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The Impact Of Cultural Differences On Budgeting In A Multinational Company

Marie-solange Perret

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THE IMPACT OF CULTURAL DIFFERENCES ON BUDGETING IN A MULTINATIONAL COMPANY

By

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ABSTRACT

The objective of this research was to explore some concrete implications of operating in different cultures for controlling operations in multinational companies.

The hypothesis tested is that cultural differences between subsidiaries of a company limit the degree of standardization which can be achieved in a worldwide budgeting system and, more specifically, that even when the multinational corporate management standardizes budgeting practices:

1. actual practices differ among subsidiaries, and
2. a number of significant differences are related to cultural differences.

It was meant to be a first step toward providing multinational management with a framework to analyze which currently successful control techniques and processes (in the multinational home culture) may be dysfunctional in culturally different locations.

The research was conducted in two subsidiaries—the French and the U.S. subsidiaries—of a North-American multinational company operating on a tight centralization and coordination basis. This company used, in particular, a detailed standardized budgeting and reporting system to control its worldwide operations.

The research steps consisted of the following:
- Measurements of the cultural differences between the subsidiaries, using the culture questionnaire developed by the anthropologists Kluckhohn and Strodtbeck.

- Comparison of the budgeting practices between the subsidiaries. This comparison covered both tangible elements (such as the steps followed or the formality of the process) and intangible elements (such as the level of participation or the priorities pursued).

- Relating the differences in practices to the cultural differences.

The data on budgeting practices were collected through interviews at top management level, in the controllers' departments and in the plants.

Conclusions were the following:

1. The analysis of the culture questionnaire identified cultural differences on the **Man-Nature** and **Relational** dimensions. The French respondents believed in collaterality and being in harmony with nature. The U.S. respondents were individualistic and believed in mastery over nature. These differences were strongly reflected in the budgeting practices.

2. There were no differences on the other cultural dimensions, **Time** and **Activity**. However, differences in practices suggested that the two groups were not similar on these dimensions and that the questionnaire did not measure them adequately.
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I am also very grateful to my supervisors, Joe DiStefano and Bob Lord for their enthusiasm, guidance, ... and patience in seeing me through this process. I am particularly sad that Bob Lord, who recently died accidentally, will not be here to see its conclusion.

I would also like to thank my friends and colleagues for all the help and support they gave me to get this thesis done, particularly Georl Ross, Aidan Vining, Michael Davies, and Cam MacDonald, who I kept working for long hours at his word processor to put this thesis together.

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERTIFICATE OF EXAMINATION</td>
<td>ii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>v</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>ix</td>
</tr>
<tr>
<td>CHAPTER I - THE RESEARCH PROBLEM</td>
<td>1</td>
</tr>
<tr>
<td>The Problem: A Brief Introduction</td>
<td>1</td>
</tr>
<tr>
<td>The Research Design</td>
<td>3</td>
</tr>
<tr>
<td>The Research Framework</td>
<td>7</td>
</tr>
<tr>
<td>Description of the Instruments</td>
<td>21</td>
</tr>
<tr>
<td>Description of the Company and the Subsidiaries</td>
<td>30</td>
</tr>
<tr>
<td>The Research in France and in the U.S.A.</td>
<td>34</td>
</tr>
<tr>
<td>CHAPTER III - THE CORPORATE BUDGETING REQUIREMENTS AT MULTI-CO.</td>
<td>41</td>
</tr>
<tr>
<td>The IPC Philosophy</td>
<td>41</td>
</tr>
<tr>
<td>The Company-Wide Budgeting and Control Process</td>
<td>43</td>
</tr>
<tr>
<td>CHAPTER IV - THE CULTURAL DIFFERENCES BETWEEN THE FRENCH AND THE U.S. GROUP</td>
<td>51</td>
</tr>
<tr>
<td>Description of the Data, Aggregation Method and Statistical Analysis</td>
<td>51</td>
</tr>
<tr>
<td>The Value-Orientations, i.e. The Culture of the French and the U.S. Groups</td>
<td>57</td>
</tr>
</tbody>
</table>
TABLE

1 THE FIVE VALUE-ORIENTATIONS AND THE RANGE OF VARIATIONS POSTULATED FOR EACH .................................................. 29
2 COMPARISON OF THE FOUR PLANTS .......................................................... 35
3 SUMMARY OF THE SAMPLE IN FRANCE AND IN THE U.S. .................. 38
4 TOTAL CULTURE QUESTIONNAIRES RETURNED BY LOCATION .............. 39
5 TABLE OF CONTENTS OF THE IPC DOCUMENT .................................. 44
6 SCHEDULES REQUIRED BY THE CORPORATE MANAGEMENT FOR THE GOALS AND FOR THE PLAN .................................................. 47
7 LIST OF PAIR-WISE COMPARISONS OF FREQUENCIES ...................... 54
8 THE VALUE-ORIENTATIONS IN THE FRENCH AND THE U.S. GROUP .. 59
9 SUMMARY OF THE CULTURAL DIFFERENCES BETWEEN THE TWO GROUPS ......... 59
10 THE STRUCTURAL DIFFERENCES AND THEIR RELATIONSHIP TO THE CULTURAL DIFFERENCES -- SUMMARY ........................................... 78
11 POSITIONS REPORTING TO THE MANAGING DIRECTOR IN FRANCE AND IN THE U.S. .......................................................... 81
12 RESPONSIBILITIES AND REPORTING LINES FOR THE FRENCH PLANT ANALYSIS AND THE U.S. DETROIT FINANCE STAFF .................. 92
13 FORMAL MEETINGS HELD BETWEEN SUPERIORS AND SUBORDINATES AT THE MARQUETTE PLANT .................................................. 100
14 FORMAL MEETINGS HELD BETWEEN SUPERIORS AND SUBORDINATES AT THE BEAUVAIS PLANT .................................................. 102
15 DESCRIPTIONS OF A TYPICAL WORKDAY IN THE FRENCH AND THE U.S. PLANTS .......................................................... 108
16 DIFFERENCES IN THE BUDGETING PROCESSES AT HEADQUARTERS AND THEIR RELATIONSHIP TO THE CULTURAL DIFFERENCES -- SUMMARY .................................................. 116
17 DIFFERENCES IN THE BUDGETING PROCESSES AT THE PLANTS AND THEIR RELATIONSHIP TO CULTURAL DIFFERENCES -- SUMMARY ......... 146
18 RESPONSIBILITIES AND PRIORITIES REPORTED IN DEPARTMENTS OTHER THAN PRODUCTION .................................................. 156
LIST OF FIGURES

FIGURE
1  The Research Design ............................................ 4
2  The IPC Logic .................................................. 48
3  Pairs of Positions in the Time Dimension ...................... 52
4  Answers of Respondent R to the Time Questions ............... 53
5  Frequency Matrix of Pair-wise Preferences .................... 53
6  The Activity Value-Orientations in France and in the U.S. .... 62
7  The Time Value-Orientations in the French Group .............. 64
8  The Time Value-Orientations in the U.S. Group ................ 65
9  The Relational Value-Orientations in the French Group ...... 66
10 The Relational Value-Orientations in the U.S. Group ......... 67
11 The Man-Nature Value-Orientations in the French Group ..... 68
12 The Man-Nature Value-Orientations in the U.S. Group ...... 69
13 Responsibilities of the Product Services Department .......... 83
14 Organization of the Controller's Department in France ...... 85
15 Organization of the Controller's Department in the U.S. Company ................................. 87


CHAPTER I

THE RESEARCH PROBLEM

The Problem: A Brief Introduction

The objective of this research was to explore some concrete implications of operating in different cultures for controlling operations in multinational companies.

It was hypothesized that cultural differences between subsidiaries of a company limit the degree of standardization which can be achieved in a worldwide budgeting system and, more specifically, that even when the multinational corporate management standardizes budgeting practices:

- actual practices differ among subsidiaries, and

- a number of significant differences are related to cultural differences.

The past twenty-five years have seen a striking increase in the multinationalization of business firms. According to Prietl (1974) between 1960 and 1969 alone, 3,000 new U.S. ventures were established abroad. This development, which mainly occurred in U.S. business in the early part of the period, has since spread considerably. Since 1965, multinational business has become a reality in most countries, and in particular in Western Europe and Japan (Kolde, 1974).

Multinationalization has not only spread geographically, but also has become relatively more important within countries' industrial structure. In addition to giant corporations, the vast majority of
medium-sized industrial firms as well as many smaller businesses (Kolde, 1974) in the U.S., for instance, are now operating in several countries.

Kolde (1974) attempted to explain increasing multinationalization in terms of a "snowball" effect as the phenomenon spreads inter- and intranationally, firms are increasingly inclined to think multinational, and new investments are rendered easier by existing international experience.

Scott (1977) distinguished between two forms of multinational companies: the "multinational enterprise" (ME), and the "multinational holding company" (MHC). He characterized the mode of operations of the ME as "global coordination": "the ME attempts to manage all operations together to optimize global returns.... This integration and coordination of the subsidiaries of the ME means that they must be managed together, not autonomously". In the MHC, on the other hand, considerable autonomy is left to the various member organizations. Although many companies have characteristics of both the ME and the MHC, Scott noted that a large number of companies closer to the MHC type are now evolving toward the ME type.

The ME is potentially the most difficult form of organization to control as a balance must be found between the need for uniformity in the worldwide control system to achieve "global coordination" and for diversity required by differential environments. Two important questions for management are, therefore: when should uniformity be enforced? When should the control system be adapted to local conditions?

This research focused on whether management should adapt the control system of a multinational company of the ME type to the cultural values of its operating location.
As will be seen in the description of the research framework later in this chapter, although cultural diversity has often been reported in the management literature as one of the important factors that should be considered when designing management systems, its practical implications have not been studied systematically. Therefore, an exploratory research design was adopted. It was a first step toward providing multinational management with a framework to analyse which currently successful control techniques and processes (in the multinational home culture) may be dysfunctional in culturally different locations. An important extension from this was to provide guidelines on how these techniques and processes could be modified to fit the local cultural values in order to facilitate their acceptance and internalization by local management.

The Research Design

The research design adopted is depicted in Figure 1. The research sites were limited to two subsidiaries of one multinational company of the MNE type.

Actual budgeting practices in each subsidiary (the dependent variable) were viewed as a function of corporate management's requirements and the subsidiary's cultural characteristics (the two independent variables).

The steps involved were as follows:

- Description of the corporate budgeting requirements.
- Measurement of the cultural differences between the subsidiaries.
- Comparison of the budgeting practices between the subsidiaries.
Figure 1
The Research Design

Corporate Management's Requirements

Actual Budgeting Practices in Subsidiary A
Describe Differences
Actual Budgeting Practices in Subsidiary B
Relate

Cultural Values in Subsidiary A
Measure Differences
Cultural Values in Subsidiary B

- Relating the differences in practices as determined by step 3 to the cultural differences determined by step 2.

The decision to choose a multinational company operating on a tight centralization and coordination basis was to ensure that certain constraints were imposed on the practices which could be adopted in each subsidiary. Because the subsidiaries were exposed to the same set of explicit rules and procedures, any differences between them would be potentially meaningful. Furthermore, the detailed set of tasks set out in the rules and procedures would provide a framework to describe what was actually done in the subsidiaries and thus make the practices more directly comparable.

A North American multinational company of the ME type agreed to cooperate in this research. This company will be called Multi-Co. in the remainder of this thesis. Two subsidiaries were chosen, one operating in France and one operating in the U.S. In each subsidiary, the headquarters and two plants operating in different locations were retained as research sites.
The choice to limit the number of subsidiaries to two was made for practical reasons. Apart from the obvious constraints of time and financial resources, there was the problem of finding sites willing to cooperate and reasonably similar along dimensions other than culture which could affect results. Some important dimensions were identified from the literature which are discussed below in the research framework. Furthermore, the choice to study two plants in each subsidiary was to help to distinguish the effect of personality difference among individuals from that of cultural differences, when comparing the budgeting practices between the two subsidiaries.

As it was not possible to research the whole management control system, an operating budget was chosen as the research focus. This choice of focus was based on four major reasons:

- Budgets are a major management control tool in most American companies (Anthony, 1972, pp.459-461; Sord and Welsch, 1958, p.35).

- Their importance as a control tool is likely to draw considerable attention on the way the related activities are carried out. Risks of conflicts are therefore potentially high in case of deviant behavior.

- Because of the nature of their content, budgets have a potential impact on a large portion of everyday work activities.

- They are usually the most formalized aspects of the management control process, and therefore are an area where uniformity is most easily enforced and deviant behavior most easily noticed (Anthony, 1972).
Furthermore, of the three major operating budgets—sales, production, administration—the production budget was chosen as the research focus. It is an important budget in a manufacturing firm, such as Multi-Co., as it is where most of the resources are spent and where the level of efficiency has potentially the greatest impact on profits. It is also relatively less influenced by external conditions than the sales budget and, therefore, reflects less ambiguously the values of management.

Finally, the budgeting process was followed from the top of the companies down to plant foremen in order to obtain as complete as possible a picture for each subsidiary. This choice imposed some constraints when designing the budgeting questionnaire. In particular, the scope of the process researched limited the amount of detail that could be practically collected.

The remainder of this chapter presents the theoretical framework for this research. In this section, literature relevant to this research is reviewed. This review is to justify the research hypothesis adopted in this research and to identify the contribution of existing research, particularly in terms of instruments, design, and empirical results which could help interpret and evaluate the data obtained here.

Chapter II describes the instruments—the instrument designed to research the budgeting practices and the instrument adopted to measure cultural differences—the company chosen, Multi-Co., and the research process. Chapter III describes the corporate budgeting requirements in Multi-Co. The empirical results are discussed in Chapter IV (the cultural differences), V and VI (the differences in budgeting practices).

1See Chapter II.
The Research Framework
A Contingency Model of Management

This research extends existing work on the problem of operationalizing a normative "contingency" model for organization and management. According to this model, there is more than one way to organize and manage, the most effective and efficient being dictated by the nature of the firm's environment and the nature of the firm's strategic goals. So, organizational performance is a function of the degree of fit between environment, strategic plans, organization structure and management processes.

A large body of literature which deals with the theory and the operationalization of the model already exists.

On the theoretical side is the work of Kast and Rosenzweig (1973), who have exposed the model, and Ashby (1961), who, along with other researchers in cybernetics, has postulated necessary relationships between a system and its environment. One of the central postulates, the law of "requisite variety", is that "only variety can destroy variety". In other words, management systems must have variety and flexibility to cope with environmental variety.

On the empirical side, emphasis has been placed on the following relationships in the model:

- The relationship between the nature of the task and the types of management systems (Woodward, 1970; Lawrence and Lorsch, 1969; Burns and Stalker, 1961; Fiedler, 1966)
- The description and measurement of the characteristics of the environment and the analysis and their impact on the decision-making systems (Duncan, 1972 and 1973).

The impact of culture on management systems, in particular on budgeting has not been systematically described, analysed, or measured in this literature. Yet existing theoretical and empirical work strongly support the hypothesis that culture is an important variable in this model.

In this research, culture was operationalized as a set of fundamental beliefs and values which is shared by a large proportion of the members of a group but differ between groups. To use the words of Linton (1945), cultura is manifested in the members of the cultural group through the existence of one or more "modal personality structures", i.e. personality structures which appear with a large frequency among the members of the group but differ between groups².

It is not difficult to visualize how employees' personal beliefs and values will have a significant impact on the budgeting process. The budgeting process can be depicted as a series of steps consisting of the selection, exchange and review of information leading to a comprehensive set of operational objectives, i.e. the budget. Employees' values and beliefs will determine certain preferences and priorities which affect directly or indirectly the content of the budget. Their direct effect results from their influence on the selection of information and of goals and means. Their indirect effect results from their influence on the processes chosen to carry out the budgeting task.

²The definition of culture adopted in this research is discussed more thoroughly in Chapter II when describing the instrument used to measure this variable.
There are a number of studies in the management literature, in particular in the behavioral field but also in accounting, on the impact of values on the way management activities are carried out. This research has recognized that different basic values, or assumptions, regarding human nature can lead to different attitudes and behaviors, and therefore to different management processes. If culture systematically organizes the beliefs and values of the individual members of a group and generates personality structures which are widely shared in the group, there are important implications for budgeting processes, in particular:

- Differences in culture will be a source of systematic differences in the way budgeting activities are carried out in firms belonging to different groups.
- Normative models of budgeting will not be generally applicable. The best techniques or processes for a firm will be contingent upon the predominant personality structure of the cultural group in which it operates.

However, as stated earlier, this question has not been systematically researched in the "contingency" management literature. Existing research related to this topic, outside of this body of literature, is mainly useful in that it provides justifications that there is a problem worth researching and a useful bank of data. The problems encountered by these researchers, in particular, helped determine the appropriate design for this research and the choice of adequate instruments. This literature is summarized below.

However, the "contingency" literature did make a contribution to this research. From this literature, the following factors were
identified as being of particular importance for matching the subsidiaries because of their potential impact on management systems:

- Factors related to the subsidiaries

The subsidiaries had to be similar in terms of size, age and performance. Both subsidiaries needed to be at least ten years old so that the management systems have had time to settle down. Both also had to be similar in terms of performance: unequal performance could have drawn more attention from corporate management to one subsidiary and, therefore, potentially introduced an additional source of difference in actual practices not related to culture (Lorsch and Allen, 1975; Pugh et al., 1969).

- Factors related to the environment

Ideally, the two subsidiaries had to carry out similar operations in terms of products manufactured and sold, and technology. They also had to operate in similar general economic and market conditions (Woodward, 1970; Duncan, 1972; Lawrence and Lorsch, 1969).

Contribution of Existing Research

The existing research was classified into three categories:

- Research on the impact of values or beliefs on management processes.
- Cross-cultural research.
- Research on budgeting.

The impact of values and beliefs on management processes

There are a number of studies in the management literature, particularly in the behavioral field but also in accounting, indicating
that different beliefs and values influence the way in which a number of management activities are carried out. For instance, researchers such as Likert (1967), MacGregor (1960), and Caplan (1971) have identified a range of possible assumptions regarding the nature of man and have related each one to specific types of management processes. The major limitation of these studies is that they tend to focus primarily on one set of beliefs or values, those related to individuals' conception of the nature of man, which have an effect limited to the interpersonal aspects of management processes. Furthermore, these studies tend to conclude that the type of process which is consistent with the more optimistic assumptions regarding the nature of man is always better than the other types, thus assuming that people can and want to change their beliefs and values.

The cross-cultural research

The most directly relevant research is in the cross-cultural literature. This can be classified into three major categories:

- Research on specific problems arising from cultural differences.
- Research on the impact of culture on management practices.
- Research focusing on measuring and comparing culture across countries.

These studies have made the following important contributions:

- They show that there are differences in values, needs, and attitudes among countries even if these are sometimes very subtle.

Man can be viewed as good, bad, or a mixture of both. He can also be viewed as able (or not) to change. Each of these views will lead to a different behavior when dealing with other people.
- They show that these differences can lead to misunderstanding and conflict between culturally different individuals.

- They offer a number of instruments and methods which have produced reliable results.

- They provide a bank of data for designing or evaluating the results of future research in this area.

Many of these studies, however, have the following limitations:

- Those which focus on measuring culture do not attempt to show practical implications for management.

- Those which examine the impact of culture on management practices compare practices between countries without defining and measuring cultural differences. These studies therefore cannot highlight the relationship between cultural characteristics and management practices. Furthermore, their findings are not reliable as a number of factors other than culture could have been the cause of the differences observed between countries (Negandhi et al., 1965).

These criticisms have been made by other researchers over the past couple of decades. What Richman wrote in 1965 is still true in 1981, i.e. that:

[A]...major problem is the absence of a basic theoretical conceptual framework within which to hypothesize that certain cultural factors do in fact generally and significantly tend to influence the performance of management. Finally, there is a lack of "developmental research" which would attempt to answer the question, "If this hypothesis about a particular cultural variable is generally true in principle, how does it find expression in the operational context of the real management world?" (Richman, 1965, p. 292)

The three categories of cross-cultural research that were identified are discussed, in turn, below.
The first category supports the statement that cultural differences are a source of conflicts in a multinational organization, and therefore that they are a significant variable in managing such organizations. It also indicates that multinational management is aware of the problem but usually does not know how to deal with it. For instance, Wormald (1973), writing from his own vast experience in working with multinational companies (chairman of Grace Bros. Ltd. and management consultant), notes that cultural clashes are extremely widespread:

... It is not even necessary that there should be any antipathy, although there frequently will be, because the foreign body will be felt as an irritant, like a speck of dust in the eye; it is sufficient that it should be different.

In international business, everyone has had experience of these cultural clashes. (Wormald, 1973, p. 91)

Findings by Alpander illustrate how a lack of communication between local and corporate management may result from cultural differences. Alpander (1973) asked U.S. executives on overseas assignments to compare their employees in the foreign subsidiary with their employees at home. He found that:

- The U.S. executives perceived their foreign employees as being more resistant to new ideas and more unwilling to change.
- Over 50% of the U.S. executives described their foreign employees as being unwilling to assume responsibility, while less than 20% described their U.S. employees in that way.
- Generally, the executives shifted to authoritarianism from high people and low or high task orientation, to a low people and high task orientation.

These findings are supported by Rokeach's work on values. Rokeach (1969, p. 63) cites several studies which "...support the hypothesis
that differences in beliefs on some important issues are more powerful
determinants of prejudice or discrimination than differences in race or
ethnic membership."

The second category of cross-cultural research which was identified comprises mainly descriptive studies of management practices within
certain countries, or comparative studies of management practices
between countries. The bulk of these studies are attributable to Zeira
et al. (1965) and Negandhi et al. (1965). However, the findings tend to
be too general to be of use in specific situations. Furthermore, as
these studies were carried out mainly in developing countries, the data
are not directly relevant to this research which has been conducted in
France and in the U.S.

More directly relevant are the studies of Granick and Crozier
which provide useful background data on French managers' values and
managerial practices. Granick (1972) examined the education, back-
ground, and resulting values of managers in France, Britain, the U.S.
and Russia. He used a case study approach for France and Britain (16
firms altogether) and relied on available literature for the other two
countries. His descriptions are based on studies of typical, large,
domestic, firms in each country. Crozier (1964) examined the managerial
values and practices in French bureaucracies through a series of cases.
His findings and those of Granick are used later in this research when
discussing the empirical data.

The third category of cross-cultural research which was identified
comprises studies focusing on measuring and comparing cultural values
across countries. Some major studies in the cross-cultural management
literature are those of Haire et al., England, Cummings et al., and Hofstede. They are briefly presented below.

Haire, Ghiselli and Porter (1966)

They studied the values and needs of 3,641 managers from 14 countries, using three instruments:

- A questionnaire of 8 items to measure the basic management assumptions and attitudes in dealing with subordinates.
- A questionnaire of 11 items based on Maslow's need hierarchy.
- A semantic differential test on a list of words concerning different modes of work activities.

