispensable part of a larger social system. The government and large member firms are the critical environmental areas in Intro´s environment. Owing to inconsistencies

between one ideology advocating free enterprise and another representing a high degree of government influence in certain areas, Intro has found it difficult to fulfill a significant function in relation to its two critical environmental areas simultaneously.

Contro is part of the highly institutionalized labor market system. Its ties with this system, however, obstruct Contro's efforts to satisfy new types of needs arising in the member firms.

Servo is an organization that can be regarded as having attained the highest degree of distinctive competence. Servo has fundamental values which agree with the large member firms' need to adapt to technological development.

The organization alters its strategy in response to changes in the environment via the adaptation process. Two changes have been especially important in the environment of the organizations investigated. The discussion shows how the ability to achieve adaptation depends on the interplay of several different variables. The groups in Intro which advocate values contrary to traditional values in the organization do not have enough influence to change the organization. Contro has a structure for organic adaptation because there are influential groups that advocate separate values. Servo has a structure for planned adaptation in which influential employees advocate change-oriented values.

The exchange process is described with reference to each of the three organizations' most important participant groups. The contribution-inducement balance has to be evaluated separately in relation to each participant group.

The control process has to do with the organization's ability

to coordinate different information-processing activities. A
certain degree of correlation is shown between the communication
and administrative structure and the indicators of the control
process. On the other hand, data seem to indicate that the
organization's size and degree of differentiation have to be
taken into account more explicitly in dealing with the control
process. An organization with many conflicts was expected to
have serious problems of coordination but this expectation was
not confirmed.

The reward process aims at reinforcing the parts of the personnel's
behavior which comprise activities in different organizational
processes. In each of the three organizations, the reward
process is found to go on in similar ways. Considerable importance
is assigned to the fact that work in the organizations should serve
an important purpose in society. The personnel say that relations
to others and stimulating tasks are the most significant sources
of satisfaction. Opportunities for promotion and personnel develop-
ment are also important rewards. Promotion is to a large extent
linked to a university education in each of the three organizations.

The review of the organizational processes leads to the conclusion
that Intro and Contro have effectiveness problems. These problems
are primarily related to external effectiveness.

11.10 The Purpose of the Proposed Model

Organizations have different types of effectiveness problems.
Advisors are sometimes called upon to help the organization solve
them. The advisor's activity can be called clinical organization
research if he aims at assisting the organization and systematic-
ally recording his observations so as to give an account of his
experiences later on. This clinical organization research is

similar to both consulting and traditional research. The advisor's
activity in relation to an organization can be divided into several
phases. The first phase consists of determining the organization's
problems, the second is to formulate methods for solving these
problems and the third is to participate in the change process.
This study is limited to the first of these phases, i.e. proposing
a "model" or "language" suitable for diagnosing the problems of
organizations. The second phase is treated in the literature on
problem solving in organizations (for a survey, see Johnsen, 1969).
The third phase has recently been dealt with in a number of
studies. This literature emphasizes the importance of a thera-
peutic relation between a "change agent" and the organization.
This relationship has to exist in order for change to be
accomplished (see, e.g. Wallroth, 1968b and Hutte, 1967).

I use the word "language" rather than "theory" to characterize
the proposed model. As I explain below, I do not think that the
type of model usually referred to in terms of theory suffices
to cover the purpose of a model suited for diagnosis. Every
organization can be regarded as a more or less unique phenomenon.
Different organizations consist of many different parts and
activities which can affect each other through numerous kinds
of relationships. They have different environments and histories.
This means that an explanation of the problems of a given organiza-
tion has to be sought on the basis of this particular organization's
situation. General theories which say that a certain condition X
is correlated with another condition Y are not usually sufficient
for finding explanations. The diagnosis has to be based on a
model of what is characteristic of the organization in question
(cf. Chapter 5).