They found that the countries fell into five clusters, four geographically defined and one related to the level of development:

- Nordic European countries (Denmark, Germany, Norway, Sweden)
- Latin-European countries (Belgium, France, Italy, Spain)
- Anglo-American countries (England, United States)
- Developing countries (Argentina, Chile, India)
- Japan

They also found that there were large variations among individual scores within each country. Only 28 percent of the differences between individuals were related to nationality.


England developed a "Personal Value Questionnaire", or PVQ, and administered it in successive studies to over 2,500 managers in five countries (U.S., India, Japan, Australia, Korea). The questionnaire consisted of a list of 66 concepts, classified into five groups:
- Organizational goals
- Personal goals
- Groups of people
- Ideas associated with people
- Ideas about general topics

England devised a scoring method which allowed him to classify the concepts along a centrality-peripherality continuum for the individuals or groups studied.

England found significant differences among the value profiles of the managers of the various countries but also large differences among individual value profiles within each country. He also found that some of these differences among individuals within a country were related to organizational contextual variables such as size and type of structure.

An interesting aspect of his questionnaire is that it seems to yield consistent results over time. In 1972, Lusk and Oliver replicated the study made by England on U.S. managers in 1967 and found remarkably few differences.

Cummings et al. (1971)

They studied the attitudes of 451 middle and top-level managers in 11 countries, using a 58-item questionnaire adapted from the Personality Attitude Schedule of Shure and Meeker. They measured four dimensions in attitudes:

- Conciliation versus belligerence in interpersonal relations
- Risk-avoidance versus risk-taking
- External versus internal control (attitude toward fate)
- Suspiciousness versus trust
In order to compare their findings to those of Haire et al., they grouped the countries into five geographical clusters:

- Scandinavia (Norway, Finland, Sweden, Denmark)
- Central Europe (France, Belgium, Germany, England)
- United States
- Greece
- Spain

Their findings may be summarized as follows:

- 95 percent of the variability in the scores was attributable to individual differences within each geographical cluster as opposed to 72 percent in the Haire et al. study.
- The 5 percent variability attributable to regional differences was statistically significant for the four scales.
- On the four dimensions, the five regions divided themselves into three sets of roughly comparable scores, with the U.S. and Europe always in a different set.
- Variations within a country seemed to be related to the nature of the firm (private or public sector) rather than the level of industrialization of the country or the functional identification of the manager.

Hofstede (1976)

Research by Hofstede is possibly the only one which has attempted to control for environmental factors other than culture and which is oriented toward practical implications for management systems. Hofstede conducted extensive studies within one multinational company (IBM) controlling for the nature of the task environment, the type of personnel, and organizational structure and systems.
Hofstede administered an attitude questionnaire of 150 items to 60,000 people at IBM. From this data bank, he was able to determine specific differences among countries regarding working relationships. He was particularly interested in differences in power relationships (July 1976).

Hofstede, however, did not attempt to operationalize the concept of culture, and so there is no framework in which to determine what the critical differences between cultures are.

There are also a number of less extensive empirical studies in which researchers have examined two cultural settings along a limited number of dimensions, using instruments which had been developed previously for measuring certain values or attitudes within one cultural setting (Bedeian, 1975; Kemp, 1973; Slocum, 1971).

These studies support the existence of modal personality structures. However, either they do not provide a comprehensive instrument to measure culture (for instance Hofstede’s studies) or the instrument used does not seem to measure systematically the relevant values, beliefs or attitudes (for instance Haire’s or England’s instruments).

The questionnaire which was finally chosen to measure cultural differences in this research is that developed by the anthropologists Kluckhohn and Strodtebeck (1961). Although it had not been developed specifically for use in research on management it seemed to be particularly suited to this research as it provided what the instruments used in the management literature lacked. Specifically, it was comprehensive and designed to measure some of the values which are likely to vary systematically between cultural groups (Kluckhohn and Strodtebeck, 1961, p. 3). Furthermore, field observations and field testing indicated that
the instrument was valid and reliable. Its authors tested it in Indian, Spanish-American, Mormon and Texan communities (Kluckhohn and Strodbeck, 1961). Its discriminating ability had also been demonstrated in non-primitive societies, for example, in Boston where it was able to identify five different social groups. Its use to predict behavior had been shown in a marketing study where the questionnaire had been used successfully to predict the type of car purchased by culturally different families (Henry, 1976). Finally, Stewart (1972) had used this instrument to describe the U.S. culture and related specific examples of behavior to each cultural value. His research is used in Chapter IV when describing the results obtained from the administration of the questionnaire.

A major drawback in using this questionnaire was that it measured broad values and therefore could not be related to specific management practices as easily as the instruments from the management literature. It was decided therefore to use it with England's PVQ, the PVQ being used as an intermediate step in relating general cultural values to specific budgeting practices. However, the PVQ had to be abandoned for reasons described in the section on the research process in Chapter II, and Kluckhohn and Strodbeck's questionnaire is the only instrument used in this research for measuring cultural values. It is described in detail in Chapter II, and it is reproduced in Appendix II.

The budgeting literature

In the budgeting literature, no ready-made instrument was found which would be suitable for this research. However, a number of important elements or aspects of a budgeting process were identified which could be used to develop a questionnaire, specifically:
- some major steps and set of tasks that are normally performed (Anthony, 1972; Welsch, 1971)
- some important characteristics of the process (Anthony, 1972)
- some important behavioral variables in budgeting.

The major steps and set of tasks which were used to develop the questionnaire do not need further discussion as they are those which are commonly used in textbooks on budgeting. They are reported in detail when describing the budgeting questionnaire in Chapter II. The same comment applies to the characteristics of the process. Those retained here, namely the degree of standardization, the degree of formalization, and the level of detail required have been widely used to describe budgeting processes (Anthony, 1972) or management processes in general (Pugh et al., 1968; Mintzberg, 1979).

The behavioral variables, which are listed below, were retained because of the link identified in the literature with performance. They also have received a great deal of attention from researchers, as can be seen below. They can be classified into three major topics:

- Is the goal elaboration process participative or authoritarian? Specifically, how much "real" participation is there? (Dunbar, 1974; Becker and Green, 1974; Argyris, 1952).
- How much importance is attached to budgeting? How much commitment is there to achieving the budget? (Stedry, 1960; Hofstede, 1968; Swieringa and Moncur, 1972, 1975; Searfoss, 1976).
- How is the budget used? What are the attitudes towards budgeting and the budget? (Hopwood, 1973, 1974; Campan, 1976).

How these budgeting variables were built into a questionnaire is discussed in Chapter II.
CHAPTER II


This chapter describes how the research was actually carried out. It describes successively the instruments used, the company and the sites, and the data collection process.

Description of the Instruments

The Budgeting Practices in the Subsidiaries

As indicated in Chapter I, there was no ready-made instrument to describe the budgeting practices. The term, budgeting practices, is used to mean the way the budget was elaborated, i.e., the inputs, the internal steps, and the output in each subsidiary, and the structure in which this process was embedded, i.e. the organization structure in each subsidiary. The organization structure was relevant as the way the budgets are elaborated depends partly on how the overall task is broken down into components and how the responsibilities are assigned.

The data on the organization structure could be taken directly from the organization chart in each subsidiary and therefore did not require a special instrument. A questionnaire, however, had to be developed for the data on processes.
The organization structure

Given the research design adopted (see Chapter I), three groups of people in each subsidiary were particularly relevant because of their involvement in the manufacturing budget:

- the managing directors and the top Finance and Manufacturing executives, who set out the policies and review and approve the final budget;
- the controllers' departments, which are responsible for the coordination of the budgeting activities and for the evaluation and integration of the departmental inputs;
- the plant Accounting departments, which coordinate and review plant inputs into the budget, and the plant technical departments, particularly the Production departments, which are involved in the budget either as direct (or indirect) participants in the preparation, or as recipients responsible for the implementation.

Therefore, the structural descriptions cover the following levels or functions in the companies:

- The basic division of the company into departments and the structure at top management level
- The controllers' departments
- The plants

The structural descriptions are reported in Chapter V. They map out the vertical specialization, i.e. the depth of the hierarchy and division of responsibilities between levels, and the horizontal specialization, i.e. the task break-down, for each of these groups.
The budgeting process

The data on the budgeting processes were collected through interviews. The interview schedule used is reproduced in English and French in Appendix I. The content and the form adopted for this schedule are discussed below successively.

The content

As discussed in Chapter I, two types of data were sought, data on the tangible aspects of the process, e.g. steps, content, form, and data on the intangible aspects, e.g. priorities, attitudes, participation.

The following tangible elements were sought:

The budget guidelines
- Description of the content and the form
- Who prepares and issues the guidelines?
- Who are the recipients of the guidelines?

The budget timetable
- Who prepares and issues the timetable?
- Description of the content of the timetable.

The successive steps and the participation in the budget preparation
- Who is responsible for preparing the initial inputs?
- Who is responsible for the coordination and consolidation of all inputs?
- What are the successive review and approval steps?
- What is the revision process?
- Who gives final approval?
The content and the form of the budget
- Description of the items required internally versus those required by the corporate management.
- The degree of standardization and formalization of the inputs and of the final internal document.

Although the control activities (i.e., reporting and variance analysis), were not studied, the data on how these activities took place were thought to be useful as an indicator of what the priorities were, officially at least, and of how much importance was attached to the budget. Therefore, it was decided to obtain data on the content, form, periodicity, and distribution of the major control reports used internally. As it happened, the budgeting system at Multi-Co. was such that it would not have been meaningful to limit the research to the budget preparation only. Some reporting activities were in effect an integral part of budgeting (see Chapter III, particularly the section "Control").

The information sought on the intangible elements of the budgeting process, as described in Chapter I, included the following:
- Information on the level of commitment to the budget and on the real priorities pursued, which would indicate which parts of the budget, if any, were truly relevant.
- The attitudes towards budgeting and the budget, which would indicate how much "real" effort was likely to be invested in budgeting and later in implementing the budget.
- The modes of interpersonal interactions, in particular the degree of participation, which would explain how the information was exchanged and the decisions made.
The attitudinal data were a surrogate for behavioral data for those aspects of the process for which behavior could not be easily observed. For instance, the attitudes towards budgeting and the budget were an indicator of the amount and the seriousness of the efforts invested in budgeting. The priorities reported were an indication of the areas where effort was high. As much factual evidence as possible was gathered to corroborate the attitudinal data, some important sources of information being anecdotes and crises.

These intangible data did not have to be gathered solely within the context of the budgeting process. The budgeting process is a set of activities somewhat arbitrarily isolated for this research from all the activities performed in a firm. In other words, the intangible aspects of the budgeting process were likely to be the same as those of a number of other activities performed. Because these intangible aspects are by their nature difficult to grasp, it was decided to supplement the data gathered within the context of the budget preparation with information on other processes and, more generally, on how people performed their daily tasks. Such general questions also allowed unplanned topics to be brought up during the interviews. This was considered an advantage since it left the interview somewhat open-ended, and thus allowed the effects of cultural differences not specifically anticipated to be recorded.

The form

The form adopted for the questionnaire was that of a semi-structured interview schedule with many broad topics as well as some specific questions.
This form was adopted for several reasons. A first reason was that as one of the objectives of this research was to gather data, it was important not to select in advance all the topics to be researched, but rather to allow the interviewees to bring up what they thought was important. A second reason was that it was important to let the interviewees talk freely in order to obtain answers which reflected their true feelings, not ones which they believed to be theoretically or socially desirable or ones which were analytical reconstructions of what they thought they felt. A third reason stemmed from the lack of homogeneity in the sample in terms of hierarchical levels and functions. The resulting differences in the scope and the specific content of the task performed by the respondents made it imperative to keep the questions sufficiently general so that they could be understood and answered by all.

The administration of the questionnaire is described in more detail later in this chapter when describing the research process.

The Culture

As explained in Chapter I, the Kluckhohn and Strodtbeck instrument was used to measure culture. Kluckhohn and Strodtbeck (1961) operationalized culture through the concept of value-orientations which Clyde Kluckhohn defined as "... generalized and organized conceptions influencing behavior, of nature, of man's place in it, of man's relation to man, and of the desirable and non-desirable as they may relate to man-environment, and interhuman relations" (1951, p. 411).
According to Kluckhohn and Strodtbeck, these value-orientations, or postulates are basic to all social systems because they are the answers to fundamental problems faced by all human groups. The problems are the same but the solutions vary from one society to another. The postulates are usually implicit and must be inferred from behavior. People are not aware of them and rationalize their behavior on other grounds.

Quoting from Kluckhohn and Strodtbeck, the questionnaire is based on the following assumptions:

- "... there is a limited number of common human problems for which all people at all times must find some solution.
- "... while there is variability in solutions of all the problems, it is neither limitless nor random but is definitely variable within a range of possible solutions.
- "... all alternatives of all solutions are present in all societies at all times but are differentially preferred" (Kluckhohn and Strodtbeck, 1961, p. 10).

Kluckhohn and Strodtbeck singled out five crucial questions asked by all human groups, each question representing a value-orientation:

- What is the characteristic of human nature? (Human Nature orientation).
- What is the relationship of man to nature? (Man-Nature orientation). This orientation has to do with the belief in fatality (Subjugation) versus self-determination and control over the environment (Mastery). The middle solution (Harmony) is the belief in the oneness of man with the universe.
- What is the temporal focus of human life? (Time orientation). This orientation has to do with a respect for past traditions and order versus the belief in planning for a better future. The middle solution values the present over the past or the future.

- What is the modality of human activity? (Activity orientation). This orientation centers on the nature of man's mode of expression in activity. The Being solution is characterized by a preference for "... spontaneous expression of what is conceived to be given in the human personality" (Kluckhohn and Strodtbeck, 1961, p. 16), while the Doing solution is expressed in an activity which results in accomplishments measurable by external standards. Being-in-Becoming stresses the development of all aspects of the self as an integrated whole.

- What is the modality of man's relationships to other men? (Relational orientation). In Individualism, individual goals have primacy over group goals, and the individual is fully responsible for himself. The other solutions emphasize group goals and the responsibility of the group for the individuals belonging to it. The difference between the Lineality and the Collaterality solutions is the emphasis on the ... "continuity of the group through time and ordered positional succession within the group" for the former (Kluckhohn and Strodtbeck, 1961, p. 19).

The matrix in Table 1 represents the five problems and the range of solutions. However, the questionnaire did not measure the Human Nature orientation. Furthermore, although three solutions were identified for the Activity orientation in Table 1, only two were retained in the questionnaire as the authors were not able to develop a satisfactory
TABLE 1
THE FIVE VALUE-ORIENTATIONS AND THE RANGE OF VARIATIONS POSTULATED FOR EACH

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Postulated Range of Variations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Nature</td>
<td></td>
</tr>
<tr>
<td>Evil</td>
<td>Neutral</td>
</tr>
<tr>
<td>mutable</td>
<td>immutable</td>
</tr>
<tr>
<td>Mixture of Good-</td>
<td></td>
</tr>
<tr>
<td>and-Evil</td>
<td>Good</td>
</tr>
<tr>
<td>mutable</td>
<td>immutable</td>
</tr>
<tr>
<td>Man-Nature</td>
<td>Subjugation-to-Nature</td>
</tr>
<tr>
<td>Harmony-with-Nature</td>
<td>Mastery-over-Nature</td>
</tr>
<tr>
<td>Time</td>
<td>Past</td>
</tr>
<tr>
<td>Present</td>
<td>Future</td>
</tr>
<tr>
<td>Activity</td>
<td>Being</td>
</tr>
<tr>
<td>Being-in-Becoming</td>
<td>Doiing</td>
</tr>
<tr>
<td>Relational</td>
<td>Lineality</td>
</tr>
<tr>
<td>Collaterality</td>
<td>Individualism</td>
</tr>
</tbody>
</table>

*From Kluckhohn and Strodtbeck, 1961, p. 17.*

test for the Being-in-Becoming solution. This turned out to be unfortunate as we will see in the discussion of the interview data in Chapter VI. The questionnaire comprises twenty-two descriptions of concrete situations, seven for the Relational orientation and five each for the others. For each situation, respondents are given concrete descriptions of possible behavior, one per type of possible solution as identified in the matrix. Respondents are asked to rank order these descriptions from the most preferred to the least preferred. From these rankings, preference patterns can be established for a group, one per value-orientation. This set of preference patterns for a group is similar to what Linton called "modal personality structure" (see Chapter I). The aggregation method is described in detail in Chapter IV.

The questionnaire is reproduced in Appendix II in English and French (Appendix II, part II and III). In Part I of Appendix II, questions are grouped by orientation rather than presented in the order in which they were asked. There was no French version available at the
time of the research. The questionnaire was independently translated from English into French by two translators; the two French versions were then re-translated into English by a third person, and the three translators agreed on the final version.

**Description of the Company and the Subsidiaries**

The Company -- Multi-Co.

Multi-Co. is among the world leaders in the manufacture of a certain type of heavy industrial equipment. Products are manufactured in 30 countries and sold in nearly 200.

The major manufacturing locations as well as the major markets for Multi-Co. are the U.S., Canada, the U.K., West Germany, France, Brazil and Australia. North America and Europe each account for approximately 30% of the net sales and 38% of the assets employed, and Latin America for 20% of the net sales and 17% of the assets employed.

Whereas at one time nearly all of a particular product or component came from one source within the company, the manufacturing rule at the time of the research was multiple sourcing of components, which therefore created a great deal of interdependency between the various companies.

Multi-Co.'s management described its basic international organization and control principles as "modified decentralized operations and strong centralized planning and control".

The worldwide organization structure was three-tiered. At the bottom, each manufacturing country constituted an operation unit (or OU), responsible for manufacturing and marketing activities, with the exception of the U.S. and Canada, which had been grouped into one OU.
called North American Operations, or N.A.O.. It was managed through the
U.S. subsidiary headquarters in Des Moines.

The OU's were grouped into three regions: Asia/Africa/Australia,
Americas—made up of North and Latin America—and Europe. Each region
was headed by an executive vice-president (or EVP) assisted by a small
staff with line supervision over the operation units in their region.

At the top, there was a corporate staff of some 150 people which
directed the regional managements. This corporate staff, headed by the
corporate president, was responsible for global strategies and policies,
which included:

- Product strategies, i.e. product design and all engineering
  activities,

- Treasury management, which included all decisions on the financing
  structure and capital investments,

- Location of facilities,

- Planning and control processes,

- Flows of trade, in particular decisions on sourcing of parts and
  components, intercompany trade and prices,

- Personnel administration, and

- Organization structure.

This organization evolved from a 1959 re-organization, when
Multi-Co. first established a worldwide corporate staff separate from
its domestic subsidiary, thus treating equally the domestic and the
foreign operations.

The last major re-organization in December 1972 added the regional
staffs between the corporate headquarters and the OU's. Up to that time,
the OU's reported directly to the corporate headquarters.
The Subsidiaries

In Chapter I, the need to choose subsidiaries similar in terms of age, size, performance, products, technology, and operating in similar market and economic conditions was identified. As we can see below, the French and the U.S. subsidiaries chosen for this research were reasonably well matched on all factors except size.

The North American OU was considerably larger than the French one with sales revenue and total net assets approximately 2.5 times and 3.5 times, respectively, that of the French OU.

The North American OU operated eleven plants in total, five in Canada and six in the U.S. Two of the six plants operating in the U.S. were selected to match as closely as possible the two plants operating in France. The Detroit Southfield plant was chosen to match the French Beauvais plant and the Des Moines plant was chosen to match the French Marquette. However, again, the matching in terms of size was not perfect. The French plants were larger than the two U.S. plants.

The two subsidiaries were well matched in terms of age. In North America, operations started in the late 19th century. In France, products were first sold at the turn of the century. Manufacturing began at Marquette in 1926 and the second plant, Beauvais, was created in 1960. Given their ages, the two subsidiaries could be considered mature organizations.

In terms of financial performance, both subsidiaries had been financially shaky over the recent years and were reporting losses at the time of the interviews.

One reason for this poor performance suggested by the top management of both subsidiaries seems to have been the financing policy of the
corporate management, which resulted in high proportion of debt—70% debt and 30% equity. (Other manufacturers in the industry, because of the cyclical nature of the demand, did not normally exceed a 40% debt proportion.) As a result, the subsidiaries incurred on an on-going basis extremely high interest costs, which over the years had considerably contributed to the deterioration of the company's cash flow.

Other reasons for the poor performance of the subsidiaries were more difficult to ascertain. For the French company, corporate policy could have been a major factor. Until the seventies, England had the lowest salaries and prices in Europe and therefore was a prime location for manufacturing. Consequently, corporate management had concentrated the high volume productions in England and tended to give the French OU either what the English OU could not handle or the less economical production runs.

The North American OU seemed to have been affected by the acquisition policy of corporate management, which resulted in a large number of production facilities in need of reorganization and rationalization, as well as the ownership of some ailing companies, which became a financial drain. At the time of the interviews, the North American OU's management was beginning to examine the possibility of closing down or selling out marginal plants and companies.

Regarding products and technology, the French and U.S. plants were again reasonably well matched.

With the product design and engineering functions centralized at the corporate level and with the policy of standardization of components to facilitate exchanges between OU's, the basic products manufactured and the technology were the same in the French and the U.S. plants.
Furthermore, all four plants could be classified in Woodward's mass production category, specifically in the cell "Production of large batches on assembly lines" (Woodward, 1965). However, there was more diversity in the products manufactured in the French plants. The French Marquette plant was highly integrated, producing nearly 100% of its required stampings and mechanical components needs; the degree of integration at its U.S. counterpart, Des Moines, was not as extensive. At Beauvais, an important part of the productive facilities was utilized for major sub-assemblies which were shipped to the rest of Europe and to the North American works. The activity at its U.S. counterpart, Southfield, was exclusively assembly. In addition, there was more diversity in the product line assembled at Beauvais than in that assembled at Southfield due to the fact that approximately half of the Beauvais production was exported to countries with different needs and different legal requirements. Table 2 gives the normal production level for each plant, expressed in total standard direct labour hours. The direct material purchases give an idea of the level of integration at each plant.

The Research in France and in the U.S.A.

The General Process

In France, the research began with an informal conversation with the controller who provided the basic information regarding the organization of the French company. This conversation identified the general manager of Planning and Control (P and C) general manager\(^2\) as the person in charge of the design of the budgeting process, the coordination of

\(^2\)For brevity, referred to hereafter as the P and C G-manager.
### TABLE 2

**COMPARISON OF THE FOUR PLANTS**

<table>
<thead>
<tr>
<th></th>
<th>Marquette</th>
<th>De Moines</th>
<th>Beauvais</th>
<th>Southfield</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production</strong></td>
<td>2021</td>
<td>574</td>
<td>1515</td>
<td>431</td>
</tr>
<tr>
<td>(in 000's)</td>
<td>of which</td>
<td>of which</td>
<td>final</td>
<td></td>
</tr>
<tr>
<td><strong>standard</strong></td>
<td>major</td>
<td>final</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>hours</strong></td>
<td>components</td>
<td>assembly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for Beauvais</td>
<td>= 4%</td>
<td>= 68%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Direct</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Material</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Purchases</strong></td>
<td>28.0 a</td>
<td>12.0</td>
<td>197.0</td>
<td>152.0</td>
</tr>
<tr>
<td>($ millions)</td>
<td>(at standard)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>of which:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interworks</td>
<td>Negl.</td>
<td>23%</td>
<td>11%</td>
<td>24%</td>
</tr>
<tr>
<td>Inter Co.</td>
<td>20%</td>
<td>4%</td>
<td>30%</td>
<td>41%</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>73%</td>
<td>59%</td>
<td>35%</td>
</tr>
<tr>
<td>Suppliers</td>
<td>80%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Excluding the foundry*

The budgeting effort, and the consolidation and presentation of the content for the French company. So data gathering started with the P and C G-manager.

Interviews took place over several days and were held informally. This initial set of interviews mapped out the overall flow of the budgeting process in the French company, i.e. the procedures, inputs required, responsibility allocation and steps in the process. The descriptions of the budgeting process allowed the researcher to identify the relevant sample of interviewees at the headquarters, i.e. the people involved in the manufacturing budget.

After the interviews at headquarters, the budgeting process was followed down to the plants, first to Marquette, then to Beauvais.

The procedure adopted was similar in both plants: first, a meeting with the plant manager, then a formal introduction to his
department managers at which time the researcher briefly explained the research. This was followed by interviews with the department managers. The sample of people to be interviewed within each department was always determined after discussion with the department manager.

The shortest interviews were with the foremen, lasting half an hour on average. Interviews with those above the foremen were never less than an hour and some lasted two or three hours. All interviews followed a very similar general pattern.

- A description of the research with particular emphasis on the meaning of the culture questionnaire. This questionnaire aroused a great deal of concern with the respondents who thought it might be used by their management for an evaluative purpose.

- A discussion of the interviewees' positions in the organization and of the technical aspect of their jobs to provide the context for the interview.

- The administration of the budgeting interview schedule.

The sample selected at headquarters and at the plants is described in the section on the administration of the questionnaires.

Similar steps were followed in the U.S. company. The research at headquarters started with the assistant controller, who acted as liaison between the researchers and the sample of interviewees. Interviews at headquarters were followed by interviews first at the Des Moines plant then at the Detroit plant.
The Administration of the Questionnaires

The sample and the procedure followed for the interviews are successively described in the remainder of this chapter.

Description of the Sample

The positions and number of respondents in the French and the U.S. company are given in Table 3. At headquarters, nearly 100% of the people directly involved in the budgeting process were interviewed; at the plants, a representative sample could be used. The sampling, however, could not be done totally randomly because of problems of availability and willingness to cooperate.

Interview Procedure

The culture questionnaire was normally given first with an explanation on how to fill it out. It was usually taken home and returned a few days later. A few people preferred filling it out immediately. People reported having taken from thirty-five minutes to one hour and a half to fill it out. The return rate was high and is summarized in Table 4.

At both headquarters, the questionnaire was not administered to the managing directors because of the time involved in filling it out. At the Beauvais plant, the questionnaire filled out by a Production Control chef de section was incomplete and had to be discarded. At the Des Moines plant, two foremen did not return it; and at the Detroit plant, the plant manager and one foreman did not return it.

The interview schedule on the budgeting practices was administered verbally. Extensive notes were taken, as much as possible verbatim, during the interview.
### TABLE 3

**SUMMARY OF THE SAMPLE IN FRANCE AND IN THE U.S.**

<table>
<thead>
<tr>
<th>Total Sample:</th>
<th>France</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headquarters</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Plants:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marquette</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td>Beauvais</td>
<td>14</td>
<td>-</td>
</tr>
<tr>
<td>Des Moines</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>Detroit</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td>TOTAL</td>
<td>38</td>
<td>38</td>
</tr>
</tbody>
</table>

Sample from Headquarters:

<table>
<thead>
<tr>
<th>Top Management:</th>
<th>France</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>. Managing Director</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>. Director Manufacturing</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>. Director Finance/Controller</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Controller's Department:</td>
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<td></td>
</tr>
<tr>
<td>. Planning</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>. Plant Financial Analysis</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>. Accounting</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>. Sales</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>. Programming</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL HEADQUARTERS</td>
<td>11</td>
<td>11</td>
</tr>
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</table>

Sample from the Plants:

<table>
<thead>
<tr>
<th>Plant Manager</th>
<th>France</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marquette</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Beauvais</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Des Moines</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Detroit</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL PLANTS</td>
<td>13</td>
<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department Managers:</th>
<th>France</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>. Accounting</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>. Facilities</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>. Foundry</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>. Personnel</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>. Production</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>. Production Control</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>. Purchasing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>. Quality Control</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Level 2 and Below:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>. Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Foremen/</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Chefs d'Atelier</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Foremen</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>. Other Departments</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL PLANTS</td>
<td>13</td>
<td>14</td>
</tr>
</tbody>
</table>

---

*a* Only Marquette had a Foundry.  
*b* People reporting to a department manager, or below.
TABLE 4
TOTAL CULTURE, QUESTIONNAIRES
RETURNED BY LOCATION

<table>
<thead>
<tr>
<th>Location</th>
<th>Total Sample No.</th>
<th>Total Questionnaires Returned No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRANCE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paris</td>
<td>11</td>
<td>10</td>
<td>28</td>
</tr>
<tr>
<td>Marquette</td>
<td>13</td>
<td>13</td>
<td>36</td>
</tr>
<tr>
<td>Beauvais</td>
<td>14</td>
<td>13</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>36</td>
<td>100</td>
</tr>
<tr>
<td>U.S.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Des Moines Headquarters</td>
<td>11</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>Des Moines Plant</td>
<td>11</td>
<td>9</td>
<td>27</td>
</tr>
<tr>
<td>Detroit</td>
<td>16</td>
<td>14</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>33</td>
<td>100</td>
</tr>
</tbody>
</table>

As discussed earlier in this chapter when describing the interview schedule, it was important to let the respondents express themselves as freely as possible. Therefore the interviews were conducted in a conversational mode:

- The questions were rephrased when not understood. However, they were not rephrased more than twice if the interviewee did not understand or could not give an answer. This was to avoid putting pressure on the interviewee and stopping the flow of the conversation.
- The questions were asked only if they had not been already answered within the context of another question.
- The order adopted for the questions followed, as much as possible, the flow of the conversation, and digressions from the topics were
not checked. The vocabulary used in phrasing the questions was, as much as possible, that already used by the respondent.

The researcher commented on the facts presented when it was felt that such comments were expected and were needed to keep the conversation flowing.

In order to obtain as much meaningful data as possible, there was less control exhibited over the phrasing of the questions. Therefore the reliability of the comparisons made on the basis of the data is somewhat diminished. However, it was not felt that there was any systematic bias in the way the data was collected in each country which could seriously affect the results.

Originally, it was intended to use England's PVQ in conjunction with the Kluckhohn and Strodtbeck's questionnaire (see The Research Framework in Chapter I). After the PVQ had been administered to approximately half of the sample in France it was decided to leave it out for two major reasons:

- The time required to fill it out was high (often one hour) and time was a scarce resource particularly when interviewing at the plants.
- Respondents found it extremely ambiguous and several different interpretations of the questions were reported which would seriously affect the comparability of the data obtained.
CHAPTER III

THE CORPORATE BUDGETING REQUIREMENTS AT MULTI-CO.

The major features of the corporate requirements were that a) they were extensive, b) they were imposed identically on all Multi-Co. companies, and c) many aspects of these requirements were unique to Multi-Co.

The description covers separately the philosophy of the system, i.e. the objectives and general approach, and the process, i.e. the steps and techniques. In order to provide the background information and the vocabulary needed to interpret the interview data reported in chapters V and VI, the description covers the whole budgeting system rather than just the unusual features or the features which are revealed as important in the analysis of the interview data. (The unusual features and the features which were internalized differently or were followed differently in the two subsidiaries are identified for future reference.)

The IPC Philosophy

The philosophy behind Multi-Co.'s worldwide budgeting system is important as it indicates what the corporate management wanted to accomplish with this system. As we will see later in chapters V and VI when analysing the data collected, certain aspects of the system produced in France the opposite results from those desired.
Following the 1959 reorganization, Multi-Co.'s management decided to implement a uniform approach to planning in their worldwide operations. In order to help identify the information needs and to design a suitable system, a large North-American consulting firm worked with Multi-Co.'s management and developed a system which they entitled "Integrated Planning and Control", or "IPC". The system was defined as...

A set of annual planning and control practices which continually focus attention on the improvements that are brought about by the action of individual managers. (Bishop and Wilson, 1963, p. 2-1)

It was presented in a detailed and thorough document of approximately 100 pages, and left little discretion to the companies as to the form and content of their budget.

The objective of the IPC was to implement the use of "a creative approach," i.e. "an approach that focuses primary attention on improvement through change".

The involvement and commitment of managers to the plan, and the emphasis on action and change on a continuous basis were central elements in the IPC system. Some quotations, given below, can be used to illustrate the importance of these themes in the IPC document:

- IPC creates a situation in which managers are expected to devise phases that will:
  - take advantage of improvement opportunities
  - change the existing situation
  - generate larger profits.

---

1 Integrated Planning and Control: Change through Management Action, by S.V. Bishop and S.R. Wilson, September 1963.

2 Ibid., Chapter 3. "How IPC Helps to Re-establish Managerial Initiative", p. 3-1 and 3-2.
Although a single standard of performance is maintained throughout the year, flexibility is achieved by making revised action programs, an integral part of the process. Each step in the planning and control process should promote the concept that a successful manager must constantly be alert to the need for change.

The table of contents of the IPC document reproduced in Table 5 also highlights well the importance of these themes. Part Three and most of Part Four are devoted to managerial involvement. The word "change" appears with great frequency.

The emphasis on change was operationalized by the unusual role of the monthly profit forecasts which were effectively used as new budgets. This element of the IPC is given special attention in the section "Control" since it is an important issue in the interview data reported in Chapters V and VI. As we will see in these chapters, these monthly changes to the budget were well accepted in the U.S. subsidiary but not in the French one.

The Company-wide Budgeting and Control Process

Budgeting

The planning process started in March with strategic planning. The corporate management defined overall objectives (profits, assets, headcount, investment) and indicated the important issues to be considered. These were then communicated to the Executive Vice Presidents (EVP) of each regional headquarters, who were responsible for allocating their objectives between the Operating Units (OU's) within their region.

3Ibid., Chapter 7 "Controlling Results", p. 7-7.
4Ibid., Introduction, p. 3.
# TABLE 5

**TABLE OF CONTENTS OF THE IPC DOCUMENT**

**Page**

<table>
<thead>
<tr>
<th>Foreword</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background of Integrated Planning &amp; Control</td>
<td>4</td>
</tr>
<tr>
<td>Accomplishments of IPC at Multi-Co.</td>
<td>6</td>
</tr>
<tr>
<td>Summary of Experience to date</td>
<td></td>
</tr>
</tbody>
</table>

## PART ONE: A VIEW FROM THE TOP

1. The Problem of Declining Managerial Initiative | 1-1 |
2. Essential Feature of Integrated Planning & Control |
   - Goals for Profit Improvement | 2-1 |
   - Identifying Opportunities for Change | 2-2 |
   - Developing Plans | 2-3 |
   - Ensuring Achievement of Goals | 2-4 |
3. How IPC Helps to Re-Establish Managerial Initiative | 3-1 |

## PART TWO: ENSURING THAT THE FORMAL STRUCTURE PROVIDES A CONTINUING INCENTIVE FOR IMPROVEMENT

4. Establishing Ambitious Goals | 4-1 |
   - Establishing a Demanding Management Task | 4-1 |
   - Responsibility for the Goal Setting Process | 4-7 |
   - Reconciling the Company's Long- and Short-Term Needs | 4-9 |
5. Identifying Improvement Opportunities |
   - Questions to be Resolved in the Goal Setting Process | 5-1 |
   - Questions to be Asked When Plans are Developed | 5-3 |
6. Developing Plans |
   - Specifying Changes Required to Achieve the Goal | 5-6 |
   - Demonstrating the Adequacy of the Planned Actions | 6-1 |
7. Controlling Results |
   - The Yardstick for Performance Measurement | 6-5 |
   - The Continuous Focus on Management Action | 7-1 |
   - The Use of Control Reports | 7-2 |

## PART THREE: ENSURING A PERSONAL IDENTIFICATION WITH IPC

8. Selecting Managers to Participate in the Process | 8-1 |
9. Relating Plans to Each Manager's Job | 9-1 |
10. Establishing Personal Accountability for Results |
    - The Problem of Delegation | 10-1 |
    - The Importance of Good Staff Work | 10-4 |
    - The Significance of Critical Decision Points | 10-6 |

## PART FOUR: MAKING IPC WORK

11. The Installation |
    - Installation Approaches | 11-1 |
    - Problem Areas | 11-2 |
12. How IPC Influences Management Attitudes |
    - The Structure Encourages Change | 12-1 |
    - The Structure Builds Management Disciplines | 12-2 |
    - It is a Part of the Management Process | 12-3 |
    - Conclusion | 12-4 |
Each OU prepared a preliminary balance sheet and income statement covering five years, which were reviewed and consolidated by the EVP's. In May, these strategic plans were reviewed with the corporate management by region.

The first year of the strategic plan became the basis for the coming year's budget. The budget itself was divided into two phases: the Goals and the Plan.

The Goals were the first detailed budget. They were due by the end of July and were reviewed in August with the corporate management.

The Plan was the final budget which was due in October. Although the financial year ended October 31, in practice the final budget was rarely approved before January, i.e. three months into the budget year. Apart from the revisions requested by the corporate management, the Plan differed from the Goals in that it incorporated updated assumptions regarding the economic environment for the budgeted year. These always included new sales volumes assumptions.

The Goals phase was initiated at the end of May by the corporate management who issued a timetable with a set of some forty schedules to be filled out by each OU (in accordance to very detailed instructions).

The submissions of the OU's at the end of each phase consisted of the set of forms issued by the corporate management, of a covering letter from the EVP, and of their general managers' comments on four summary schedules:

- The strengths and weaknesses summary
- The key operating ratios
- The breakeven
- The short form financial statements
The submissions for the Goals included only part of the corporate schedules. Table 6 lists the schedules included in the set and identifies those required for the Goals phase and those required for the Plan phase. As can be seen from this list, the coverage of the schedules was extensive.

The content of the budget was organized according to a planning logic consistent with the IPC emphasis on profit improvement through management action and change. It is illustrated in Figure 2. Briefly, the budgeting exercise consisted of establishing the planning base on the one hand, the profit objectives on the other hand, and then giving a detailed description of how management actions would bridge the gap between the two.

The planning base was defined as the level of profit which would be expected to be achieved if no new action or changes were internally undertaken by management.

The gap between the planning base and the profit objectives was to be bridged by management actions. This was the part of the plan for which management was held accountable and which was the focus of the budget reviews. These actions were shown in a key document called "Profit Impact Summary" which summarized the impact of non-controllable factors and the impact of new management actions on the revenue and cost items of the income statement. This consisted of some seven schedules accompanied by four pages of instructions.

At the time of the preparation of the Goals and of the Plan, because the actual results for the current year were not known, forecasted results had to be used. The official forecast for the Goals was the 7 + 5 forecast (seven months actual plus five months forecasted) and


**TABLE 6**

**SCHEDULES REQUIRED BY THE CORPORATE MANAGEMENT FOR THE GOALS AND FOR THE PLAN**

<table>
<thead>
<tr>
<th></th>
<th>GOALS</th>
<th>PLAN</th>
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</thead>
<tbody>
<tr>
<td><strong>1) GM/EVP LETTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summary Section</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Strength/Weaknesses Summary (P1)</td>
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<td>X</td>
</tr>
<tr>
<td>- Key Operating Ratios (P2)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>- AOP Break-even (P3)</td>
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<td>X</td>
</tr>
<tr>
<td><strong>2) ECONOMIC INDICATORS (P5)</strong></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>3) VOLUMES (P6 to P11)</strong></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>4) MANPOWER (P12 to P15)</strong></td>
<td>Only P12</td>
<td>X</td>
</tr>
<tr>
<td><strong>5) PROJECTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Engineering (P16 - P17)</td>
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<td>X</td>
</tr>
<tr>
<td>- Capital (P18 - P20)</td>
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<td>X</td>
</tr>
<tr>
<td>- Penalty Cost Summary (P24)</td>
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<td>X</td>
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<tr>
<td><strong>6) CASHING PLANNING</strong></td>
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</tr>
<tr>
<td>- Monthly Assets/Borrowings/Interest (P25)</td>
<td>–</td>
<td>X</td>
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<tr>
<td>- Continuity of Fixed Assets (P26)</td>
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<td>X</td>
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<tr>
<td>- Change in Financial Position (P27)</td>
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<td>X</td>
</tr>
<tr>
<td>- Asset Impact Summary (P28-P29)</td>
<td>–</td>
<td>X</td>
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<td><strong>7) PROFIT IMPACT SUMMARY</strong></td>
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<td>- 1978 (P30 - P31)</td>
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<td>X</td>
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<td>- Reconciliation to 1978 Goal (P32)</td>
<td>–</td>
<td>X</td>
</tr>
<tr>
<td><strong>8) STATISTICAL</strong></td>
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<tr>
<td>- Product Group Analysis (P33)</td>
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<td>X</td>
</tr>
<tr>
<td>- Price Cut-in Dates (P34)</td>
<td>–</td>
<td>X</td>
</tr>
<tr>
<td>- Economics (P35)</td>
<td>–</td>
<td>X</td>
</tr>
<tr>
<td>- Tax/Minority Interest (P38)</td>
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<td>X</td>
</tr>
<tr>
<td>- Intercompany Transactions (P39)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>9) PLAN BY QUARTER (P40)</strong></td>
<td>–</td>
<td>X</td>
</tr>
</tbody>
</table>

*a X indicates that the form had to be submitted.

b (P...) indicates the schedule number in the set of forms.

c General manager.
Figure 2

The IPC Logic\(^a\)

Range of Goals for Management Action

Planning Assumptions

Plus or minus impact of uncontrollable changes in external condition

Plus or minus carryover effects

This Year's Estimated / Actual Profit (7 + 5 forecast)

Next Year's Profit Goal

\(^a\) From Bishop and Wilson, 1963.

\(^b\) Adjustments to reflect the effect over one year of actions or external factors which did not have a full year effect in the current year.
the 10 + 2 forecast for the Plan (ten months actual plus two months forecasted). This feature and its implementation by the corporate management raised a great deal of antagonism in the French company, while it seemed to be well accepted in the U.S. one. The difference in the acceptance of this practice and its relationship to cultural differences is discussed in Chapter VI.

Control

The control reports followed the budget schedules closely. Every month, the OU's reported the month's actual results and the cumulative year-to-date actuals, and prepared a new full year forecast for the current financial year. Each monthly full year forecast was in essence a new budget, updated in light of the latest conditions, and as such it was regarded as a key control tool. Variances between the current month's and the previous month's full year forecast received as much attention as variances between actual results and the original budget. The objective of this practice was to encourage the managers to keep up with the latest conditions and continuously set new objectives and plan new actions, in line with the objective of the IPC described earlier in this chapter.

The way these monthly profit forecasts were used is unusual by common budgeting standards. Monthly profit forecasts are rarely granted as much importance as the original budget as control tools. This feature is important in this research as it brought out some major differences in practices between the French and the U.S. subsidiaries, as will be shown in Chapter VI.
Accounting Techniques

The purpose of this description is to provide the necessary background information and vocabulary needed to understand the interview data.

For budgeting and control purposes, Multi-Co. used a direct costing approach.

Manufacturing costs were classified into three categories:

- The standard costs
- Cost allowances
- Decision costs

The standard costs were actual costs as of April or May of the current financial year. For instance, when budgeting for the financial year starting November 1, 1980, the standard costs were the actual costs as of April or May 1980. These standards costs included direct materials, direct labour and direct variable burden (overhead).

Cost allowances were adjustments to the standard costs made to reflect changes in the products, the processes, efficiency levels and inflation. Although they were effectively part of the standard costs, they were budgeted and controlled as a separate cost category in line with the IPC philosophy of identifying and controlling the changes between financial years.

Sales less standard costs and cost allowances constituted the direct variable profit, or DVP. DVP, and DVP as a percentage of sales, were important items in the budget and in control reports. In fact a schedule of the Impact Summary was devoted to the DVP.

Finally, decision costs were all fixed overhead costs.
CHAPTER IV.

THE CULTURAL DIFFERENCES BETWEEN
THE FRENCH AND THE U.S. GROUP

The chapter starts with a description of the questionnaire data, of the aggregation method to determine individual and group value-orientations and of the statistical tests used to compare these value-orientations. This description is necessary to understand the choice of the statistical tests and the presentation of the results. It is followed by an analysis of the differences in value-orientations, i.e. the cultural differences between the French and U.S. subsidiaries. The details of the statistical analysis are reported in Appendix III by dimension.

Description of the Data, Aggregation Method and Statistical Analysis

As described in Chapter III, the questionnaire consists of 23 questions: 6 relating to Activity, 5 to Time, 5 to Man-Nature, and 7 to Relational.

Each respondent answers 23 questions by ranking the alternative positions in a preference order. There are two possible positions on the Activity dimension, while there are three possible positions for all other dimensions. In each case the respondent assigns the number "1" to the preferred position, "2" to the next preferred, and in the case where there are three positions, "3" to the least preferred position. The
data obtained for each person therefore consists of 23 such rank-orderings.

The value-orientations of both individuals and groups are aggregate rank-orderings (one per cultural dimension) that are computed by pooling the answers on a given dimension. The aggregate rank-orders are established by pair-wise rankings, whereby the three positions (two for the Activity dimension) are taken two at a time in order to determine which one is preferred in the majority of cases. This procedure is illustrated using the Time dimension.

A 3 x 3 matrix (Figure 3) utilizing the three possible positions for Time identifies all the possible pairings. The six cells around the diagonal represent three different pairs. For cells A, B, and C, the pairs are Present-Past, Future-Past, and Future-Present respectively; the other three pairs---D, E, F---are complementary.

**Figure 3**

**Pairs of Positions in the Time Dimension**

<table>
<thead>
<tr>
<th></th>
<th>Past</th>
<th>Present</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past</td>
<td>Not App.</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>Present</td>
<td>A</td>
<td>Not. App.</td>
<td>F</td>
</tr>
<tr>
<td>Future</td>
<td>B</td>
<td>C</td>
<td>Not App.</td>
</tr>
</tbody>
</table>

Using the notation $X > Y$ ($X$ preferred to $Y$) we compute for the cells A, B and C, the frequencies $f_A = f$ Present > Past, $f_B = f$ Future > Past, and $f_C = f$ Future > Present.