Problems in the organization can be explained in many ways. For
instance, costs that are too high in relation to income might

be caused by numerous factors. Often, a single cause does not suffice to explain a particular inadequacy. The interplay of many different variables has to be included in the explanation. The use of a given theory or method - such as executive development, long-range planning, improvement of interpersonal relations or linear programming - in order to make an organization more effective can lead to difficulties because it disregards possibilities of alternative or complementary solutions. The use of a model aimed at a certain aspect of the organization can result in partial or less relevant explanations. Similar difficulties can arise when the organization chooses an advisor who has a preference for a certain type of model. A model for diagnosing the effectiveness problems of the organization can furnish a basis for a systematic choice of theories and methods suitable for working out solution proposals.

The most important feature in the model suggested is the notion that several different processes have to go on satisfactorily at the same time. Another aspect of this idea is that process indicators can be used to determine whether or not a certain process goes on satisfactorily. This fundamental notion can serve as a search rule for determining the conditions in the organization that need to be investigated more closely. There are usually definite theories available for each process. The model can help single out theories that may be used for more detailed explanations of different problems. In addition to the basic notion of required processes, the model specifies a number of concepts which correspond to conditions in reality that should be observed.

The proposed model is somewhat similar to the systems language suggested by contributors to general systems theory. This type of systems language can be regarded as suitable for analyses of

systems, where many components influence each other in complex
patterns, where it is difficult to determine the extent of
influences from external factors and where the system changes
during the time period studied. The terms I have selected are
somewhat related to those used in other systems models; the
concept of "processes", for example, is close to that of
"functional sub-systems" used in some systems models. "Process
indicators" are partly related to "control parameters" and
"value structure" to "control center". I have chosen notations
for the concepts that differ from those used in other systems
models because the latter are not usually worked out with
reference to organizations or even to social systems. They
often apply to biological or purely abstract systems.

11.11 Concepts in the Model

In Chapter 1, I mention that the different concepts I was using
at the beginning of the study aided me in sorting out the
observations made. I will now try to summarize how the empirical
study contributed to the content of the concepts.

The usability of the proposed model or of models which employ
similar concepts can only be supported by repeated studies. In
order to draw conclusions and learn something from repeated
studies, the methods of measurement have to be fairly reliable
as well as constant from one investigation to the next. In this
section therefore, I will try to summarize the experience I think
I have gained from using different methods of measurement and
sources of data. I will also indicate the methods I feel should
be developed even further.

11.11.1 Environment

The environment of the organization has been described in different

ways. Use of the concept critical environmental area is important. A critical environmental area is one that gives the organization decisive advantages or disadvantages in relation to other organizations. Environmental areas that are designated only as participants are included in an exchange process. The organization can constantly change its relations with the participants by increasing or decreasing the flow of rewards. There are also environmental areas which have a standardizing effect on the organization but which cannot be characterized as either participants or critical areas. Rhenman´s (1969b) term "value environment" would be a suitable notation for these environmental areas. The importance of describing environment-oriented processes is justified by the fact that many relationships inside the organization have been shown to be clearly linked to changes in the environment.

Documents from the organization, interviews with employees having long tenure, certain questions in the interviews with the personnel, questions about contacts with the environment and questions answered by the members are used as a basis for describing the environment. Since my notions about the appearance of the environment were not especially formalized at the beginning of the study, certain parts of the environment are probably described better than others. A great deal of information has, in fact, been gathered from the personnel´s subjective conception of the appearance of the environment. In a new study, interviews with the personnel should be supplemented by other methods of collecting data. Formalized instruments for measurements should be developed in order to ascertain the personnel´s perception of the environment. Instruments for measurement can also be constructed to measure the interaction of the organization and different parts of the environment. An example of this kind of instrument is registration of the number of contacts. Attempts should also be made to measure how the environment conceives of the organizations.

This might be achieved through interviews with representatives of important environmental areas. The discussion about the institutionalization process especially shows that the organizations, along with the Employers' Confederation, the Federation of Trade Unions and the government, are included as components in a larger context. This means that it does not suffice to describe the environment simply as an analysis of pairwise relationships between the organization and each separate environmental group. The structure of the environment in terms of relations between different groups in the environment should also be depicted.