To illustrate, we can take the answers of respondent R to the 5 Time questions (Figure 4), compute a frequency matrix (Figure 5) and
determine the Time value-orientation. Because there are 5 questions, for Time, the maximum frequency \( f(X > Y) \) for each respondent is \( 5^1 \) from Figure 5, we can see that respondent R has ranked Present before Past in four cases out of five, Future before Past and Future before Present in three cases out of five, i.e. more often than the reverse.

**Figure 4**

Answers of Respondent R to the Time Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Rank Assigned:</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Present</td>
<td>Past</td>
<td>Future</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Future</td>
<td>Present</td>
<td>Past</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Present</td>
<td>Past</td>
<td>Future</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Future</td>
<td>Present</td>
<td>Past</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Future</td>
<td>Past</td>
<td>Present</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 5**

Frequency Matrix of Pair-wise Preferences

<table>
<thead>
<tr>
<th></th>
<th>Past</th>
<th>Present</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present</td>
<td>( f \text{ Present} &gt; ) Past = 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future</td>
<td>( f \text{ Future} &gt; ) Past = 3</td>
<td>( f \text{ Future} &gt; ) Present = 3</td>
<td></td>
</tr>
</tbody>
</table>

In computing the Time value-orientations for a group of \( N \) people, the maximum frequency would be \( 5 \times N \), since there would be in total \( 5 \times N \) rank-orderings of the three positions.
This particular Time value-orientation, then, can be summarized as follows:

Future > Present > Past

meaning that in more than fifty percent of cases, respondent R has preferred Future to both Present and Past, and Present to Past.

This does not necessarily mean that the most frequent answer pattern is Future = 1, Present = 2 and Past = 3. In Figure 4, this pattern occurred only 2 out of 5 times; Present = 1, Past = 2, and Future = 3 also occurred twice. The aggregate and the most frequent rankings correspond when there is a high degree of concordance between the individual answers. In total, the four value-orientations yield ten pair-wise frequency comparisons. These are listed by dimension in Table 7 along with the abbreviations used hereafter.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Pairs</th>
<th>Abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>Doing &gt; Being</td>
<td>D &gt; B</td>
</tr>
<tr>
<td>Time</td>
<td>Present &gt; Past</td>
<td>R &gt; P</td>
</tr>
<tr>
<td></td>
<td>Future &gt; Past</td>
<td>F &gt; P</td>
</tr>
<tr>
<td></td>
<td>Future &gt; Present</td>
<td>F &gt; P</td>
</tr>
<tr>
<td>Relational</td>
<td>Individualism &gt; Collaterality</td>
<td>I &gt; C</td>
</tr>
<tr>
<td></td>
<td>Individualism &gt; Lineality</td>
<td>I &gt; L</td>
</tr>
<tr>
<td></td>
<td>Collaterality &gt; Lineality</td>
<td>C &gt; L</td>
</tr>
<tr>
<td>Man-Nature</td>
<td>Mastery &gt; Harmony</td>
<td>M &gt; H</td>
</tr>
<tr>
<td></td>
<td>Mastery &gt; Subjugation</td>
<td>M &gt; S</td>
</tr>
<tr>
<td></td>
<td>Harmony &gt; Subjugation</td>
<td>H &gt; S</td>
</tr>
</tbody>
</table>

^a A > B meaning A preferred to B. A is preferred to B when A is ranked 1 and B is ranked 2 or 3, or A is ranked 2 and B is ranked 3.
The value-orientations for the French and the U.S. groups were computed according to the procedure outlined for respondent R. However, before performing the aggregation on all the answers for each dimension, a first analysis was performed to test whether the pooling of the answers of all the respondents to all the questions for each dimension was justified. It was considered to be justified if Kendall's coefficient of concordance W (computed on all the rank-orderings) was significant. W varies from 0, indicating complete randomness in the rankings, to 1 indicating perfect agreement between all the respondents on all the questions. A W significantly different from 0 indicates a definite preference pattern in the answers that the aggregation will reveal.

The value-orientations obtained for each group were then tested to see whether the preferences were statistically significant. The aggregation performed produced a set of ten frequencies f(X>Y) per group, one for each pair-wise comparison X>Y (see Table 1). A t-test was performed on each frequency f(X>Y) to determine whether it indicated a significant preference. A significant t (p<0.05) indicated that the observed frequency f(X>Y) was significantly different from the expected frequency, that is 50% which would be the frequency expected under the null hypothesis of equal preference for X and Y. A significant preference for X over Y is represented in this research by the notation X>Y. An observed preference for X over Y but with a non-significant t is represented by X=Y.

2 See footnote 1.

3 Therefore, if there was a probability of 5 percent or less that X and Y were equally preferred, the preference X>Y was considered to be significant.
Finally, to compare the value-orientations of the two groups, i.e. to measure the cultural differences, a series of ten one-way analyses of variance were computed, one for each pair-wise preference X > Y (p < 0.05). A significant F-statistic indicated that the observed frequency f(X > Y) in one group was significantly different from that observed in the other group.4

When performing the statistical tests, the raw frequencies f(X > Y) had to be transformed. As the magnitude of these pair-wise frequencies depends both on the number of questions in a dimension and the number of respondents in the group, when comparing frequencies across groups and/or dimensions of unequal size, absolute frequencies were transformed into mean frequencies. Depending on the comparison, the mean frequencies used in the statistical tests were equal to either:

- absolute frequencies ÷ number of questions, or
- absolute frequencies ÷ (number of questions x number of respondents), or
- absolute frequencies ÷ number of respondents, the last two being the most frequently used in this research.5

---

4 Therefore, if there was a probability of 5 percent, or less, that the preference X > Y was the same in both groups, the two groups were considered to be significantly different.

5 For an individual, absolute frequencies can vary from 0 to i, where i = number of questions in a dimension. Mean frequencies vary from 0 to 1.

For a group, absolute frequencies vary from 0 to N x i, where N is the number of respondents and i is the number of questions in a dimension. Mean frequencies vary from 0 to i if computed as (absolute frequencies) ÷ N, or 0 to 1 if computed as (absolute frequencies) ÷ (N x i).
The Value-Orientations, i.e., The Culture of the French and the U.S. Groups

This discussion is organized in two parts. The first part compares the value-orientations within the French and U.S. groups. The second part compares the results obtained in this research to the cultural characteristics of French and U.S. nationals reported in existing literature. This comparison highlighted some discrepancies in the findings on the Time and Activity dimensions between this research and existing literature. Possible explanations are discussed.

Details of the statistical analysis supporting the results reported in this chapter are given in Appendix III. The first part of the Appendix reports the results of the statistical tests performed to compute the value-orientations in each group and to compare them across groups. The second part discusses the effect on value-orientations of variables other than "country" (i.e., being French or American). The culture of the respondents, operationalized here by value-orientations, may be significantly influenced by other variables such as their function or specific location within a country. If the national groupings were not the most homogeneous groupings in terms of value-orientations, the subsequent comparisons of budgeting practices in chapters V and VI would not be very meaningful. This Appendix is useful

---

6For each dimension, the following data are reported:
1. Results of the t-tests used to establish the value-orientation in each group.
2. Results of the analyses of variance comparing the value-orientations between the two groups.
3. Tables showing the percentage of respondents having a given value-orientation and the overall level of consensus within each group as measured by W.

Additional tests are reported for the Activity dimension.
in understanding the questionnaire data, and more specifically in ascertaining whether the group value-orientations are widely shared within the group, and therefore can be used to predict group behavior, or whether these are merely a statistical artifact, i.e. the result of the aggregation method adopted.

The Cultural Differences Between the French and U.S. Groups

The value-orientations computed for each group are shown in Table 8. The cultural differences identified by the analyses of variance are summarized in Table 9.

When comparing the two subsidiaries, there were no differences on the Activity dimension; both preferred Doing over Being, or on the Time dimension, where both chose Future > Present > Past. (The preference for Future over Present was not statistically significant in either group and is therefore represented as Future > Present in Table 8.)

There were significant differences between the two groups on the Relational dimension. However the difference did not lie in the ranking pattern as the dominant pattern within each group was Individualism > Collaterality > Lineality (in neither case is the preference for Individualism over Collaterality statistically significant). However, the collateral orientation was in fact considerably stronger in the French group than in the U.S. group. The French group was significantly more evenly split between Collaterality and Individualism as a first choice than the U.S. group. The detailed t-test table in Appendix III clearly demonstrates that the representation Individualism > Collaterality does not represent the same phenomenon in each country. The probability that the respondents were indifferent between the two positions is 31.8% in
TABLE 8
THE VALUE-ORIENTATIONS IN THE FRENCH AND THE U.S. GROUP

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>France</th>
<th>U.S.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>Doing &gt; Being</td>
<td>Doing &gt; Being</td>
</tr>
<tr>
<td>Time</td>
<td>Future &gt; Present &gt; Past</td>
<td>Future &gt; Present &gt; Past</td>
</tr>
<tr>
<td>Relational</td>
<td>Individualism &gt; Collaterality &gt; Lineality</td>
<td>Individualism &gt; Collaterality &gt; Lineality</td>
</tr>
<tr>
<td>Man-Nature</td>
<td>Mastery &gt; Harmony &gt; Subjugation</td>
<td>Mastery &gt; Harmony &gt; Subjugation</td>
</tr>
</tbody>
</table>

The notations used to express the rankings are those used by Kluckhohn and Strodbeck:

- A > B > C (A over B, A over C, and B over C -- all three are significant at the .05 level or better).
- A > B > C (Only A over C and B over C hold at the .05 level. The preference for A over B is present but does not appear with sufficient frequency to be significant at the .05 level.)
- A > B > C (A over B and A over C both hold at the .05 level. B over C is a more frequent response than C over B but is not a significant result.) (Kluckhohn and Strodbeck, 1961, p. 138.)

France versus 5.1% in the U.S. The preference in the U.S. group is shown as Individualism > Collaterality as the probability that the group was indifferent was over 5.0%, and 5.0% was chosen as the arbitrary cut-off point. In this case, however, Individualism > Collaterality might be a better representation of reality for the U.S. group.

There were also significant differences on the Man-Nature dimension. The ranking in both groups was (1) Mastery, (2) Harmony, and (3) Subjugation, but the strengths of the preferences between first and second choice, and between second and third choice, varied significantly between the two groups (Table 8). Whereas the French group was indifferent between Mastery and Harmony as a first choice, the U.S. group expressed a strong preference for Mastery as a first choice but was
TABLE 9
SUMMARY OF THE CULTURAL DIFFERENCES
BETWEEN THE TWO GROUPS

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Activity</th>
<th>No Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time</td>
<td>No Difference</td>
</tr>
<tr>
<td>Relational</td>
<td>Preference for Individualism over Collaterality weak in French group, stronger in the U.S. group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Preference for Mastery over Harmony weak in French group, strong in U.S. group</td>
<td></td>
</tr>
<tr>
<td>Man-Nature</td>
<td>* Preference for Harmony over Subjugation weak in U.S. group, strong in French group</td>
<td></td>
</tr>
</tbody>
</table>

indifferent between Harmony and Subjugation. These differences were supported by the analyses of variance (see Appendix III).

In summary, the results indicated that the cultural differences between the two groups were greatest in the pair-wise preferences Individualism > Collaterality (Relational dimension), Mastery > Harmony and Harmony > Subjugation (Man-Nature dimension).

The results of the statistical tests were the strongest for the Man-Nature dimension. In particular, the level of consensus (as measured by W) between respondents within each group was either the highest (U.S.) or the second highest (French) of the four dimensions.

In general, the consensus was higher between French respondents than between U.S. respondents except on the Man-Nature dimension.

The interview data reported in chapters V and VI only partly supported these conclusions since both the Man-Nature and Relational dimensions but also the Activity dimension appeared to have a major
impact on the processes. Furthermore, the differences in consensus did not seem to be strongly reflected in the data.

The value-orientations within the French and the U.S. groups are graphically displayed in figures 6 to 12. There are two figures for each dimension, one for the French respondents and the other for the U.S. respondents. The **Activity** dimension figures are histograms that represent the percentage of the total respondents within each group who share a given value-orientation. For the other dimensions with three rather than two positions the figures are two-dimensional representations of three-dimensional plottings.

Figure 6 displays the distributions of value-orientations for the **Activity** dimension. As we can see, approximately 75% of the respondents in both groups ranked Doing above Being. There were some problems with the **Activity** dimension which are discussed in detail in Appendix III.

---

7 Each respondent is plotted in a three-dimensional space according to his preference pattern for the three positions. The distance from each axis indicates the respondent's psychological distance from the position: the smaller the distance, the stronger the preference.

Some information is lost when plotting respondents in a two-dimensional space. For instance, a location between the Future and Present axis indicates that Future and Present are the first and second choices respectively and that Past is the third choice. Closeness to the centre of the plot (where the axes meet), indicates a strong third choice, but in general the strength of the third choice is difficult to judge.

8 In particular, when examining answers on a question-by-question basis, there were large differences in the ranking patterns which suggested that the **Activity** questions might not constitute an appropriate scale, and therefore that these questions should not be pooled to compute an **Activity** value-orientation. This point is discussed in detail in Appendix III; the conclusion is that the six **Activity** questions did constitute an acceptable scale.
Figure 6

The Value-Orientations in France and in the U.S.\textsuperscript{a}

France (\(W = 0.27\))

U.S.A. (\(W = 0.26\))

\textsuperscript{a}Percent of total respondents in each group sharing a given value orientation.
Figures 7 and 8 display the value-orientations on the *Time* dimension within the French and U.S. groups. Although the U.S. group appeared more concentrated on the *Future* axis than the French group, the analysis of variance did not single out any significant differences between the two groups (see Appendix III).

On the *Relational* dimension the value-orientation plottings of the individual respondents in France (Figure 9) and in the U.S. (Figure 10) clearly showed the difference in the preference for Individualism over Collaterality. In the U.S. the centre of gravity (located on the Individualism axis) emphasized a preference for Individualism over the other two positions. In France the centre of gravity (located between Individualism and Collaterality) suggested a lack of clear preference in the group between the two positions.

On the *Man-Nature* dimension, the individual value-orientation plotted in Figure 11 and Figure 12 illustrated differences in the preferences for Mastery over Harmony, and Harmony over Subjugation. The French respondents were highly concentrated halfway between Mastery and Harmony, while the U.S. respondents were closer to the Mastery axis.

Discussion of the Cultural Differences

The differences in value-orientations observed between the two countries in the *Relational* and the *Man-Nature* dimensions were consistent with an extensive body of literature.\(^9\) As we will see in chapters V and VI, they also are well supported by the interview data.

---

Figure 7

The Time Value-Orientations in the French Group

Key
- Center of Gravity
- 4 Respondents
- 3 Respondents
- 2 Respondents
- 1 Respondent
Figure 8

The Time Value-Orientation in the U.S. Group

Key

• "Center of Gravity"

□ 4 Respondents

□ 3 Respondents

□ 2 Respondents

□ 1 Respondent
The Relational Value-Orientations in the French Group

Key
- Center of Gravity
- 4 Respondents
- 3 Respondents
- 2 Respondents
- 1 Respondent
Figure 10

The Relational Value-Orientations in the U.S. Group

Key
- Center of Gravity
- 4 Respondents
- 3 Respondents
- 2 Respondents
- 1 Respondent
The Man-Nature Value-Orientations in the U.S. Group
The absence of significant differences on the Activity and the Time dimension, on the other hand, was unexpected. The literature typically depicts the North American culture as future-oriented while the European culture is past-oriented. It also suggests a significantly stronger Doing orientation in North America than in Europe.

There may be a simple explanation for the Activity dimension results. The theoretical framework provided for three positions: Being, Being-in-Becoming, and Doing, but the middle position was not utilized by Kluckhohn and Strodtbeck. Kluckhohn and Strodtbeck (1961) reported that the lack of a middle position did create some problems in their research, as it takes the three positions to give a meaningful description of the culture of a group and to make valid comparisons across groups. Consequently the French respondents who were not Being oriented may have been "forced" into this particular choice pattern. This hypothesis is consistent with the existing literature. Kluckhohn and Strodtbeck describe the Being-in-Becoming position as emphasizing "... that kind of activity which has its goal in the development of all aspects of the self as an integrated whole." By contrast, the Doing position emphasizes "... the kind of activity which results in accomplishments that are measurable by standards conceived to be external to the acting individual." (Kluckhohn and Strodtbeck, 1961, p. 17). The pursuit of goals such as quality, almost for quality's sake, scientific and technological leadership, or organizational growth, which is often reported as important in French organizations (for instance, Granick, 1972) is a typical expression of a Being-in-Becoming orientation. On
the other hand, the profit maximization goal which is the typical expression of a Doing orientation tends to be primary in U.S. organizations; but is viewed as relatively unimportant if not with contempt, within in the French organizations (Granick, 1972; MacArthur and Scott, 1959; Leontiades, 1973).

The data on the budgeting process in chapters V and VI provided some support to the hypothesis that there was a difference between the countries on the Activity dimension. From the data, the Doing orientation appeared to be stronger in the U.S. group than in the French group, therefore suggesting that the questionnaire did not measure the Activity value-orientation adequately. The supporting evidence, however, was not very extensive, which made it difficult to draw solid conclusions.

The Time dimension presented a more difficult problem. Kluckhohn and Strodtbeck wrote:

... The value-orientation which created the most difficulties in both these respects was the Time orientation. In general, we consider the items developed for it to have been the least successful in producing responses which can be considered as fairly clean-cut and accurate indications of the ordering of preference on a single orientation, (Kluckhohn and Strodtbeck, 1961, p. 9.)

A factor analysis performed by Mezei (1974) on Kluckhohn and Strodtbeck's data indicated that the Time questions were not loaded on purely temporal elements, but that they contained elements that were highly correlated with the other dimensions. The same conclusion can be drawn from the factor analysis performed on the data obtained in this research. Whereas each of the other three dimensions fell into a different factor, the Time dimension appeared to be strongly associated with the Man-Nature dimension. This link between the two dimensions is confirmed in the literature (Lamm et al., 1976; Nisan, 1973). According
to the literature one component of the Future orientation is optimism regarding the outcome of future events. Therefore, a person with a Mastery orientation, who feels in control, is more optimistic than a person with either a Harmony or Subjugation orientation, who feels more helpless, especially when the Future involved is distant.

Two of the five Time questions have such a strong Mastery/Optimism implication: Question 5, "Expectations about Change", and Question 11, "Philosophy of Life". However, the response patterns to these questions in each group did not suggest that the groups differed in either optimism or perceived ability to control the future.

It has also been hypothesized in the literature that value-orientations may differ by behaviour sphere (Kluckhohn and Strodtbeck, 1961; Caudill and Scarr, 1962; Rokeach, 1969) and with the temporal distance of the future event.

In particular, value-orientations relating to the personal life may differ from value-orientations relating to the working life. Unfortunately, there were not enough Time questions to allow such an analysis.

The interview data on the budgeting process reported in chapter V and VI did not help shed light on this specific issue. However, they did provide evidence supporting the existence of a strong Future orientation at the U.S. headquarters as against a Past or Present orientation at the French headquarters. The differences appeared only at the headquarters; the data did not indicate differences between the French and U.S. plants.

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10 The questions are reproduced in Appendix II.
Two hypotheses could explain these findings: a) the time value-orientation differed, between headquarters whereas the plants were similar, or b) value-orientations also differed between French and U.S. plants but the differences were not revealed as clearly in the manufacturing context. The production task requires a short-term focus, with short-term objectives—daily, weekly or at most monthly—and rapid feedback. These characteristics limit the manifestations of time value-orientation differences in the work context.

However, analyses of variance performed between French and U.S. manufacturing and control respondents showed that while the plants had similar time value-orientations, the U.S. control respondents were the least future oriented of the four groups. The difference between control respondents, therefore, was the opposite of that indicated by the interview data. The first hypothesis was therefore not supported. The second one was difficult to document. There was no evidence allowing a discussion.

The issues raised by the results on the time and the activity dimensions, and the large error terms in the results of the analyses of variance performed between French and U.S. respondents, suggested that perhaps we could identify variables other than "country" (i.e. the fact of belonging to the French or U.S. group) to explain the differences in value-orientations.

The information available allowed the analysis of the impact on value-orientations of a sub-set of the potentially relevant variables (see for instance, England et al. for such a list), location, function and hierarchical level.

---

11See below.
The analyses of variance with location and function as independent variables produced some statistically-significant results. Location was significant to explain part of the preferences in the Activity and the Man-Nature dimensions. Function was significant to explain part of the preferences in the Time dimension. A discussion of the significant results follows below. The detailed results are in Appendix III, part II.

Cultural differences between locations/sub-units

Respondents were from six different sub-units of the company consisting of a French and a U.S. headquarters, and of two French and two U.S. plants. Except for the plant and the headquarters in Des Moines, all sub-units were in different locations. Therefore, the comparisons of value-orientations between the six sub-units reflect simultaneously the differences in value-orientations between locations and between sub-units.

In the Activity dimension, the preference for Doing over Being was the strongest in the U.S. Des Moines and the French Marquette plants and it was the weakest in the U.S. Detroit and the French Beauvais plants. The two headquarters fell in between.

In the Man-Nature dimension, the preference for Mastery over Subjugation, however, differed between locations. The preference for Mastery was stronger at the two headquarters than at the plants.

Cultural differences between functions

Respondents were in the Control, Manufacturing and Sales departments. Only the first two were retained for the analyses as the Sales representation was too low.
There were significant differences between the groups in the *Time*
dimension. These were in the preference Future > Present, and Present >
Past.

When looking at the preference Future > Present, manufacturing
respondents had a stronger preference for Future than control respon-
dents. Manufacturing respondents in both the U.S. and in France
preferred Future to Present. The difference between manufacturing and
control was very small in France, but very pronounced in the U.S. U.S.
control respondents chose Present before Future and, in that preference
differed markedly from the other groups.

When looking at preference Present > Past, the control respondents
had a stronger preference for Present than the manufacturing respon-
dents. This time, the difference was somewhat more pronounced in
France.

**Cultural differences between hierarchical positions**

Nine categories were identified and a cluster analysis was per-
formed to try to reduce their number. As it did not provide any
meaningful groupings, the nine categories were retained. There were no
significant differences in value-orientations between the nine levels.\(^1\)

Looking at all the independent variables examined, "country"\(^2\) was by

---

\(^1\) The analyses of variance performed using the hierarchical positions as
the independent variable are not reported in detail as, overall, the
results were not significant. The multivariate F-statistic was not
significant, with \(p = 35\%\). Therefore, there was a 35% probability
that the respondents at the nine hierarchical levels had the same
preference patterns in all of the two pair-wise comparisons.

\(^2\) "Country" refers to the fact of belonging to the French group or to
the U.S. group.
far the strongest to explain differences in value-orientation. Location and function were both significant in a few cases and always when "country" was not a significant source of differences. In general, the effect of the other variables, reported above, were not clearly reflected in the interview data. There was only sufficient evidence in the interview data to discuss the difference observed between functions in their preference Future > Present. This evidence, however, was not consistent with the statistical analysis of the culture questionnaire reported above, which showed that the U.S. control respondents were markedly different from the other groups in that they preferred Present to Future. The interview data strongly suggested the opposite. So by and large, these additional variables did not help clarify the issues raised on the Time and Activity dimensions.
CHAPTER V

BUDGETING IN FRANCE AND IN THE U.S. —
THE FORMAL AND INFORMAL STRUCTURAL CONTEXT

The major points which are made in this chapter are summarized in Table 10. The left-hand column itemizes the structural differences observed; the middle column presents a hypothesis regarding the cultural dimensions which could have caused the observed differences; the right-hand column indicates whether this hypothesis was supported (.) or not supported (X) by the statistical analysis of the culture questionnaire.

The data supporting this table are described below. The first section of this chapter describes the structural context of the budgeting process in each subsidiary, and the second discusses the meaning of the differences observed between the subsidiaries. The description of the structural context covers successively top management and the general functional division in each company, and in more detail, the division of responsibilities in the controllers' departments and the manufacturing organizations, the two major participants in the elaboration of the manufacturing budget.\footnote{The reasons for choosing these respondents were discussed in the research design in Chapter I and in the section on the budgeting questionnaire in Chapter II.}
### TABLE 10

**THE STRUCTURAL DIFFERENCES AND THEIR RELATIONSHIP TO THE CULTURAL DIFFERENCES**

--- **SUMMARY**

<table>
<thead>
<tr>
<th>Description of the Structural Differences</th>
<th>Inferred Cultural Difference</th>
<th>Observed Cultural Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Functional division at headquarters:</strong></td>
<td>Man-Nature:</td>
<td></td>
</tr>
<tr>
<td>Traditional and input oriented in France; task/output oriented in the U.S.</td>
<td>Mastery stronger in the U.S. group.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Use of dual reporting lines:</strong></th>
<th>Relational:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existed in both plants and for the Detroit Finance staff within the controller's department; were not used in France.</td>
<td>Stronger preference for Individualism over Col-laterality in the U.S. than in the French group.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Use of formal meetings:</strong></th>
<th>Relational:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extensive use of formal meetings in the French plants, particularly between superiors and subordinates; infrequently used in the U.S.</td>
<td>Stronger preference for Linearity in the French than in the U.S. group.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Interpersonal contacts:</strong></th>
<th>Time and Man-Nature:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important issue in the two French plants but not in the U.S. plants.</td>
<td>French group more past and less Mastery oriented than U.S. group.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Vertical specialization:</strong></th>
<th>Relational:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wider span of control at the top levels, more rapid task specialization in France than in the U.S. indicating a more authoritarian process.</td>
<td>Stronger preference for Linearity in the French than in the U.S. group.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Stability of organization structure:</strong></th>
<th>Time and Man-Nature:</th>
</tr>
</thead>
<tbody>
<tr>
<td>High in France but frequent changes were used in the U.S.A. to influence processes.</td>
<td>French group more Past and less Mastery oriented than U.S. group.</td>
</tr>
</tbody>
</table>

---

X indicates that the inferred cultural differences are not supported, and / that they are, by the questionnaire results.
The Structural Context

In general, the U.S. organization chart was difficult to pin down, partly because of the size and complexity of the U.S. company, but mainly because of the numerous changes that it was undergoing apparently on an on-going basis. At the time of the interviews, the changes being carried out were particularly far reaching so that many documents were being re-drawn to describe the new organization. Interviewees at headquarters, at the Detroit plant and, to a lesser extent, at the Des Moines plant where there were fewer changes, tended to describe their jobs in terms of before and after the changes, often with some uncertainty as to what the latest organization really was.

By contrast, the French chart seemed very stable. The document was accurate and no one expressed any uncertainty as to what the organization structure really was.

There seemed to be two major reasons for these changes in the U.S. organization. Interviews at top management level and within the controller's department indicated that the recent changes were due in part to changes in management philosophy to a less authoritarian one. These interviews and the organizational document also indicated that the changes in structure were commonly used as a tool to affect management processes. There was an explicit assumption of a causal relationship between structure and the way the tasks were carried out. This is seen, for instance, in the preface to the latest organizational document at the time of the research:

The organizational restructuring of North American Operations is designed to strengthen the planning process, and the control of assets within NAO while continuing to monitor carefully the direct line areas of Manufacturing and Sales for near term results.
The organizational changes shown below set forth more clearly defined interfunctional relationships and areas of responsibility. NAO should be in a position to respond more quickly and decisively to its problems and opportunities. (Organization Structure document, dated June 6, 1968).

In France, the issue was never raised. The stability of the organization structure at a time of financial difficulties indicates that changes in the structure either were not regarded as a way to affect processes or were regarded as an exceptional measure.

Functional Division and Spans of Control at Top Management Level

The French company was divided into ten departments and the U.S. into nine. The departments were headed by a director who reported to the managing director. The list of these directors with their spans of control is given in Table 11.

The allocation of responsibilities between directors and the size of the span of control suggested that task specialization occurred more rapidly in the French company than in the U.S. one. The French company was considerably smaller but had more first level positions, i.e. positions reporting to the managing director, and those had, for the majority, more positions reporting to them than their U.S. equivalents.

The most striking example of this occurs in marketing. The responsibility for marketing was broken down between three directors in France, while it was allocated to only one director in the U.S. On one level lower, tasks were broken down between twenty people in France versus nine in the U.S.

Again, Public Relations and Management Services were headed by separate directors in France, while they were grouped under the Administration and the Finance directors respectively in the U.S.
### TABLE 11

**POSITIONS REPORTING TO THE MANAGING DIRECTOR**

**IN FRANCE AND IN THE U.S.**

<table>
<thead>
<tr>
<th></th>
<th>France</th>
<th>U.S.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Span of Control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>5</td>
<td>Administration &amp; External Affairs</td>
</tr>
<tr>
<td>Public Relations</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Personnel &amp; Industrial Relations</td>
<td>4</td>
<td>Personnel &amp; Industrial Relations</td>
</tr>
<tr>
<td>Finance</td>
<td>6</td>
<td>Finance</td>
</tr>
<tr>
<td>Management Services</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Main-line Sales</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>B-line Sales</td>
<td>4</td>
<td>Marketing</td>
</tr>
<tr>
<td>B-line Retail Stores</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Parts Sales</td>
<td>6</td>
<td>Customer Services</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>3</td>
<td>Manufacturing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Logistics</td>
</tr>
<tr>
<td><strong>Average span of Control</strong></td>
<td>5.3</td>
<td>5.1</td>
</tr>
</tbody>
</table>

\(a\) Boxes indicate the correspondence between directors.

"Main-line" refers to the major product line while "B-line" refers to the secondary line of Multi-Co.
Apart from the director for Canada, who had no counterpart in France because the French organization did not extend outside France, only two directors existed in the U.S. organization which did not exist in the French one. They were the director of Product Services and the Director of Logistics.

Product Services was a new department created by the major organization changes implemented June 6, 1978. The objective for this new department was described as follows:

...to focus on product integrity, manufacturing capacity and facilities planning, and new product and product change co-ordination.

The functions of this department are described in Figure 13. As can be seen in this figure, this department grouped together functions which are usually the responsibility of different departments in order to improve the coordination needed for product changes or new product introduction. The scope of the problem was considerably less in France, therefore there was no need for such a department.

The responsibilities of the U.S. director of Logistics included stock control, distribution, warehousing, production programming and purchasing. The creation of a central purchasing function was the result of the June 6, 1978 organizational change. Previously each plant handled their purchases through their own staff.

In France, apart from purchasing, which was still a plant function, the Logistics department's functions of programming and distribution were the responsibility of a senior manager, who reported to the director of Administration. This unusual reporting channel was designed.

Figure 13

Responsibilities of the Product Services Department

North American Operations
Product Services Functional Organization
June, 1978

Product Services

Manufacturing Planning

- Process Engineering
- Welding Engineering
- Manufacturing Standards
- Capacity and Facilities
- Value Engineering (e.g., product cost, reduction coordination)
- Manufacturing Research
- Production Engineering

Product Change Coordination

- Liaison between NAO Manufacturing, Marketing, Logistics, Finance and Corporate Engineering on New Product Development and all product changes
- Product Review Committee Agenda and Minutes (Product Change Reporting)
- Tracking All Phases of New Product Introduction
- RCD Cost Records and Controls

Product Integrity

- Product Safety
- Warranty Claims and Processing
- Quality Assurance
- Product Integrity Testing

Source: Organization document dated June 6, 1978
to limit the number of positions reporting to the managing director. This meant grouping this function where there was "space", i.e., where there were few people reporting to the director. It also avoided conflicts of interest, which would arise if this function had been linked, for instance, with marketing or manufacturing. This function was often referred to as Market Supply in France.

Interviews suggested, however, that the director of Administration had little interest in this function and so was usually by-passed. This effectively added an eleventh first-level position to the French company.

In summary, the French organization was flatter and wider at the top than the U.S. one, i.e., there were more people at the first and second level of management with responsibilities more narrowly defined than those of their U.S. counterparts. A possible explanation for the differences observed will be presented at the end of this section.

The Controller's Department

Multi-Co. in France

The controller's department was headed by the director of Finance who also held the title of controller. There was no separate controller's position.3

Figure 14 presents the details of the organization. The first level below the controller was that of chefs de division; below chefs de division were chefs de service, and below the latter, chefs de section.

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3Source: Official organization structure document dated 18 July 1977 and interview with the controller.
Figure 14

Organization of the Controller's Department in France

Director of Finance/Controller

Finance
Projects

Accounting* Planning* Plant* Treasury & Internal
and Financial
Control Control

Accounting Forecasting* Investment*

Pricing* Control

Suppliers' Accounts

Customers' Accounts

Intercompany Accounts

Salaries

Product Cost Analysis

Credit Control

Treasury

Financial Control

Procedures and Systems

Numbers in brackets represent the total number of people reporting directly or indirectly to a given position. * Indicates that the person is part of the sample of interviewees.
Chefs de section. The chefs de service are boxed in.
For simplicity, the U.S. terminology of respectively general manager, manager and supervisor is used.

In total, five G-managers reported to the controller, three of whom—the Planning and Control, the Plant Analysis and the Accounting managers—were important participants in the budgeting process.

The Planning and Control G-manager was responsible for the coordination of the budgeting effort, the preparation of the monthly forecasts and control reports.

The Plant Analysis G-manager reviewed and consolidated all financial data received from the plants both for planning and control purposes. He also had an advisory function for the plants in terms of developing with the plants "... methods ... to improve plant management and forecasting activities." 5

The Accounting G-manager handled the traditional bookkeeping activities and issued the monthly reports on actual results.

**Multi-Co. in the U.S.**

The controller's department was headed by a controller, who was separate from the director of Finance. At the time of the interviews, however, the director of Finance was acting as controller (Figure 15). 6

This organization was the result of a major organizational restructuring in the U.S. company, which was being implemented at the time of the interviews. Prior to the restructuring the director of Finance was also controller.

---

4As noted earlier, the general managers are referred to as G-managers for simplicity.


Figure 15

Organization of the Controller's Department in the U.S. Company

Director of Finance

- Director Management Services
- Treasurer
- Controller

General Tax Manager

Assistant Controller

- Planning
- Financial Analysis
- Detroit Finance
- Accounting Operations
- Financial Forecasting

- Plan Reporting
- Price & Cost
- Manufacturing Analysis
- Accounting Operations
- Financial Reporting

- Product Review
- Market Analysis
- Wholesale Accounting
- Accounting Practices

Numbers in brackets represent the total number of people reporting directly or indirectly to a given position. * Indicates that the person was interviewed in this study, and **Indicates that the interview could not be conducted but that some data could be gathered through informal conversation.
The director of Finance headed very similar functions to those headed by his French counterpart, with the exception of Management Services which, in France, were headed by a separate director, who reported to the managing director.

In total, four G-managers and one assistant controller reported to the controller, three of whom—the Planning G-manager, the Detroit Finance G-manager and the assistant controller—were relevant to the study.

The Planning G-manager was responsible for the co-ordination of the budgeting activities and for comparing actual results to the plan. But unlike his French counterpart, he was not responsible for the preparation of monthly forecasts.

The Detroit Finance G-manager was the counterpart of the French Plant Analysis G-manager. Unlike the French manager, he was located at the Detroit plant complex rather than at headquarters with the rest of the controller's department.

The assistant controller headed three managers. Two of these are relevant to the study: the Financial Forecasting manager who prepared the monthly forecasts, and the Financial Reporting manager who prepared the monthly reports on actual results.

At the time of the interview, the assistant controller was acting as Financial Forecasting manager.

Comparison of the controllers' departments

There were three areas in which major differences could be observed in the organization of the French and the U.S. departments:
number of levels and task specialization, division of tasks and responsibilities, and reporting lines of the Plant Analysis staffs. Each of these areas are discussed below.

Number of levels and task specialization

There were more levels in the U.S. hierarchy than in the French one. In France, tasks became specialized at the level of management immediately below that of director of Finance. In the U.S., the same level of specialization occurred only two or three levels below the director of Finance. There were two co-ordinating positions between the specialized managers and the top financial executives: the controller and the assistant controller. However, the position of controller distinct from the position of director of Finance was not a permanent feature of the U.S. organization. It did not exist before the June 1978 reorganization, and it was later abandoned in a 1979 reorganization. The position of assistant controller was more permanent, there being only some changes in the content of the responsibilities over time.

Division of tasks

The U.S. organization emphasized the link between reporting and forecasting, while the French organization separated the functions which dealt with future-oriented data, i.e. planning and forecasting, from the reporting of actual results.

In the U.S. prior to April, 1978, reporting actuals and forecasting were under two separate managers, who reported to the controller. By grouping both of these tasks under the assistant controller, the strong interdependency between the two tasks was explicitly recognized
and the co-ordination was facilitated. Again, some caution is needed in drawing conclusions since this grouping was not a permanent feature of the U.S. organization. It was implemented in 1978 but did not survive the 1979 structural changes which put forecasting under the Planning G-manager. However, it is interesting to note that in the U.S. forecasting was initially a function of its own, was then linked with the reporting of actuals, and finally linked with planning, while in France, it had been more consistently associated with planning.

Interview data suggest that this structural difference did reflect two different views of the forecasting task.

In the U.S., monthly forecasting was viewed as a basic part of the control process. The monthly forecasts were seen to be the best standard available for analyzing actual results and evaluating performance.

In France, the monthly forecasts were not seen to be associated with the control process. Nearly all respondents expressed the view that more time ought to be spent on the analysis of actual results and less on forecasting. They generally described forecasting as a "number manufacturing exercise". [This theme will be developed in more detail in Chapter VI where the interview data on the budgeting processes are described.]

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7Source: Interview with the assistant controller, director of Finance, and Planning Manager.
Responsibilities and reporting lines of the Plant Analysis staffs

Formally, the two staffs had similarly defined responsibilities and both reported to their respective controllers. However, the interviews with the two staffs showed that in practice they viewed their responsibilities and reporting lines quite differently. Table 12 summarizes the parts of the interviews which relate to the topic of structure, responsibilities and reporting lines.

Two major differences between the two staffs can be noted: a difference in identification and a difference in the number of perceived reporting lines. Looking at the content of Table 12, part A and B, we can see that the U.S. staff appeared to have a dual loyalty to the headquarters and to the plants. The role of go-between did not indicate any particular loyalty, but other reported priorities and responsibilities indicated an identification with either headquarters or plants. The desire to make the plan reasonable and achievable indicated a plant orientation, while the desire to insure that the plant inputs were reasonable indicated a control/headquarters orientation. The identification with one side was as frequent as with the other.

The French staff, on the other hand, expressed a definite control/headquarters loyalty. The two managers reported their current responsibilities as being to fulfill the reporting and planning requirements imposed by the corporate staffs and, to a lesser degree, by their own top management. They felt their responsibilities ought to be to

---

8 Source: Official organization document and interview with the Planning and Control G-manager in France; official organization document and interviews with the assistant controller and Planning manager in the U.S.
## TABLE 12

RESPONSIBILITIES AND REPORTING LINES FOR THE FRENCH PLANT ANALYSIS AND THE U.S. DETROIT FINANCE STAFF

<table>
<thead>
<tr>
<th>A: Answers to question:</th>
<th>France</th>
<th>U.S.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;What are your responsibilities?&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- To inform top management</td>
<td>G-M M</td>
<td>G-M X</td>
</tr>
<tr>
<td>- To consolidate and review plant results</td>
<td>X X</td>
<td>X</td>
</tr>
<tr>
<td>- To act as go-between for plants and headquarters</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>- Planning, forecasting, reporting</td>
<td>X X</td>
<td>X</td>
</tr>
</tbody>
</table>

| B: Answers to questions: |        |        |
| "What are your priorities" and "What is important in your work?" |        |        |
| Plus spontaneous comments made by the respondents on how they viewed their responsibilities. |        |        |
| - To highlight problems | X      |        |
| - To be a service function for the plants by providing the analysis and review of what is happening | X      |        |
| - Felt responsibility for content of data packages from plants |        | X      |
| - To ensure that plants' inputs for planning are reasonable |        | X      |
| - To elaborate and discuss the final plan |        | X      |
| - To make the plan reasonable and achievable |        | X      |
| - To cut down on amount of paper without information loss |        | X      |
| - To eliminate typing errors and adding errors |        | X      |
| - To provide accurate information on time |        | X      |

| C: Description of Reporting Lines |        |        |
| Report to Controller | X X    |        |
| Report to Controller and Manufacturing Director | X X    |        |

| D: People/Functions frequently mentioned during the course of the interviews. |        |
| Regional headquarters/Corporate management | X X    |
| Director of Finance/Controller | X X    | X X    |
| Director of Manufacturing |        | X X    |
| Planning manager or other Controllership function | X X    |
| Plant Accounting Functions | X X    | X X    |

\(^a\) G-M is the general manager of the function and M is the manager reporting to him.

\(^b\) Either on several occasions during the interviews or once with some emphasis.
direct attention to problems and to provide information to top management for decision and action. So the difference between the actual and the desired responsibilities resided only in the content of the task and not in the functional loyalty (Table 12, parts A and B).

In part C of Table 12, when describing the authority channels, the U.S. staff indicated a dual responsibility to the controller and to the director of Manufacturing. The U.S. general manager reported this dual responsibility several times during the interview and indicated that he discussed most matters first with the director of Manufacturing. His manager described the reporting line to the controller as solid and that to the director of Manufacturing as dotted. He also reported a great deal of interaction with the latter (Table 12, part C).

The French staff reported only one channel, to the controller. This answer was consistent with the general content of the interviews. The two managers mentioned frequently the controller during the interviews. And when specifically asked with whom they had contacts in the course of their work (Table 12, part D), they mentioned only once the director of Manufacturing.

The Manufacturing Organization

In both subsidiaries, the plants were headed by a Plant manager, who reported to the director of Manufacturing.

The functional division of responsibilities was the same in the two countries. In all plants, the following reported to the Plant manager: Quality Control, Facilities, Production, Production Control, Accounting and Personnel managers (Chefs de division in France). In addition to these, the French plants also had a Purchasing manager, while the U.S. plants at the time of the interview had the purchasing
function under the Production Control manager (also called Materials manager). The French Marquette plant had one additional manager for its foundry operation.

Focusing in more detail on the Production department, which is the major line participant in the manufacturing budget, we can observe two major differences between the way these departments were set up in the two countries: (a) a difference in the management levels, and (b) a difference in the way co-ordination was achieved between the Production department and the other departments in the plant.

The management levels

In France, below the chef de division Fabrication (Production manager), the Production department was divided into ateliers (workshops). Each atelier handled one aspect of the production process such as welding, assembly, or painting, and was headed by a chef d'atelier, who reported to the Production manager. Below the chefs d'atelier were contremaîtres of foremen. Finally, the workforce was divided into équipes or teams, each headed by a chef d'équipe, who reported to a foreman. The status of the chefs d'équipe is somewhat unclear. They were sometimes described as part of the plant management and other times as part of the workforce.

There were a few instances of an additional level, that of chef d'atelier principal. The chefs d'atelier principal managed the larger ateliers and had at least one chef d'atelier reporting to them.

In the U.S. plants, the first level below the Production manager was that of general foreman (G-foreman). Below the G-foremen were the foremen and then the hourly workforce. In the Detroit plant, there was
an additional level between the G-foremen and the foremen, that of lead foreman.

In total, therefore, there were more management levels in the French plants than in the U.S. plants. Between the Plant manager and the workforce, there were from three to four levels in France as compared to two to three in the U.S.

Furthermore, specialization occurred considerably more rapidly in the French Production department than in the U.S. one. There were six chefs d'atelier (or chefs d'atelier principal) reporting to the production manager in each of the two French plants as opposed to one Production G-foreman in the U.S. The U.S. Production G-foreman was responsible for all the production activities, and specialization occurred only at lead foreman/foreman level. The French chef d'atelier, on the other hand, was only responsible for one workshop, i.e., one specific aspect of the production process.

Co-ordination between Production and other departments

In order to operate, the Production department needs a number of technical services; these are provided by the other departments in the plant, in particular, Quality Control, Production Control, and Facilities.

In the U.S. plants, co-ordination between these departments and Production was facilitated by the structural design.

Because the Des Moines plant manufactured part of the components needed for its final product, careful coordination was needed between the various productive sub-units in the plant to ensure the continuity of the production flow. A Planning organization, parallel to the Production organization, was responsible for this coordination. It was
headed by a Planning G-foreman, who worked in a team with the Production G-foreman. Below him, the Planning foremen worked in conjunction with Production foremen. This Planning organization reported to the Production Control manager with a dotted-line relationship to the Production manager.

In the Detroit Plant, which was an assembly operation, the critical functions for keeping the assembly line moving were maintenance and line feeding. Co-ordination was ensured by Maintenance and Material Handling G-foremen and foremen reporting to the Production manager as well as to the Facilities manager (Maintenance foremen) and the Production Control manager (Material Handling foremen).

These dual reporting lines did not appear on the organization chart but were drawn by the interviewees when describing their position in the plants. There was a high consensus among interviewees in Detroit with regard to the existence and the strength of the second reporting line, but the consensus was somewhat lower in Des Moines. In Des Moines, the Production interviewees perceived a formal authority channel between the Planning G-foreman and both the Production and the Production Control manager, while the Planning G-foreman described a formal relationship to the latter only and an informal work relationship with the Production manager.

In the French plants, there were no dual reporting lines. Both the organization chart and the interviewees' descriptions of their reporting lines were in agreement on this point. That there were no dual reporting lines even on an informal level was indicated by the answers to four of the questions in the interview schedule, which showed the following pattern of interpersonal contacts:
Contacts between people from different departments occurred almost solely at the same hierarchical level. Contacts involving people at different hierarchical levels were initiated by the person at the higher level to gather information on a technical problem.