11.11.2 Sway Group Values

Even if the histories show that the development of the organizations has been controlled by certain strong values, I did not find any group that met the requirements stipulated by the definition of sway groups. This might be because the study was not aimed at ascertaining the existence of such groups. Another possible explanation is that no sway groups exist in the organizations. This absence could be attributed to the fact that relations to members and other areas in the environment do not leave much room for sway group values.

A future study should employ more direct methods for ascertaining the existence of organizational sway groups and for determining who belongs to these groups. These measurements could be in the form of "sociometric" questions about who makes decision in important matters as well as an analysis of who decided when important decisions were made in the organization or when the organization found itself in crisis situations. Analyses of policy statements and "depth" interviews with members of organizational sway groups could be made in order to determine sway group values. Another possibility might be to analyze conflicts about

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the policy of the organization and to interview those who are forced to leave the organization or influential groups (see Rhenman, 1968).

11.11.3 Value Structure

A great deal of the work in this study consisted of determining values. The descriptive Chapters, 7-9, constitute an attempt to specify the signification of the value concept. I show how values control the environment-oriented processes. Conversely, it is also noteworthy that different strategic values originated because of events which took place in the environment. The problems facing the different organizations can only be explained in connection with simultaneous reference to the environment of the organizations and to the established values existing in the organizations.

Interviews with the personnel were the primary aid used to determine the values in the organizations. Interviews with a limited number of employees would only have provided a limited picture of the organization. Therefore, I thought it necessary to investigate values on many different levels in order to find out how the organization functioned. A good deal of work also went into measuring values with the aid of standardized questionnaire items. But I do not think that the information received from these questions corresponds to the efforts made to obtain it. As a result, I feel that with regard to developing methods for describing the value structure, more can be gained from working out standardized and improved methods for a "qualitative" content analysis of the interview data. Another important methodological question related to describing the value structure has to do with interviewer effects. To what extent are the values reflected in the answers controlled by the interviewer and by the purpose attributed to him by the respondent?

11.11.4 Concrete Structure

The concrete structures described are relatively simple. But
it was still possible to perceive the importance of the concrete
structure with respect to obstructing or facilitating changes.
Analysis has also shown that there is a close connection between
value structure and concrete structure. Persons classified in
similar ways in the concrete structure tend to have similar
values.

Various official sources in the organizations were used to describe
the concrete structure. This information was supplemented by
interviews and parts of the questionnaire about contacts between
different units. The description of the concrete structure
presented relatively insignificant problems, mainly because the
organizations are comparatively small, have an uncomplicated
make-up and make use of simple technology. The analysis of the
control structure, however, shows that the descriptive capacity
of the methods used for measurement is fairly limited. Improved
formalized instruments for measuring elements such as the contact
structure should be formulated in future studies. Methods should
also be constructed for distinguishing between different functional
sub-systems in the organization. Organizational structures that
are more complex than those investigated here will require a
classification of different technologies.

11.11.5 Processes and Indicators

A differentiated picture of the organization's problems has been
obtained by a classification into different processes. The
description reveals that the processes are not isolated from
each other. The same activity can be included in more than one
process. Via his activities, the same person can participate in
more than one process. Similarly, a certain part of the concrete

structure can be required in order for several processes to go on.

The formulation of standardized indicators for different processes is a basic condition for the model used. It should be possible to apply the indicators in a large number of organizations. Measurements similar to those used in this investigation have also been used in other studies. But the methods for measurement applied have not been standardized and the reliability of the measurements has not been ascertained with sufficient exactness. In connection with future studies, it therefore seems important to work out standardized methods of measurement. This can be accomplished by making comparisons between a number of organizations. "Soft" questionnaire-type measurements can be used, as well as "hard" measurements borrowed from accounting or production.

11.12 Improving the Model

The subject of this study is the effectiveness of organizations. I want to show that an open systems approach means that effectiveness is not only a question of using a normative model in optimizing the organization's results with respect to one (hypothetical) decision-maker's stipulated criterion. An organization is a social system in which relations to the environment as well as internal interdependencies determine to a large extent what is effective or not. As a result, the given structure of both the organization and the environment, as well as the processes that take place in the organization and between the organization and its environment have to be taken into account.