Problems involving several departments were usually solved at one's own hierarchical level. When this was not possible, respective superiors were informed, who then handled the issue.⁹

This pattern of contacts suggested that there were no second reporting lines running across departmental boundaries even at the very informal level. If such a line existed, even informally, one would expect that interdepartmental contacts involving different hierarchical levels would be reported more frequently and that these would be of a more order- or advice-giving nature than of an information-gathering nature.

In the French plants, therefore, the only coordination function within the organizational structure was that provided by the Plant manager. This seemed insufficient since the strong interdependencies among the departmental inputs required close and on-going collaboration between the Production and the other technical departments. Lawrence and Lorsch (1967), in particular, have shown that more complex coordination devices are necessary as differences in expertise and objectives among the departments become more pronounced.

⁹The four questions were:
- With whom do you have contact during the course of the day?
- Describe a typical work day.
- What happens in case of conflict with another department?
- Do you attend any formal meetings?
Yet there was ample evidence that the French plants achieved the required coordination. Production schedules were always met, even when difficult to achieve (the Beauvais plant, for instance, worked at full capacity for an extended period of time) and in spite of late changes in production programs requiring last minute reorganizations of production.

Spontaneous comments made at headquarters about the plants were always favorable and can be summarized by the Market Supply's manager's comment that the plants "... always manage ...".

Coordination, therefore, occurred, but as a result of a different method of organization. Answers to the four questions above (see footnote 9) provided some information on how the individuals and groups interacted with one another to accomplish the overall production task. They highlighted some important differences between the plants. In particular, they pointed out:

- A difference in the use of formal meetings between superiors and subordinates. (Formal meetings are defined here as routinely held meetings taking place at fixed times and with predetermined participation.)

- A difference in the importance attached to interpersonal relationships.

In the use of such formal meetings, the four plants fell into three categories with the French Marquette plant representing one extreme (extensive use of formal meetings), the two U.S. plants at the other extreme (little use of formal meetings) and the French Beauvais plant falling in between.

At Marquette, people at the higher levels of the plant hierarchy (department managers and chefs d'atelier or chefs de service) made a
practice of holding daily meetings in their offices with all of their subordinates. These meetings lasted from half an hour to one and a half hour in the Production and Foundry departments, sometimes more in the other departments.

Table 13 shows the number of regular meetings held between a superior and his subordinates. It shows that all five people interviewed at level 1\(^{10}\) held daily meetings attended by all their subordinates. At level 2, two of the three people interviewed held such meetings, while at level 3, no one held such meetings. The reason given was that the task of coordination and liaison was the responsibility of the people at the higher levels. Below level 3, people were solely concerned with the production task and were needed at all times on the shop floor.

Information was the most complete for the Production department, since all hierarchical levels were represented in the sample. In this department, these meetings were part of a process which can be described as follows:

- The Production manager held a meeting in his office with all his subordinates (level 2 positions) at mid-morning (9 to 10 a.m.), allowing time for them to supervise the start up of production and to check with their own subordinates on existing or potential problems in carrying out the production plan for the day. Topics covered at the meetings varied but always included existing or

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\(^{10}\) See Footnote on Table 13 for the meaning of the levels.
TABLE 13

FORMAL MEETINGS HELD BETWEEN SUPERIORS AND SUBORDINATES AT THE MARQUETTE PLANT

<table>
<thead>
<tr>
<th>Level(^a)</th>
<th>No. of people interviewed at that level</th>
<th>No. of people reporting regular meetings</th>
<th>Frequency of meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Manager</td>
<td>1</td>
<td>1</td>
<td>1 weekly</td>
</tr>
<tr>
<td></td>
<td>and 1 monthly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dept. Manager</td>
<td>1</td>
<td>5</td>
<td>1 daily</td>
</tr>
<tr>
<td>Chefs d'atelier Principal or Chef d'atelier</td>
<td>2</td>
<td>3</td>
<td>1 daily</td>
</tr>
<tr>
<td>Chéfs de service</td>
<td>2</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>Chefs d'atelier or Foremen</td>
<td>3</td>
<td>4(^b)</td>
<td>0</td>
</tr>
<tr>
<td>Chefs de Section</td>
<td>4</td>
<td>0</td>
<td>--</td>
</tr>
</tbody>
</table>

\(^a\)For simplicity, positions will be referred to as follows:
- Department managers will be called level 1.
- Positions reporting to level 1, i.e. chefs d'atelier in the production department and chéfs de service in the other departments, will be called level 2.
- Level 3 positions are those reporting to level 2, i.e. chefs d'atelier, when level 1 is a chef d'atelier principal, or foremen in the Production department; chéfs de section in the other departments.

\(^b\)Two from the Production department and two from the Foundry department.
potential problems, the day’s priorities, the rate of absenteeism, and the social climate.

Immediately following this meeting, people at level 2 either held a similar meeting with their subordinates (2 cases out of 3) or met with them individually (1 case out of 3) in order to pass on the information obtained at the first meeting. A social purpose was also overtly reported by one of the chefs d’atelier.

Following these meetings, the Production manager and the level 2 chefs d’atelier usually spent some time with their colleagues in other departments in order to follow-up on specific issues raised at the meetings, or simply to keep in touch.

At the Beauvais plant, formal meetings between superiors and subordinates were reported much less frequently, and those that were reported were often on a one-to-one basis. Table 14 shows who the respondents were and what meetings were reported.

The Plant manager held one weekly and one monthly meeting with all his subordinates, as in Marquette; the Production Control manager held a meeting every other day with all his subordinates. The Production manager held daily meetings in his office but with each chef d’atelier in turn; and the chef d’atelier held a meeting each day with a selected foreman and a weekly meeting with all his foremen.

Other meetings reported did not qualify as formal meetings according to the definition used above, i.e. they were not routinely held at fixed times and with predetermined participation. They occurred on an ad hoc basis.

In addition to the superior-subordinate meetings at both Marquette and Beauvais, Production people at both level 1 and 2 attended a few
TABLE 14

FORMAL MEETINGS HELD BETWEEN SUPERIORS AND SUBORDINATES AT THE BEAUVIAS PLANT

<table>
<thead>
<tr>
<th>Level(^a)</th>
<th>No. of people interviewed</th>
<th>No. of people reporting meetings</th>
<th>Frequency of meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Manager</td>
<td>1</td>
<td>1</td>
<td>1 weekly 1 monthly</td>
</tr>
<tr>
<td>Dept. Managers</td>
<td>1</td>
<td>7</td>
<td>1 every other day (Production Control) 1 daily (Production)</td>
</tr>
<tr>
<td>Chefs d'ateliers</td>
<td>2</td>
<td>1</td>
<td>1 daily 1 weekly</td>
</tr>
<tr>
<td>Chefs de Service</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Foremen</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Chef de section</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

\(^a\)For simplicity, positions will be referred to as follows:
- Department managers will be called level 1.
- Positions reporting to level 1, i.e. chefs d'ateliers in the Production department and chefs de service in the other departments, will be called level 2.
- Level 3 positions are those reporting to level 2, i.e. chefs d'ateliers, when level 1 is a chef d'ateliers principal, or foreman in the Production department; chef de section in the other departments.
formal meetings held with other departments on specific topics, in particular, Safety and Quality. These meetings were, in general, bi-monthly or monthly.

In the U.S. plants, very few formal meetings were reported. At the Des Moines plant, among those that were reported were the following superior-subordinate meetings:

- All department managers attended a weekly review meeting with the plant manager similar to that held in the two French plants.
- The Production manager held a weekly review on an individual basis with his G-foremen.
- The only other formal meeting between the Production manager and his G-foremen was held during lunch.

G-foremen did not hold any formal meetings with their subordinates. Both G-foremen interviewed expressed the view that foremen were needed at all times on the shop floor and had no time to spare for meetings. No formal meetings were reported by the other two level 2 interviewees either with their superior or their subordinates.

The only other formal meeting reported at the Des Moines plant was an interdepartmental meeting of all department managers, their relevant staff and the G-foremen. The meeting was held every morning to prepare the launching of a new line, but it was to be phased out over time.

At the Detroit plant, the situation was very similar to that in Des Moines.

The Plant manager held a weekly formal meeting with all his subordinates to review results and discuss issues. This meeting could last three hours or more.
No other formal meetings with subordinates were reported. A few interdepartmental meetings held by the department managers and the Plant manager were reported to deal with specific issues such as cost reduction and new product launching.

The Structural Differences -- Conclusion and Meaning

Cultural Differences and Structural Differences

The descriptions of the organization structure at top management level, in the controllers' department and in the plants highlight five basic differences between the French and the U.S. organizations, i.e. differences in:

- the functional division,
- the use of structural changes to affect processes,
- the use of dual reporting lines,
- the use of formal meetings at the plants, and
- the horizontal and vertical specialization.

The first two structural differences listed above relate to the Man-Nature and Time dimensions, while the last three strongly relate to the Relational dimension.

These differences, which are summarized in Table 10 at the beginning of this chapter, are discussed below with, when relevant, additional interview data and the researcher's observations gathered during the research.

As the research design did not control for the organizational size factor, a factor which has been shown to have a significant impact on structure, some attention is also devoted to the separation of the cultural from the size effects.
The functional division and the use of structural changes

The functional division in the U.S. organization was more task, or output, oriented than that of the French organization, which specialized according to the type of input. Examples of the output orientation were found (a) in the controller's department in the linking of forecasting with the traditional accounting activities rather than with planning; (b) at the top management level in the creation of the Product Services department which integrated functions previously scattered between several departments; and (c) at the plants in the linking of Purchasing with Production Control until the last reorganization, which instituted a central Purchasing Function for cost-cutting purposes. In all cases, the grouping of the functions which departed from the traditional pattern was the result of a conscious attempt to improve the way a task was being accomplished.

Furthermore, in the U.S. company, there was a deliberate and repeated use of new structural designs as a tool to modify the management processes and mold them to the tasks to be accomplished.

This use of the organization structure suggested a strong Mastery approach to the environment in the U.S. company which was not matched in the French organization. This hypothesis was supported by the questionnaire analysis reported in Chapter IV.

However, differences in the Time dimension could also be related to some of these differences. A strong Present or Future orientation in the U.S. would explain the frequent changes in organization structure and the resulting ease in adopting nontraditional structures. In France, on the other hand, a stronger Past orientation could explain the relative stability of the structure and its traditional nature.
However, this second hypothesis was not supported by the cultural analysis reported in Chapter IV.

The dual reporting lines and the formal meetings

In the U.S., the necessary coordination between departments was accomplished through the use of dual reporting lines. These were either formal as in the Detroit plant or informal as in the Des Moines plant and in the controller's department.

This emphasis on coordination of the critical tasks appeared also in the way the organizational document was presented. The U.S. document was presented both in the traditional pyramid form, showing the various functions and the reporting patterns of each department, and a circular form, showing the points of interaction with the other departments in the company.

The French organization maintained the traditional single reporting lines and the separation of departments, and the chart was presented solely in the traditional pyramid form.

In the French plants, regular formal meetings between superior and subordinates seemed to be a major tool to achieve coordination, particularly at Marquette and, to a lesser degree, at Beauvais. In the U.S., very few such meetings were reported. The view expressed was that those involving a superior and all his subordinates would be a waste of time as the issues discussed could not be relevant for everybody at the same time.

More generally, interpersonal contacts were an important issue in the French plants. At the Marquette plant, nearly all interviewees reported spontaneously and with some emphasis that the collaboration
between departments was excellent. At the Beauvais plant, the absence of trust between department managers was reported spontaneously and with equal emphasis. This importance attached to interpersonal contacts in the French plants was strongly reflected in the answers to the question "Describe a typical work day."

Table 15 reproduces typical answers in the French and in the U.S. plant. The French descriptions included a maze of contacts while the U.S. descriptions were almost totally task oriented.

In France, the strict separation of the departments and the importance attached to interpersonal contacts between superior and subordinates within each department (as evidenced by the formalization of contacts--formal meetings--and generally by the spontaneous emphasis on this topic in the interviews), suggested a group rather than an individualistic approach to organization. Rather than seeing themselves as individuals fulfilling a certain part of the organizational objectives, respondents in France tended to see themselves as belonging to a group and having a certain status within that group.

This emphasis on the group and the importance of the definition of the individual's role within that group suggested a strong collateral orientation in France which was not matched in the U.S. organization. The U.S. respondents appeared in fact strongly individualistic. This hypothesis was supported by the questionnaire analysis reported in Chapter IV.

The importance of the group did not appear solely in the elements of the organization structure reported above. A number of observations gathered during the research backed up this aspect of the French organization. For instance, the separation of the departments was emphasized
TABLE 15

DESCRIPTIONS OF A TYPICAL WORKDAY IN THE FRENCH AND THE U.S. PLANTS.

FRANCE

1. Assembly Foreman, Beauvais:

"I meet first my chefs d'équipe to touch base and discuss absenteeism. Then I follow-up on missing parts and keep constant liaison with Purchasing, Production Control, Stores, Quality Control and Facilities. We live together."

2. Assembly chef d'atelier, Marquette:

- At 6:45 I tour the plant.
- At 7:30 my foremen have talked to their chefs d'équipe as I touch base with them to check up on absenteeism.
- At 8:15 I meet with Production Control in my office to talk about production rejects and missing parts.
- Then I tour the plant.
- At 3:00 p.m. I check up on production volumes with my foremen.
- After the workforce has gone, I tour the plant to see the loads by work station.

U.S.

1. Welding Foreman, Des Moines:

"I check first the scheduling board, then I go to the shop floor to prepare the jobs. I plan some backup jobs in case things are different from planned (machine breakdown for instance). I spend most of my time on the shop floor."

2. General foreman, Detroit:

"I spend most of my day on the shop floor, about six hours. I spend two hours planning."

on the shop floor by the use of coats of different colors by each of the four technical departments, Quality Control, Production Control, Facilities and Production. The explanation given was that the colors helped identify the relevant person functions on the shop floor in case of need. There was some evidence, however, which suggested that the reason for these coats was not purely practical. The U.S. plants, which ought to have had a similar identification problem, made a very limited use of colored coats, and used no other identification device. The Production people interviewed did not feel that there was a problem. In both the U.S. plants and the French plants each production area was assigned its own technical staff so that the relevant people were always within reach.

Furthermore, in both Marquette and Beauvais chefs d'ateliers and foremen emphasized the difficulty of switching hourly laborers from one job to another. The rate of absenteeism frequently required exchanges of labor force between production departments. But these exchanges were strongly resisted by the people involved who, if forced, usually complained to their union and even took sick leave. The reasons given were that they wanted to keep the job they were familiar with and to remain with the group of people they knew. A foreman at Beauvais explained:

They are good at their work and they have their pals. They would have to re-adjust and often for a short period of time.

"Ils sont forts a leur poste et ils ont leurs copains. Il faut se readapter ailleurs et souvent pour peu de temps." (Assembly foreman, Beauvais)
The comparison of the work group to a family was made on numerous occasions at the plants by people at various hierarchical levels. This "Esprit de clocher"\(^{12}\), to quote the expressions used by a chef d'atelier at Marquette, also manifested itself in competition between production departments on efficiency, safety, and similar other targets.

At the Beauvais plant, several instances were cited where the work group protected an individual by preventing him from being fired. By contrast, at the U.S. plants, mobility between work stations and production departments was not an issue; it was accepted as normal procedure. No examples were cited of individuals being protected by their peers, even when the question was specifically raised. Poor performance was regarded as sufficient grounds to fire an individual, without protest from peers or union. In general, the concept of group did not appear in the interview content.

The horizontal and vertical specialization—
The hierarchical levels and spans of control

Task specialization occurred more rapidly in France than in the U.S., whether we compare top management, the controllers' departments or the plants.

When comparing top managements, we find that more directors reported to the managing director in France than in the U.S., and the average span of control of these directors was larger in France than in the U.S.

\(^{12}\) Could be translated as "village spirit". This expression refers to the closeness within a group created by belonging to the same village.
When comparing the controllers' departments, we found that the level of task specialization which was achieved only one level below the chief financial executive in France was not achieved until two or three levels below in the U.S. In the U.S., there were two co-ordinating positions between the chief financial executive and the specialized managers.

One might hypothesize that the size of the U.S. organization created a need for intermediate management levels at the higher hierarchical levels. But we found that the delegation patterns at the plants matched those of headquarters even though the French plants were larger than the U.S. plants.

When taking the Production departments, for which the most data are available, as representative, we found that although the Plant department managers had very similarly defined functions, responsibilities at the level immediately below were very differently distributed in the French and in the U.S. plants. The French chef d'ateliers were considerably more numerous and specialized than their U.S. colleagues, the G-foremen. So again, the French organization was more rapidly specialized than the U.S. one.

The structural design was more authoritarian in France than in the U.S. It gave wide responsibilities to those at the top (managing director and directors at headquarters; plant and department managers at the plants), but comparatively narrow ones to those at the level immediately below. Such a structure concentrated potential power at the top. As will be seen in Chapter VI, the actual delegation pattern in France was in fact an authoritarian one. The top hierarchical levels of the company (managing director and directors) retained most of the
information and decision-making power. Moreover, spontaneous comments made during the interviews indicated that the interviewees viewed the situation as normal.

Lineal values were represented in the French authoritarian structural design and in the importance attached to the superior as an authority figure, as expressed in the interviews. However, the analysis of the culture questionnaire reported in Chapter IV did not show the French group as being more strongly lineal than the U.S. group.

The Effect of Size on Structure

Pugh et al. (1969) found that larger organizations tended to be more specialized, more standardized and to have more formalized behavior than smaller organizations. Child (1973) analyzed the data from five studies, including that of Pugh et al., using comparable structural measures, and found that size was highly positively correlated with functional specialization, standardization, documentation and vertical span (number of hierarchical levels). He found, more specifically, that size was a good predictor of organizational complexity, complexity being measured by the extent of functional and role specialization in the organization, and that complexity was a good predictor of formalization. (Formalization was measured by the extent of standardization and documentation.)

Organizational complexity as defined by Child has also been found to be related to sophisticated coordination mechanisms (Lawrence and Lorsch 1967) and sophisticated controls (Khandwalla, 1974, in Mintzberg, 1979, pp. 216-223).

In general, larger organizations tend to be more complex, that is to have more specialized units, which leads to more levels in the
hierarchy and generally more sophisticated liaison devices, as well as more formalization of processes and more sophisticated planning and control systems for coordination purposes (Mintzberg, 1979, p. 234). This means that differences in size could account for some of the structural differences in the French and U.S. headquarters, i.e. the taller hierarchy in the U.S. company, the more sophisticated liaison devices such as the dual reporting lines of the Detroit Finance staff, and the existence of integrating departments such as Product Services.

Size could explain another difference in the plants: the taller hierarchy in the French plants—four to five levels between plant manager and hourly labor force versus three to four in the U.S. plants. However, in the production department, for instance, the hierarchical pyramids showed the same characteristics as their respective headquarters. The U.S. pyramids were narrower at the top, indicating again that specialization occurred less rapidly than in the French plants and, therefore, that potentially more responsibilities were delegated down the line. According to the classification devices used by Mintzberg, the U.S. plants also had more complex liaison devices than the French plants in spite of their smaller size. Going from the simplest to the most elaborate, Mintzberg's classification of liaison devices is as follows: (a) direct contacts between managers, (b) liaison positions, (c) task forces and standing committees, (d) integrating managers, and (e) matrix structure (Mintzberg, 1979, pp. 161-180). The U.S. plants reported direct contacts, task forces and standing committees, and dual reporting lines, which can be classified as an embryo matrix structure. The French plants reported direct contacts and standing committees.
Therefore, although the effects of size on structures could explain some of the structural differences between the headquarters they could not explain why similar differences appeared in the plant structures when size should have the opposite effect. It did not appear, therefore, that size alone could have produced the differences observed between structures.
CHAPTER VI

THE BUDGETING PROCESS IN FRANCE AND IN THE U.S.

In this chapter, the process at headquarters and the process at the plants are examined successively.

The Process at Headquarters

The process is discussed in two parts, first the tangible elements of the process such as steps, inputs and content of the documents, then the intangible elements of the process such as the priorities pursued and the attitudes of the respondents.

This description covers successively the French, the U.S. headquarters, and a comparison of the two. They are followed by a discussion of the cultural differences which could have influenced differences observed between the French and the U.S. company. Table 16 presents a summary of the conclusions. The left-hand column itemizes the observed structural difference; the middle column presents an hypothesis regarding the cultural dimensions which could have caused the observed differences; the right-hand column indicates whether the hypothesis is supported (✓) or not supported (✗) by the statistical analysis of the culture questionnaire.

These elements were difficult to research because of the concern for secrecy of top management and the lack of formality in the process.
TABLE 16
DIFFERENCES IN THE BUDGETING PROCESSES AT HEADQUARTERS AND THEIR RELATIONSHIP TO THE CULTURAL DIFFERENCES -- SUMMARY.

<table>
<thead>
<tr>
<th>Description of The Differences in the Budgeting Processes</th>
<th>Inferred Cultural Differences</th>
<th>Observed Cultural Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude towards future-oriented data:</td>
<td>Time and Man-Nature:</td>
<td>Time and Man-Nature:</td>
</tr>
<tr>
<td>In the U.S., future numbers were relevant and real. The budget horizon was a short term horizon. In France, only actuals were &quot;real&quot;. The budget horizon was viewed as a long term horizon.</td>
<td>U.S. group more strongly Future and/or Mastery oriented, French group more strongly Past and/or Harmony oriented.</td>
<td></td>
</tr>
<tr>
<td>Commitment to the objectives and feeling of being in control:</td>
<td>Man-Nature and Relational:</td>
<td>Man-Nature and Relational:</td>
</tr>
<tr>
<td>The U.S. group expressed more feeling of being in charge, of being able to affect its environment, and therefore of being responsible for results.</td>
<td>U.S. group more strongly Mastery and Individualism oriented; French group more strongly Harmony and Collaterality oriented.</td>
<td></td>
</tr>
<tr>
<td>Authoritarian decision-making process in France:</td>
<td>Relational:</td>
<td>Relational:</td>
</tr>
<tr>
<td>Power kept at the top; secrecy.</td>
<td>Linearity stronger in the French group.</td>
<td>X</td>
</tr>
<tr>
<td>Description of The Inferred Cultural Observed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Differences in the Budgeting Processes</td>
<td>Cultural Differences</td>
<td>Cultural Differences</td>
</tr>
<tr>
<td>Concern for logic and internal consistency:</td>
<td>Activity:</td>
<td></td>
</tr>
<tr>
<td>Strongly expressed 'in the controller's department in France but not in the U.S. group.</td>
<td>French group more Being-in-Becoming oriented.</td>
<td></td>
</tr>
<tr>
<td>The U.S. group was more concerned with hard output measures.</td>
<td>U.S. group more strongly Doing oriented.</td>
<td></td>
</tr>
</tbody>
</table>

\( ^a \)X indicates that the inferred cultural differences were not supported, and \( ^b \) that they were, by the questionnaire results.

The preference for Being-in-Becoming could not be measured.
The tangible elements

This description is based on the 1978 budget elaboration which was taking place at the time of the interview, i.e. November 1977.

The Manufacturing director and the controller were very concerned about secrecy. The strategic plan for instance could not be seen and financial information was carefully screened. Respondents from the controller's department had been instructed not to provide any schedule containing current financial information.

There was no internal formal\textsuperscript{1} procedure regulating the budgeting process. Upon the reception of the corporate timetable, the Planning and Control G-manager issued his own timetable to all departments. This timetable consisted of one page showing the deadlines to be met by all departments for providing their inputs. There were no required formats for these inputs, only an outline of the data needed. Whenever necessary, additional data or revisions were informally requested, usually by personal contact between the Planning and Control G-manager and the individual managers.

Individual managers presented their inputs in a format that was suitable for their function. After all of the inputs were received and revisions made, the P and C G-manager consolidated them and then transferred the information onto the forms required by the corporate management, a task which was both tedious and time-consuming.

\textsuperscript{1}Formality throughout this research is defined as the existence of an official written document issued by a legitimate source within the company.
The planning process officially started with the strategic plan, as outlined in Chapter III. This plan was exclusively prepared at directors' level, and little information could be obtained since the French controller was very concerned about secrecy. Throughout the research at headquarters, no forms could be obtained with current information.

After the strategic plan review, the budgeting began with its two phases, the Goals and the Plan. Summarizing briefly, the official worldwide procedure, which was described in Chapter III, the Plan was a detailed version of the Goals. Apart from the level of detail, the major differences lay in the volume assumptions and the budget base used. New volume assumptions, which were supposed to be the final ones, were provided at the beginning of the Plan phase, and the final budget base was the 10+2 forecast for the current year, i.e. ten months actual plus two months forecasted, as opposed to 7+5 for the Goals. The budgeting process in France followed these two steps.

The Goals

The first step was to determine the planning assumptions, consisting of the official sales volumes and price/cost increases forecast for the new budget year.

There was no specialized economics function to provide the information on price/cost trends. The P and C G-manager provided a general inflation factor and individual departments had the choice between using it or using their own cost assumptions.

All volume assumptions were gathered by the Market Supply function. French sales were provided by the Sales Department. Intercompany and export sales were established by Market Supply through direct
contact with the Market Supply functions of the other Multi-Co. companies and the Export division located at the European headquarters. From these volumes, Market Supply prepared the production programs which were passed on to the plants for costing.

A first budget was then prepared by all the functions and submitted, except those of the plants, directly to the P and C G-manager. The plans from the plants were first submitted to the Plant Analysis G-manager for review and consolidation and then to the P and C G-manager.

This first budget was a "free demand budget", to quote the P and C G-manager, because it was not bound by objectives or guidelines.

Reviews took place with the managing director, department by department. Some "fat" was taken out and a first synthesis was made in the form of a balance sheet and an income statement.

This stage was followed by a series of iterations to bring the budget back within the bounds of the objectives agreed upon during the strategic phase.

The next major step was the presentation of the budget to the European headquarters. This was followed by more revisions.

Finally, the goals were presented to the corporate management. The last revisions were made following this presentation.

The revision and review process varied according to the stage in the planning process. Initially, the involvement was wider. Plan inputs and revisions were prepared by the relevant functions in each department, and the review sessions were attended by most directors and the managers whose inputs were being discussed. Toward the end of the process, only the director concerned attended the review sessions, and
the resulting revisions were usually made directly by the Planning and Control G-manager. The director of Finance attended all review sessions, usually with the Planning and Control G-manager.

The Goals phase took from two and a half to three months. In 1977, for example, it lasted from mid-May to mid-August.

The Plan

Whenever necessary, the departments revised their inputs to reflect the new volumes. Although the second volume assumptions should have been the final ones, volumes in fact kept changing until the very end of the budgeting process. The changes primarily occurred in intercompany and export sales; French sales assumptions usually remained the same. These changes had a substantial effect on the manufacturing budget. However, after the first revision to go from the Goals to the Plan, which was done by the plants, subsequent revisions were handled by the Plant Analysis and P & C G-managers both for speed and to avoid overloading the plant accounting functions.

Although the official Plan base was the 10+2 forecast for the current year, the corporate management required continuous revisions for all latest actual results as they became available, until the end of the budgeting process. As the budget was rarely finalized before December or January (although the financial year ended October 31), the budget base was, in fact, composed of costs and revenue items at different forecast stages ranging from 10+2 to 12 months actual.

Toward the end of the process, the European management required certain changes, apart from the changes in volumes and budget base which occurred throughout the process. In order to bring up budgeted profits, corporate management assigned blanket amounts of savings to be allocated
by the company to specific functional areas. Therefore, what should have been the final budget, i.e. the Plan, which had evolved from the Goals, kept being modified by the requested blanket amounts of cost reductions, which were often substantial.

Final decisions on the budget within the French company rested with the managing director and the directors. The Planning and Control G-manager described the decision-making process as being "collegial" and "well balanced", with all directors being able to voice their feelings and constraints and influence the outcome.

The final document

There was no official French budget document other than the corporate package and there was no summary document issued or used by the controller's department. Apart from the corporate package, the French budget as kept by the controller's department consisted of several binders of detailed schedules, either duplicates of the schedules used for control purposes by the other departments or ad hoc schedules prepared for the controller's department's specific needs.

Forecasting and control

The same process and lack of formal requirements also applied to the preparation of the monthly forecasts (called révisions in France) and control reports.

There was no formal forecast or control set of schedules at the company level other than that requested by the European headquarters and the corporate management. The closest there was to such a set within the French company was a package of approximately ten reports which had developed informally. At the time of the research, these reports were
prepared every month and they seemed to receive some attention on a regular basis.

When looking specifically at the plant performance, the important variances analyzed were the following, in line with the IPC system:
- Current full year forecast versus previous full year forecast (for instance 5+7 versus 6+6 when reporting April actuals)
- Past month actuals and cumulative actuals to date versus previous forecast.

The Intangible Elements

Two important intangible aspects could be singled out from the interviews, one related to the decision-making and information exchange process, and the other related to the attitudes towards budgeting, and the priorities pursued.

The decision-making and information-exchange process

Part of the difficulty in establishing this process was again related to the secrecy, mentioned earlier, at the top management level. This resulted in a lack of transparency between hierarchical levels, in particular, between top management (managing director and directors) and the managers below. This was complained of by all interviewees within the controller's department, although to a lesser degree by the Planning and Control G-manager, who, because of the nature of his job, had more contact with top management. For instance:

There is no downward communication. Information goes up but does not go down. Everything happens in an ivory tower at the top. (Accounting G-manager)

Decisions are taken by the Holy Trinity on the eighth floor—we know it exists but we don't see it. There is a concrete
slab between the eighth floor and us. Nothing gets through. (P and C G-manager's staff members)

Such complaints were also frequently made when talking specifically about the controller. The most common complaint expressed by the respondents concerned the lack of feedback on studies or reports prepared at the controller's request. These reports "disappeared" and no information came back to the originators regarding their purpose and ultimate use.

It is difficult to judge whether this lack of downward communication was typical in the French subsidiary or simply due to the personality of the controller. No data were available on the other departments which would allow us to determine whether they experienced the same difficulties. This lack of downward communication, though, was congruent with the structural descriptions, which suggested that relatively little delegation occurred and that power was retained at the top.

The attitude towards budgeting and the priorities

The concern for secrecy of top management, i.e. the managing director, the Manufacturing director, and the controller, also appeared in the interview content which was very non-committal. There were no evaluative comments on the organization or the corporate requirements and very few details on how the work was really done. Descriptions resembled what could be found in a textbook on management. The controller admitted on several occasions that he was not going to answer some of the questions truthfully or even comment on them. Excerpts from these interviews are reproduced in Appendix IV. They did not provide much information on the priorities and attitudes in the French company.
The Planning and Control G-manager expressed some criticisms related to the lack of internal consistency in the budget data resulting from certain corporate management practices. One was addressed to the procedure followed to prepare the schedule "Impact Summary". If the official procedure was followed in filling out of this schedule, the result would be a misclassification of some $1 million of cost for the French company. He preferred, therefore, to fill out the schedule using the correct classification, a practice which created a great deal of argument between himself and the regional headquarters. However, his major concern in adopting this practice seemed to be more for logic and internal consistency than for any real practical reason. For instance, when describing his arguments with the regional headquarters, he commented (in English) that "They don't understand how these bloody Frenchmen can be so logical."  

Another criticism, also related to the problem of internal consistency, had to do with the continuous stream of changes required over and above those required after the Goals were approved (which should have been the final ones) (a) to adjust the Goals for the final sales volume assumptions and (b) to adjust the planning base to the 10+2 forecast status. According to the Planning and Control G-manager, this

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2 The IPC logic required that the new budget be first expressed at prices and costs levels as of October 31 of the current financial year and that the adjustment to the prices and costs level of the budgeted year be shown as a separate item, "Economics". This system in practice was applied to all data except new projects. As it was customary within Multi-Co. to refer to these projects at current prices and costs level, it was decided to maintain this practice for the budget. The result was that the "Economics" line on the Impact Summary schedule did not include economics on these projects.

3 Said in English during the interview.
process caused important problems regarding the quality of the content of the budget:

- Given the large number of on-going changes and the interrelationship between the budget data, it was easy to leave unadjusted a portion of the data which was affected by the changes.
- Each change was regarded as incremental. Therefore even when the cumulative changes would have required a major modification in the budget, the content was still adjusted incrementally.
- Changes requested by corporate management were often at odds with other major assumptions already built into the budget.

Although the P and C, G-manager did express concern specifically for the practical implications of these problems, i.e. the quality and usefulness of the output of this process, he tended to phrase the issue mainly in terms of input—logic and internal consistency.

For instance, quoting from the interview:

Corporate wants as much as possible of actual results and ask us constantly to revise our numbers to reflect the latest actuals. These changes add little except work! Also we have a 'mongrel' base, for instance inventories 10+2 and sales 11+1. ... With all these changes, we always forget to adjust something. ... With all the volume changes we would really need a third complete step—Goals, Initial Plan, Plan—as the revisions produce a 'mongrel' plan.

Other criticisms were more widely shared. One concerned the use of blanket cost reductions by corporate management (see "The tangible elements," above), another the amount of future-oriented data required, and the last one the lack of emphasis on control and implementation.

The cost reductions affecting the manufacturing budget were usually handled within the controller's department both for speed and to avoid overloading the plant accounting functions, which were needed for the on-going plant operations.
Respondents perceived two major problems resulting from these changes:

- The plants' original budgets were reasonable and therefore the drastic cost reductions made subsequently were unrealistic.
- The size of the cumulative blanket cost reductions was such that the total budgeted costs were not reconcilable with the details contained in the operating plans originally worked out by the plants. To quote from the Plant Analysis G-Manager's interview, a lot of "cooking" had to be done within the controller's department, and, ultimately, the budget became an "exercise of style" done by the controller's department.

The other constellation of feelings and attitudes which emerged from the interviews related to the forecasting requirement and, more generally, to the future orientation of the IPC system.

For the French respondents in the controller's department, the budgeting process did not stop when the budget was approved but included the monthly forecasts, or révisions. Their feelings and attitudes regarding this process centered around two main issues:

- They felt that the workload created by the corporate management's information requirements was too high;
- They generally felt that budgeting and forecasting activities demanded a disproportionate amount of their time and resulted in insufficient attention being given to control operations.

As outlined in Chapter III, in the IPC system the monthly forecasts were meant to be a control device. The French respondents,

"un exercice de style", meaning by that, that it was the form rather than the content which became the important issue.
however, did not view the monthly forecasting as a control tool but as part of the budgeting process, i.e., part of the planning for the future. They saw future data as not real and the forecasting activities as taking time away from control operations and action taking. As evidenced in the interview content reproduced below, control operations for the respondents meant devoting time to the analysis of actuals, analyzing variances between the actuals and the original plan, and designing and implementing plans of action from where the company stood rather than, as in the IPC system, from where the company would like to be in the future. The general emphasis was on devoting more time to analyzing the actuals and less on planning the future.  

The following quote from the interview in with the Plant Financial Analysis G-manager is typical of the feelings expressed by the interviewees within the Controller's department:

We compare forecast to forecast, so our comparisons include data which are partly actuals and partly forecasted. With this system, it is easy to be optimistic and keep putting off the time when we must report a problem and come up with some action. We should spend more time on following up on actual results. The plants prepare schedules comparing actuals versus plan, but they are not used. These reporting requirements are costly to satisfy. The investment in man-hours is not worth it given the value of the system for the internal management of the French company. We give so much information and we account into so much detail for what we do that

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The view that the monthly reporting requirement was time consuming was not shared by the regional headquarters. A financial manager from headquarters, who was visiting the French company at the time of the interviews, explained that, in fact, the French did not need to work out each forecast in accurate detail. He cited, as an example, the German company which produced detailed and accurate forecasts every three months and only revised the interim ones for very major events. When asked to comment on this, the French replied that every time they had produced estimates, they had been required to back them up extensively so, in the end, it was easier to produce numbers which did not require further justification.
we do not feel responsible anymore for what happens. (Plant Financial Analysis G-manager)

Other excerpts are in Appendix IV.

A related complaint, although not specifically addressed to the budgeting requirements, was that there was, in general, too much number crunching and analysis and not enough decision-making and action-taking in the French company. This complaint was expressed by the respondents in the controller's department and by the Market Supply manager. This state was attributed to the interaction of the corporate demands and the lack of leadership from the managing director. There was a strong feeling that the impetus for action had to come from the top, and that without it, nothing was going to get done. Several anecdotes were told describing situations where the managing director had been expected to initiate some action and, having failed to do so, had aroused a feeling of disappointment among the managers concerned.

The Process at the U.S. Headquarters

In contrast with the French company, the budgeting process was relatively easy to establish. This was due to the formalization of the process and to the transparency between hierarchical levels. These are discussed in more detail below.

The tangible elements

The description is based on the 1979 budget preparation which was taking place at the time of the interviews, i.e. June 1978. As in France, the IPC requirements were perfectly understood and were followed

6 The Manufacturing director and Detroit Finance staff are considered part of headquarters although physically located in Detroit.
in the budget preparation. Therefore the focus of this description will be on how the U.S. company fulfilled the IPC requirements.

The 1979 plan was initiated in mid-May by a letter from the managing director to his directors which provided a timetable similar to the French one and the plan parameters. These parameters consisted of four schedules:

- The 1979 target income statement and assets as agreed upon during the strategic reviews
- A breakdown of the income statement by responsibility (department directors) and major item (overhead, cost allowances, salaried headcount and assets)
- Some major cost actions
- Assumptions regarding the introduction of new products.

The letter also emphasized where the major efforts were required to achieve the objectives. (The year before, under the previous managing director, no parameters were given because the managing director wanted to see what people would budget under a "free demand situation".) In 1978, partly because of the poor financial results, a great deal of effort went into the strategic plan, and top management, essentially the managing director and director of Finance, emphasized the necessity of linking the 1979 plan to the strategic plan. Generally, during 1978, top management invested a great deal of effort in downwards communication of financial results, objectives and goals in order to involve the whole company in the task of improving financial performance and in order to coordinate the direction of the efforts. This was strongly reflected in the 1979 plan elaboration process.
The managing director's letter was followed by a set of forms and instructions issued by the Plan Reporting manager to designated planning coordinators in each function. The input forms were prepared by the Planning department. In 1978, there were eleven forms specific to the manufacturing operations. Other functional areas usually had less than half that amount. These forms differed from the corporate forms, which as in France, were not used within the subsidiary because they were not directly suited for internal control. The corporate forms were filled out by the Planning department, once for the Goals and once for the Plan, a task which required a great deal of time.

The objective of the Planning manager in designing the forms was to keep the inputs requested to a minimum. His approach was to "Wait and see what information is needed as the plan solidifies". Full details were submitted only at the end of the process when they would not likely become obsolete.

This approach was consistent with the management style of the new managing director and director of Finance who preferred to delegate authority to the functional areas. Therefore data by major category of cost or revenue were required and the details were left to the functional management. Under the previous top manager, who was considerably more authoritarian, the input requirements were considerably heavier, and full details had to be submitted from the beginning.

The Planning C-manager and the Plan Reporting manager did not perceive any clean steps in the preparation of the budget. They described the process as a budget in constant evolution, the Goals being an arbitrary cut-off point where a first submission to the corporate management was required rather than a major step.
When the first functional inputs were received, Planning prepared a balance sheet, an income statement and some basic ratios to see if the budget submitted met the guidelines. Planning then worked on the package for about one month in close collaboration with top management, meetings being held almost daily. Planning then went back to the functions with comments and requests for changes and up-dates. Formal reviews followed this stage. Each director, with some staff members, presented his budget to the managing director, the director of Finance and the Planning manager, these sessions lasting from two hours to a full day.

Planning took over after the reviews and produced an average of one package every other day. From then on, the functions got involved only on an informal basis. When the final plan was approved, the individual functions were requested to work out the details of their final budget.

The Planning manager described the process as being first a bottom-up effort, after the issuance of the guidelines, then a top-down process.

As in France, there was no budget document. Each function kept its own detailed budget.

Although the budget preparation followed accurately the IPC requirements, in the previous financial year top management had requested the use of both the IPC incremental approach and a zero-base approach. This had created considerable additional workload, so it was decided to drop the zero-base approach for the 1979 budget. Nevertheless, several functions still prepared submissions under the two systems.
since they felt that the zero-base approach provided substantial help in understanding and evaluating their activities.

For the manufacturing inputs, the process of preparation and review was similar to that followed in France. Inputs from the plants were reviewed and consolidated by the Detroit Finance staff in close collaboration with the director of Manufacturing; Detroit Finance then filled out the forms requested by the Planning department.

Forecasting was not described as part of budgeting but as part of control. Apart from the schedules required by the corporate management, which were the same as those required from the French company, the internal reporting consisted of a four-inch binder of computerized outputs put together every month by the assistant controller. From these data, some twenty management-oriented schedules were prepared by hand covering

- An income statement and balance sheet for the month,
- The latest full year forecast, and
- A detailed analysis of changes between the previous forecast and the new forecast.

The monthly forecasting process was similar to the budgeting process. The assistant controller obtained the manufacturing inputs (which were given on standardized forms) after the Detroit Finance staff had reviewed and consolidated them.

Before submitting their input, the Detroit Finance staff normally gave preliminary forecast numbers to the director of Manufacturing and to the director of Finance, and discussed with them whether to report a saving or an unfavorable variance.
The assistant controller consolidated the inputs from all of the functions and prepared a forecast for top management.

The intangible elements

In general, the priorities and attitudes towards budgeting and the budget were quite different from those reported in the French company. Furthermore, there was considerably more transparency between hierarchical levels. This transparency can be related to two characteristics of the decision-making process in the U.S. company: (1) top management's clearly defined priorities and requirements and (2) effective downwards communication.

In the following, the priorities and attitudes of management and the transparency between hierarchical levels will be discussed successively.

The Priorities and the Attitudes towards Budgeting

Respondents at U.S. headquarters, including the top management, described their priorities in terms of relatively simple and quantifiable objectives, which allowed a relatively objective measurement of achievement. For the managing director and the controller, the objective was profit; for the director of Manufacturing, it was achieving the budget or beating the budget; for the staff function below, it was either preparing accurate forecasts or preparing a plan based on a good model of reality as measured by the magnitude and the nature of the deviations between the forecasts and the original plan.

Attitudes and feelings regarding budgeting (and the budget) or forecasting were mainly positive. One criticism was expressed regarding the IPC system: the Planning G-manager (as did his French counterpart)
reported being "forced" by the corporate management to constantly update the budget to take into account the latest actual results during the budgeting cycle. The Planning G-manager viewed the problem in practical terms, i.e., he tried to ensure that the budget under preparation was correctly adjusted for the latest results known. To that effect, he had set up a system whereby the impact of changes was tracked using all possible classifications of costs and revenues, so that all budget schedules could be adjusted consistently.

No criticisms were expressed on the forecasting requirements. In fact, the only comment directly addressed to the forecasting requirements was in support of the current philosophy and practice. Quoting from the interview with the assistant controller:

Comparisons from forecast to forecast are more important than latest forecast versus plan. The latest forecast has been well scrutinized, therefore it is a better criterion than the original plan which is now out of date.

At this level, there is a commitment to the original plan, but for control purposes it is more meaningful to see the evolution between forecasts.

There were no other comments directly addressed to the IPC system. However, the content of the interviews at headquarters indicated that a great deal of importance was attached to the budgeting and forecasting activities in the company, which implied at least some acceptance of the IPC system.

Extracts from the various interviews are reproduced below. The main points in these answers can be summarized as follows: the budgets and forecasts were viewed as important management tools and therefore a
great deal of effort went into their preparation in order to ensure that their content was as meaningful as possible; there was a high commitment to the financial objectives set out in the budgets and forecasts. These had to be achieved; and there was a strong feeling of responsibility for the results achieved.

The one-year time horizon of the budget and the forecast was viewed as very short and therefore twelve month projections were not really classified as future-oriented data.

Excerpts from the interview supporting these comments are reproduced in Appendix IV. A few are reproduced below:

I feel complete responsibility for the results. Once the plan has been finalized, no matter at what level it is finalized, I sign it and I am responsible for it. (director of Manufacturing)

I feel responsible for my forecasts even if the numbers are given by other people. I feel I should do a good job in forecasting from one month to one quarter. I dislike not hitting a forecast. (assistant controller)

All decisions taken now take at least six months to be carried out. Therefore there is not a great deal of difference between now and plan. We keep tracking the whole business. We have to stay in tune with the business. Conditions change very fast. (controller)

The transparency between Hierarchical levels

The transparency between top management and general managers' level came from two factors:

- top management had well defined expectations, and
- these were clearly communicated to the general managers' level.

Interviewees within the controller's department were able to describe accurately the financial documents used by the managing director and the controller, and within these documents, the specific items which drew their attention.
For instance:

- the assistant controller reported that all variances of $500,000 and over drew attention and required explanations,
- all interviewees at headquarters emphasized the importance currently attached to keeping inventories down in order to keep interest costs down,
- all interviewees at headquarters described the management philosophy as delegating responsibilities and as being management by exception, with top management looking at global results by functional area and expecting their management to take care of the details, to provide explanations and to take action whenever necessary.

These descriptions were totally congruent with the content of the interviews with the managing director, Finance director and Manufacturing director. As described above, interviewees at the top management level, as all interviewees at headquarters, were very specific when describing their priorities, their attitudes towards budgeting and forecasting and their management methods, which made it relatively easy to follow the budgeting process between hierarchical levels.

Comparison Between the French and the U.S. Headquarters

-- Summary and Meaning of the Differences

The most striking differences between the two headquarters were in the following:

- the attitudes towards future-oriented data
- the commitment to the objectives and the feeling of being in control in the U.S. company
- the authoritarian process in the French company
- the concern for logic in the French company
- the preference for quantitatively expressed objectives in the U.S. company.