The model used to describe the three organizations and their problems is based on five organizational processes which are all dealt with in the literature on organizations. This schematiza-

tion has yielded a more varied picture of the organization's
effectiveness problems than if the description had been made
on the basis of an assumption of a single ultimate criterion
of effectiveness. The different processes also contribute to
the descriptions by supporting each other, so as to provide
a many-sided elucidation of systems effectiveness. The picture
can be made even more detailed if processes other than those
dealt with are included. For instance, a discussion of the
evening-out process can increase understanding of the methods
the organizations use to cope with crises and other temporary
variations in the environment. A discussion of the recruitment
process can provide a better understanding of the type of
persons who seek out the organizations and their motives for
continuing to work in them.

The proposed model distinguishes between processes related to
external and internal effectiveness. This distinction has
proved to be essential. The descriptions give reason to
conclude that the organizations investigated have greater
problems with external than with internal effectiveness. But
this conclusion might have been affected by the fact that the
environment-oriented processes were dealt with in more detail
than the internally-directed ones. In order to further test
the meaningfulness of the distinction between external and
internal effectiveness, a future study of several organizations
should investigate whether the model can distinguish between
organizations which have problems of external and internal
effectiveness, respectively.

The experience and knowledge gained from this study indicate that
the proposed model constitutes a language that can be used to
describe and diagnose the effectiveness problems of organizations.
But since the model has been developed to some extent in connection

with the three organizations investigated, the questions of its
usability in other situations has to be raised. The set of
processes important to a certain organization probably varies
depending on the organization's specific situation. An important
feature in an improvement of the model would therefore consist
of rules for chosing the processes on the basis of a given
organization's situation. A step in the formulation of rules
such as these should be a rough classification scheme of organiza-
tions and their environment.

I have already stated that practical application of the model
requires the construction of standardized measurements that can
be used as indicators of each of a number of processes. As for
diagnosing the effectiveness problems of a given organization,
relevant processes have to be chosen first on the basis of the
situation in which the organization find itself. The effective-
ness of the organization can then be evaluated with the aid of
the process indicators.

APPENDIX A. INSTRUCTIONS FOR CODING THE BOARD MINUTES

The content analysis is described in Chapter 6, Section 6.8.2.
The following instructions were formulated and used in coding
the board minutes.

Every matter discussed was assigned a code. An "item" or "sub-
item" in the minutes was counted as a matter discussed. A sub-
item was counted only if its content differed from other sub-items
under the same main item. The following items were not assigned
any code:

1. Reports on the organization´s economic accounts, determination
    of budget or fees.

2. Salaries and benefits of the organization´s own personnel.

3. Hiring of personnel (as long as this did not involve creating
    new jobs).

4. Routine treatment of applications for the election and
    resignation of members.

A 1 Type of Item

The coding of the contents should reflect the matters dwelled upon
in discussions. The following classes were used:

Matters concerning relations to the environment of the industry:

1. <u>Defend the interests of the members</u>. Discussion suggests
    the existence of an adversary who is determined to harm the
    member firms. Measures to increase the member firms´
    opportunities to compete on terms equal to those of the
    adversary. Discussion of the adversary´s behavior. Direct
    political action aimed at the adversary.

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2. Influence the environment of the industry. Measures to
   influence the industry's production requirements in terms
   of laws and regulations or to influence economic planning
   in society. Discussions do not directly refer to an adversary.
   Discussion about the environment of the industry.

3. Carry on public relations. Activity via appearing in mass
   media, information and propaganda to sway public opinion
   to a more favorable attitude towards the member firms, the
   organization or the industry.

Matters related to controlling conditions in the industry:

4. Procure resources for the industry. Measures aimed at
   increasing the supply or improving the quality of the
   resources at the industry's disposal. Involvement in the
   education of different personnel categories or in procuring
   raw materials for the firms.

5. Establish standards, norms and a system of cooperation.
   Involvement in establishing standards and regulations to
   curtail conflict between different parties in the industry.

6. Represent the members in relation to the other side. Acting
   on the members' behalf in negotiations and disputes with the
   other side. "Establish standards" has to do with the formal
   construction of norms and standards, while this item refers
   to how much the members should receive in real terms in
   relation to the other side. The other side is conceived
   of as a negotiating counterpart rather than as an adversary
   who should be fought or destroyed. Production of bases
   for negotiating.

Matters concerning the organization's relation to the member firms:

7. Improve the member firms. Measures to increase the efficiency
   of the individual firm. Involvement in research and develop-

ment, efforts to introduce technological and administrative improvements into the firms and courses aimed at the individual firm.

8. Control the member firms. Measures aimed at increasing discipline in the firms. Efforts to control the members via instructions and orders. Control of the members' actions. Acquisition of new members.

9. Provide service to the member firms. Organization should give consulting service to firms that want it. Furnish statistics.

Other:

10. The organization itself. Matters having to do with the structure of the organization itself.

11. Other.

A 2 Counterpart

Counterparts are parties discussed in an item who have given or received information or who are the objects of measures in connection with a board decision. The party should be mentioned by name in the minutes. An exception to this rule is the labor side. When this side is discussed, references are usually made via an indication of the name of the agreement. In these instances, the other (labor) side is coded as a counterpart. No counterpart can have more than one coding per item.

A 3 The Direction of Initiative

The direction of initiative has been classified according to the following three categories:

1. Item taken up after being explicitly proposed by another party or prescribed by laws, regulations or by-laws.

2. Item not proposed by external parties but by personnel or by board members themselves. Items coded in this category should include discussion of measures directed towards a counterpart (explicitly mentioned) outside the organization.

3. Other items.

APPENDIX B.   INSTRUCTIONS FOR CODING THE OPEN-ENDED QUESTIONS
              ABOUT THE ORGANIZATIONS˙ POLICY

The processing in this appendix is based on two questions in the
questionnaire:

1.   What do you regard as the organization˙s most important
     task today?

2.   What changes would you like to see take place in the organiza-
     tion˙s goals and methods within the next 10 years?

According to the description in Chapter 6, Section 6.8.2, the
answers to these two questions were combined before the content
analysis was performed. Every respondent˙s answer was divided
into one or several statements. Every statement was assigned
to one of the classes listed in the coding scheme. A maximum
of one statement from each person was assigned to one and the
same class. The instruction for coding the type of item in
Appendix A is constructed on the basis of the analysis of the
open-ended questions. The principal contents of the classes
in the scheme used for coding these open-ended questions are
found in Appendix A, Section A 1.

APPENDIX C.   EXAMPLES OF QUESTIONS IN THE QUESTIONNAIRE

Project 442   CONFIDENTIAL
Form 20

ABOUT YOURSELF

1.   In what year were you born?   ....

2.   What education have you had?
     ___ (1) Junior high school
     ___ (2) Senior high school
     ___ (3) Commercial high school
     ___ (4) Technical high school or institute
     ___ (5) University

3.   What year were you employed in CONTRO?   ....

4.   In what firm or organization were you previously employed?
     ....

5.   What job did you have when previously employed?
     ....

ABOUT CONTRO´s TASKS

6.   How well does the present   7.   How satisfactorily do you
     policy of the organization   think CONTRO´s administration
     correspond to what you   is structured with respect to
     think it should be?   how it supports and facilitates
     ___ (4) Very well   good performance of your most
     ___ (3) Well, but certain   important tasks?
             modifications could   ___ (4) Very satisfactorily -
             be made   changes would hardly
     ___ (2) Fairly well, but   lead to improvement
             extensive modifications   ___ (3) Satisfactorily, but
             could be made   certain changes could
     ___ (1) Poorly, thorough   be made
             revisions should be   ___ (2) Not wholly satisfac-
             made   torily - considerable
                                                improvements could
                                                be made
                                        ___ (1) Unsatisfactorily

21. ABOUT THE WAY CONTRO WORKS TODAY

What is your opinion of the way CONTRO works today?

Indicate |_X_|___|___|___| if you think the left-hand statement is definitely better than the right-hand one in describing the way CONTRO works.

Indicate |___|_X_|___|___| if you think the left-hand statement is somewhat better than the right-hand one in describing the way CONTRO works.

Indicate |___|___X___|___| if you think both statements describe the way CONTRO works equally well (or equally poorly).

a. CONTRO´s primary task |___|___|___|___|CONTRO actively influences
   is advisory in relation   the firms via development
   to its members   work in different areas

   No opinion [ ]

b. CONTRO has extensive |___|___|___|___|The member firms have to
   means of influencing   adhere to CONTRO´s policy
   the actions of the   only when it serves their
   member firms   own interests

   No opinion [ ]

c. CONTRO works to prepare |___|___|___|___|CONTRO works in support of
   the member firms to meet   competition on equal terms
   competition from state and   by working for an equitable
   local government and   wage system
   trade union undertakings

   No opinion [ ]

d. CONTRO asserts the in- |___|___|___|___|CONTRO serves as a mediator
   terests of the member   in disputes
   firms in relation to
   the other side

   No opinion [ ]

e. CONTRO supports the |___|___|___|___|CONTRO supports the indi-
   individual member   vidual member firms via
   firm via its service   external action on behalf
   and information   of the industry
   activities

   No opinion [ ]

25. FREQUENCY OF CONTACT

How often in your work do you come in contact with some representative of the following different units and groups? (Omit your own unit.)

Unit	Daily	Once or several times a week	Once or several times a month	More seldom than once a month	Never
	(5)	(4)	(3)	(2)	(1)
1. Servo´s Negotiation Dept. and Representatives					
2. Servo´s Staff					
3. Servo´s Executive President					
4. Contro´s Representatives					
5. Contro´s Engineering Dept.					
6. Central Registration					
7. Time and Motion Study					
8. Contro´s ADP group					
9. Contro´s Legal Dept.					
10. Statistics Dept.					
11. Manpower Dept.					
12. PR Dept.					
13. Contro´s Executive President					
14. Your own organization´s Board					
15. Local association(s), Managers					
16. Local associations, Representatives					
17. Local associations, Engineers					
18. Other associations in Employers´ Confederation					
19. Employers´ Confederation, Office					
20. Intro					
21. Federation of Industries					
22. Gvt. authorities					
23. Cooperation Council, Office					
24. Labor Safety Consultant					
25. Trade Unions					
26. Small member firms (less than approx. 100 workers)					
27. Large member firms (more than approx. 100 workers)					
28. Research Agencies					
29.					
30.					

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APPENDIX D. INTERVIEW FORM

1. Name:

2. Job:

3. Describe your tasks by listing <u>the purpose of your work in</u>
    <u>terms of the final result</u>

    a.   4. For each of the points on
                                        the left, briefly describe
    b.   the activities necessary
    etc.   for completing the different
                                        tasks.

5. Which two of the tasks listed above do you think are most
    important?

6. What deficiencies in the structure of the organization make
    it more difficult than it should be to perform your tasks
    in, according to your opinion, the most efficient way?

7. a. In what areas do you lack resources (service, investiga-
        tion capacity, time, etc.)?

    b. If so, what would these resources be used for?

8. What improvements would you like to see in your own work
    areas during the next 5 years?

9. What do you think are your strongest and weakest sides,
    respectively, in relation to the tasks you are to perform
    (with respect to your own interests, knowledge and
    resources)?

    a. Best

    b. Worst

10. Does your unit lack resources in any area (personnel, knowledge,
    etc.) that makes it difficult for the unit to complete its
    tasks? If so, what resources and in what areas?

11. What tasks do you think your unit performs the best and the
    worst?

    a. Best

    b. Worst

12. List what you think are the organization´s most important
    tasks? Put 1 in front of the most important one, 2 in front
    of the next one, and so on.

13. If you regard the organization's area of activity as a whole, in what areas do you think the organization has been the most and the least successful, respectively?

    a. Best

    b. Worst

14. What changes would you like to see take place in the organization's goals and methods within the next 10 years?

15. Which of these changes do you feel are most urgent, i.e. those that should be made during the next 5 years?

16. Does the organization lack resources in any area (personnel, knowledge, etc.) that makes it difficult for the organization to complete its tasks? If so, what resources and in what areas?

17. What do you think are the most important changes that will occur in the industry during the next 15 years?

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