These points were summarized in Table 16 at the beginning of this chapter. Each of these will be discussed below in more detail.

The attitude towards future-oriented data

Perhaps the most immediately obvious difference lay in the attitude towards future-oriented data. The U.S. respondents felt at ease in expanding time and effort in analyzing, evaluating and constantly revising future objectives in view of the latest events. The French respondents, on the other hand, would have liked to have seen relatively more time and effort invested in analyzing actual results. For them, building for the future meant first analyzing where the company was and building from that point, rather than starting from where they would like the company to be. Similarly, the U.S. respondents felt at ease with the control reports where the variances were computed from forecast to forecast while the French did not. For the French respondent control meant analyzing variances between actuals and the original budget. For them variances from forecast to forecast were not meaningful control devices since they were computed on a blend of actual and forecasted data, and so on both "real" data and on "numbers".

It is possible, however, that the European headquarters, through its own information requests, pushed the French company into allocating relatively more of their time than the U.S. company to future-oriented data. This is difficult to evaluate in practice because one cannot compare accurately the demands of the Americas headquarters to those of the European headquarters. Whereas the European headquarters had
formalized a great deal of its requirements, the Americas headquarters worked more continuously and informally with the U.S. company. However, even if the French company did have to spend relatively more time than the U.S. company on future-oriented data, this could not completely explain (a) their attitude toward the forecasting requirements, specifically their attitude toward the analysis of variances between forecasts or (b) the difference in the perception of the budget time horizon between the French and the U.S. respondents. 8

This particular difference can be theoretically related to a difference in the Time value-orientation and a difference in the Man-Nature value-orientation. The focus on the future in the U.S. company and the ease in accepting constantly changing future objectives indicates a Future orientation. In the French company, the need to know where the company was, the desire to design objectives which are a reasonable evolution from the present status, and the uneasiness when using constantly changing financial objectives, all could indicate a strong Present or Past orientation.

However, as pointed out in the conclusion to Chapter IV, the Future orientation is not purely loaded on temporal elements but is strongly related to the perceived degree of control of the environment, i.e. to the Man-Nature dimension (Nisan, et al., 1976). Because an important component of the Future orientation is optimism regarding the outcome of future events, a high perceived ability to affect outcomes through one's actions, i.e. a Mastery orientation, is likely to result

8 The content of the interviews at headquarters suggested that the budget horizon which was considered as very short term by the U.S. company was perceived as much more distant by the French company. See the interview data above and in Appendix IV.
in higher optimism regarding the future than a low perceived ability to affect outcomes, i.e. a Subjugation or Harmony orientation. When budgeting for the future, a Mastery oriented group is likely to consider more aggressive objectives and to be willing to spend more time and effort on planning than a Subjugation, or Harmony oriented group. Therefore, a large part of the difference observed in the attitudes towards budgeting and the IPC system could be due to a difference in the Man-Nature dimension rather than, or as well as, a difference in the Time dimension, with the U.S. group reflecting a stronger Mastery orientation than the French group. This Mastery orientation was particularly well expressed in the U.S. approach of making the future by setting their objectives and working out how to get there. This contrasted with the Harmony orientation of the French, which was expressed in their preference for working with the environment by finding out first where the company stood and planning "reasonable" improvements from there.

The questionnaire analysis reported in Chapter IV did support this hypothesis of a difference in the Man-Nature dimension, but not in the Time dimension.

The feeling of being in control and the commitment to the budget

The feelings of being in control and of commitment to the objectives, which were strongly expressed in the U.S. company but not in the French company—if anything, the French respondents expressed some helplessness and a feeling of diminished responsibility—could also be strongly related to the Man-Nature dimension, the U.S. group being Mastery oriented and the French group considerably less so.
But again, looking at the content of the French interviews, another cultural dimension seemed also to come into play to explain the differences observed between the two groups. In the French group, when helplessness was explicitly expressed, it was often in the context of the lack of leadership of the managing director and of the management style of the controller. In other words, the French were not really saying that they could not affect results by their action, but that their efforts would not be productive without top management's leadership. This suggests an interaction of the Man-Nature and Relational dimensions. A Mastery orientation is likely to be operationalized differently in a culture where Individualism is dominant than in a culture where Collaterality or Lineality are dominant. Where Individualism is dominant, each individual feels totally in charge and responsible for his actions; where Lineality or Collaterality are dominant, the individual sees himself as part of a group, with a well defined and therefore bounded role and responsibility within that group. In the collateral group, where all the members are peers, there must be consensus and joint action from all the members of the group; in the lineal group, where the positions are strictly ordered, leadership and decisions must come from the people occupying the higher hierarchical ranks. In both cases, the individual cannot act alone and, therefore, even if Mastery is the dominant orientation, at an individual level there is likely to be more feelings of helplessness and a weaker feeling of responsibility than in a group where Mastery coexists with Individualism.

To conclude, the differences in the feeling of being in control and consequently, in the strength of the commitment to the objectives
were theoretically strongly related to both the Man-Nature and the Relational dimensions, the U.S. group being strongly Mastery and Individualism oriented and the French group being more collaterally or lineally oriented.

As seen in Chapter IV, both hypothesized cultural differences were supported by the questionnaire analysis.

The authoritarian process in France

The authoritarian process in France—evidenced by the lack of transparency between top management and lower levels and, generally by the secrecy—was already noted within the context of the structural descriptions. By contrast, the existence of delegation in the U.S. company suggested a difference in the Relational dimension, the French being more collaterally or lineally oriented. The previous U.S. management, however, was also authoritarian, but whereas the U.S. respondents complained about the lack of delegation and the detailed control of their previous management, the French were more concerned by the lack of downward communication and the lack of leadership than by the authoritarianism per se.

This need for information and discussion could be viewed as the expression of a collateral orientation, while the acceptance of authority and the need for leadership were perhaps more lineal.

As reported in Chapter IV, Collaterality was stronger among the French than among the U.S. respondents, but not Lineality. Therefore the hypothesized differences were only partly supported by the culture questionnaire analysis.
The concern for logic and internal consistency in France; the use of objective standards in the U.S.

Finally, the concern for logic and internal consistency, i.e. for intellectual satisfaction, could be related to a Being-in-Becoming orientation in the Activity dimension. This contrasted with the use of quantitatively expressed and unambiguous objectives in the U.S. company which was more typical of a Doing orientation. All respondents in the U.S. company were able to describe their priorities in terms of relatively simple and quantifiable objectives allowing a relatively objective measurement of achievement. For the managing director and the controller, the objective was the bottom line; for the director of Manufacturing, it was achieving the budget or, beating the budget; for the staff function below, it was either preparing accurate forecasts at least for one month ahead or preparing a plan which was based on a good model of reality, this being measured by the magnitude and the nature of the deviations between the forecasts and the original plan. None of the French respondents described their objectives and priorities in such quantified and simple terms whether at top management level or at the lower levels interviewed. Objectives and priorities were usually qualitative such as "to provide good data for top management decisions", or too general to allow a measure of achievement, such as "to make money for the company" or "to improve plant efficiency".

However, as seen in Chapter IV, the hypothesis of a difference in the Activity dimension was not supported by the questionnaire analysis. This point is further explored on the next page and in Appendix III, Part I.

In summary, for the majority, these observations are consistent with the conclusions on the structural descriptions whereby the major
structural differences observed suggested differences in the Man-Nature and the Relational dimensions. They are also consistent with the cultural questionnaire results which showed the U.S. group as being predominantly Individualism and Mastery oriented while the French group was indifferent respectively between Individualism and Collaterality in the Relational dimension, and between Mastery and Harmony in the Man-Nature dimension.

The difference in the Time orientation which was suggested by the difference in the attitudes towards planning and forecasting was not supported by the results of the cultural questionnaire. Both cultures were indifferent between Future and Present as a first choice and ranked Past last.

Finally, the difference suggested in the Activity dimension could not be tested effectively as the Being-in-Becoming position was not measured by the questionnaire and both groups ordered only two positions, Doing and Being. In both countries, respondents chose Doing before Being. However, as discussed in Chapter IV, the lack of the Being-in-Becoming position in the questionnaire could have forced the French group into their choice pattern. The interview data strongly suggested a difference in the use of objectives external to the individual and quantitatively expressed to allow objective feedback. As such objectives are typical of a Doing orientation, this difference indicated that in reality, both cultures were not equally Doing oriented, a conclusion which was consistent with the descriptive literature on the French and the U.S. culture.
The Process at the Plants

The data is again broken down into the tangible and the intangible elements of the process. The tangible elements in both the French and U.S. plants are dealt with first, and then with the intangible elements.

The differences observed are summarized in Table 17. The left-hand column describes the differences, the middle column hypothesizes which cultural differences could have resulted in the process differences observed, and the right-hand column indicates whether the hypothesis is supported (✓) or not (✗) by the statistical analysis of the culture questionnaire.

The Tangible Elements

The Process at the French plants.

In both plants, the budgeting process was very informal. The standard manufacturing costs were computed by the Accounting department and consisted of the actual costs as of April 30th of the current year. The budgeting exercise consisted therefore of costing out the production program given by headquarters using the standards, and budgeting for cost allowances and decision costs.

In each plant, the Accounting department gathered and consolidated the data. It asked the department managers to provide information on their assumptions and the changes they expected and, finally, to review the financial objectives prepared for their department. The exchange was on-going during the budgeting period. There were no fixed dates for contacts and the departmental inputs were often verbal.

Within the Production departments, the Production managers consulted verbally their chefs d'atelier.
<table>
<thead>
<tr>
<th>Description of The Differences in the Budgeting Processes</th>
<th>Inferred Cultural Differences</th>
<th>Observed Cultural Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in budgeting:</td>
<td>Relational:</td>
<td></td>
</tr>
<tr>
<td>More participation at foreman level in the U.S. plants than in the French plants.</td>
<td>Stronger preference for Individualism in the U.S. plants.</td>
<td></td>
</tr>
<tr>
<td>Use of quantified and simple objectives:</td>
<td>Activity:</td>
<td></td>
</tr>
<tr>
<td>Priorities reported:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 17  --  (Continued)

<table>
<thead>
<tr>
<th>Description of The Differences in the Budgeting Processes</th>
<th>Inferred Cultural Differences</th>
<th>Observed Cultural Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardization of processes:</td>
<td>Could be due to the difference in size between the overall organizations.</td>
<td>(Not Applicable)</td>
</tr>
<tr>
<td>U.S.: Use of standard sets of forms in the U.S. plants.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>France: More ad hoc packages.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role of Facilities departments:</td>
<td>No clear link with a cultural dimension.</td>
<td>(Not Applicable)</td>
</tr>
<tr>
<td>France: Informal role of integrator between Accounting and the plant technical departments.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.: No special role.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a^X\) indicates that the inferred cultural differences were not supported, and \(\checkmark\) that they were, by the questionnaire results.
In both plants, the Facilities department played an important role in the budgeting effort. Because of their responsibility for capital investments and production processes, and therefore their impact on operating costs, Facilities were given the responsibility of coordinating the overhead budget and, after approval of the budget, of following up on actual consumption and variances versus budget. They were also given the task of allocating the blanket cost reductions assigned to the plants by the headquarters.

The budget was then discussed with the Plant manager. The discussions usually involved the Accounting manager and one department manager at a time.

The monthly forecasting followed a similar process. Accounting contacted the various department managers and prepared the forecasts from the information received. The information exchange process, especially at Marquette, tended to be on-going. The department managers usually contacted Accounting as soon as a change was known, such as a change in production programs.

Accounting prepared and issued all the control reports—highlighted variances and asked for explanations. The major control reports consisted of:

- The reports on decision costs issued every two weeks. These showed for the two-week period and for the year to-date, the actual consumption at actual cost, and the original plan, unadjusted for volume changes, by overhead account.

- The manpower utilization report also issued every two weeks, showing for the two-week period and the year to-date (a) the standard hours allowed for the actual production, (b) a detailed
account of the variances between allowed and actual hours, and (c) labor productivity ratios.

The monthly forecast package prepared for the headquarters and discussed at the monthly meeting on financial results between the plant manager and the department managers.

The manpower utilization report was broken down by cost center and by cost center section. The overhead report was broken down by cost center.

Each department was a cost center, except for Production, where there was one cost center per major portion of the manufacturing process, such as primary operations, assembly or painting. One chef d'atelier was normally responsible for one and sometimes two cost centers. Each cost center was further divided into sections. In production, the sections corresponded to parts of the process under the responsibility of a foreman. There was usually a one-to-one relationship between sections and foremen but, in a few instances, a foreman was responsible for two or more sections. Therefore, in Production, manpower utilization was officially traced to at least each foreman and sometimes below, to the chefs d'équipe, while overhead costs were traced to at least the chefs d'atelier.

The process at the U.S. plants

In the U.S. plants, the budgeting process started with the receipt of the forms from the Planning department at headquarters. As in France, the Accounting departments were responsible for coordinating and consolidating the departmental inputs for their plants.

In Des Moines, Accounting created input forms for each departmental manager. There was approximately one sheet per cost item in the
ledger except for the costs included in the standard costs. Each sheet included the previous year's actuals, the current year's plan, actuals year-to-date, variances and full year forecast. Standard costs, as in France, were prepared separately, and consisted of actual direct variable costs as of May 31st of the current year. The departmental managers received some guidelines to help them fill out the sheets, in particular, the production volumes and projected economics. They were given two weeks to prepare their inputs. When these were ready, Accounting consolidated all the data and sent the package to the Plant manager. Individual reviews then took place between the Plant manager and each department manager. There were no general meetings except initially to communicate and discuss the general guidelines. The package was reviewed first with the director of Manufacturing, then with the Detroit Finance staff and, finally, was sent to Planning at headquarters.

The monthly reporting and forecasting process was similar but more informal. The inputs were usually given verbally and were required only when major changes were forecasted.

In the Production department, the Production manager, for both budgeting and forecasting, normally prepared an agenda and asked his general foremen to think about each item and to come back for an informal discussion. The general foremen were primarily involved in the overhead budget, in particular, in budgeting for indirect manpower. They usually contacted their foremen informally.

As in France, Accounting prepared all the control reports, drew attention to the variances and asked for explanations. The major control reports were similar to the French ones. They were:
The monthly "Budget Performance" reports. They showed the year-to-date and the full year, (a) the original plan, (b) the previous forecast, and (c) actuals by overhead expense line. They were sent to the general foremen who were responsible for the level of decision costs.

The manpower utilization reports, one weekly and one monthly. These showed, for the period, (a) the standard hours allowed for the actual production, (b) budgeted and actual off-standards by item, and (c) one productivity ratio, the "manpower utilization ratio". The detailed variances reported were almost identical to those of the French reports.

The forecast packages sent to headquarters, which were distributed to all department managers.

In Production, the labor utilization data was presented by "department". These departments were the equivalent of the French "sections", i.e. parts of the production process under the responsibility of a foreman. Within each department, the data was presented in person. Foremen held the lowest level of responsibility for manpower utilization.

At the Detroit plant, budgeting, reporting and forecasting followed the same pattern. The only difference was that, because the Accounting department was common to the three plants of the Detroit Factory complex, a cost analyst was specifically assigned to each plant to work in close collaboration with the plant management.

On the surface, therefore, the budgeting and reporting process was very similar in the French and the U.S. plants. In all cases, Accounting carried the major part of the burden in the budget preparation as
well as in forecasting and reporting. The involvement of the department managers was kept to a minimum. Their inputs were rarely formalized and mostly verbal.

There were some differences between the two countries with regards to the role of the Facilities department, the involvement of the foremen and the content of the reports. As explained above, Facilities had informally acquired a special status because of their knowledge of both the technical side and the cost side of the plant operations. At Marquette, in particular, department managers and chefs d’atelier often consulted Facilities rather than Accounting when requiring explanations on their cost data. This liaison role did not appear in the U.S. plants. If anything, it was Production Control which was regarded as a vital service because of its role in getting the product out and therefore meeting the production programs.

The degree of involvement of the foremen in budgeting also differed between the two countries. In all four plants their involvement took the form of a verbal consultation. But whereas in the French plants this consultation was reported by the higher hierarchical levels only—Production managers and chefs d’atelier—in the U.S. plants it was also reported by the foremen themselves. Furthermore, it was reported in general terms, i.e. without identifying specific items in France, while in the U.S. plants it was reported specifically within the context of indirect manpower planning.

As far as the control reports were concerned, there were differences in the periodicity and the content of the key control reports used. The most noticeable differences were in the manpower utilization reports, namely:
- There were daily mini-reports formally issued in the U.S. plants while in France, Accounting followed the daily data and informed the line departments in case of a problem.

- The U.S. reports were broken down by foreman and by hourly worker, whenever practically feasible; the French reports mainly traced the data to the foremen only.

- The U.S. plants followed closely one ratio, the "manpower utilization ratio," which was also the ratio used in the corporate budget package to measure labor efficiency. This ratio was equal to (clock hours + P.W.S. hours), with clock hours defined as total hours paid to direct labour force and P.W.S. hours (or Planned Work Standards) defined as standard hours allowed for, the actual production. The French plants followed four ratios, none of them totally identical to the "manpower utilization" ratio. One ratio received particular emphasis, the ratio "C" equal to P.W.S. hours + (clock hours - lunch hours).

The decision costs reports were similar in content but more frequent in France than in the U.S., every two weeks versus every month. The U.S. plants emphasized a ratio not used in the French plants, decision costs per P.W.S. hour.

Finally, the forecast packages were presented somewhat differently. The French packages varied in terms of content and details according to the contextual factors and included a running commentary explaining the changes. The U.S. packages consisted of a standard set of forms used every month, without any change in the content and without commentary. The Detroit Finance staff summarized the packages of the individual plants and prepared a ten-page report in which it summarized the
changes from the previous forecast by cost item and gave short explanatory commentaries.

The Intangible Elements

In both countries the major part of the workload created by the budgeting, forecasting and reporting activities and particularly by the corporate requirements was carried out by the Accounting departments, with the line departments being relatively free of these processes. Facilities was the exception because of its responsibility for capital budgeting. In other words, the plants were concerned with the implementation and control end of the budgetary process rather than with the budgeting and forecasting end. Therefore, the bulk of the interview data relates to how the budget objectives were translated into daily priorities and commitment to the objectives.

In the Production departments, the priorities were simple, i.e. meet the daily production programs no matter what. In all four plants, this was the first and foremost concern. The number one crises were the stoppage of an assembly line, missing parts for the scheduled production or parts not conforming to specifications. All these circumstances attracted immediate mobilization of all people concerned.

Therefore, in both countries, the Production departments were totally focused on the problem of keeping the assembly lines moving. Cost came second. Again, in all four plants, cost meant first meeting the manpower productivity objectives, then keeping spoilage, scrap and decision costs on target.

Some differences emerged when comparing the interviews within the departments other than Production. Table 18 reproduces the priorities
reported by the respondents in Quality Control, Facilities, and Production Control/Purchasing. These were mainly reported when answering the question "What are your priorities in your work?" but also when answering the question "What are you responsible for?"

These answers showed different patterns. The U.S. respondents expressed their priorities in terms of a few, simple and operational objectives. Most of these objectives came back to either "get the product out" or "keep the costs down," and were therefore identical to those reported by the Production departments. At the Marquette plant in France, the pattern was similar to that of the U.S. plants. At Beauvais, however, the priorities reported were considerably broader, more complex, and expressed in terms of qualitative rather than quantitative objectives. (See for instance the excerpt for Quality Control on Table 18.)

After reporting their priorities, the respondents usually added comments and explanations regarding their jobs. Whereas the U.S. interviewees commented very briefly and tended to make their job look very simple by reducing it to a few fundamental activities, the French respondents particularly at Beauvais but also to some extent at Marquette, went through detailed explanations of what they had to do and brought out the full complexity of their task.

The French and The U.S. Plants -- Summary and Meaning of the Differences Observed

The differences were considerably fewer at the plants than at headquarters. They consisted of:

- The more extensive involvement of the foremen in budgeting in the U.S.
### TABLE 18

RESPONSIBILITIES AND PRIORITIES REPORTED IN DEPARTMENTS OTHER THAN PRODUCTION

**QUALITY CONTROL**

<table>
<thead>
<tr>
<th>FRANCE</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beauvais</strong></td>
<td><strong>Detroit</strong></td>
</tr>
<tr>
<td>Department manager:</td>
<td>Department manager:</td>
</tr>
<tr>
<td>- Represent the customer at the plant;</td>
<td>- Describe to the inspectors</td>
</tr>
<tr>
<td>- Manage the quality level;</td>
<td>- what to inspect</td>
</tr>
<tr>
<td>- Develop the quality spirit at all hierarchical levels;</td>
<td>- when</td>
</tr>
<tr>
<td>- Compare technical means with parts design requirements;</td>
<td>- how;</td>
</tr>
<tr>
<td>- Strengthen the authority of Quality Control;</td>
<td>- Define parameters of acceptability and non-acceptability;</td>
</tr>
<tr>
<td>- Sensitize the labor force to the definition of the quality level.</td>
<td>- Put together the inspection plan.</td>
</tr>
</tbody>
</table>

**Chef de Service:**

- Determine the minimum and maximum quality levels.
TABLE 18 -- (Continued)

PRODUCTION CONTROL/PURCHASING

<table>
<thead>
<tr>
<th>FRANCE</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beauvais</td>
<td>Des Moines</td>
</tr>
<tr>
<td>Department Manager</td>
<td>Department Manager:</td>
</tr>
<tr>
<td>--Production Control:</td>
<td>- The number one priority is inventory control—work-in-process, raw materials, parts;</td>
</tr>
<tr>
<td>- To be the orchestra conductor for the plant.</td>
<td>- Also, get the parts necessary for production. This is usually not a problem;</td>
</tr>
<tr>
<td>Marquette</td>
<td>- On the purchasing side, keep the costs down with value analysis.</td>
</tr>
<tr>
<td>Department Manager</td>
<td>Senior Buyer:</td>
</tr>
<tr>
<td>--Production Control:</td>
<td>- Keep the line going. The line must not stop. The key issue is to get the finished goods out. This is the number one priority;</td>
</tr>
<tr>
<td>- Liaison headquarters-plant</td>
<td>- Get the correct specifications and keep the costs down.</td>
</tr>
<tr>
<td>- Try and get the product out.</td>
<td></td>
</tr>
<tr>
<td>Department Manager</td>
<td>Detroit</td>
</tr>
<tr>
<td>--Purchasing:</td>
<td>Department Manager:</td>
</tr>
<tr>
<td>- Keep within the cost objectives consistent with the profit budget.</td>
<td>- For the company, the priorities are to reduce the assets or get the product out. For me, it is the continuity of production. If one part is missing, all tractors are in a repair situation and the cost is high. So I make the trade-off more to continuity than to inventory levels. The key for continuity is to manage the material to the assembly line.</td>
</tr>
<tr>
<td>FACILITIES</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td></td>
</tr>
<tr>
<td><strong>FRANCE</strong></td>
<td><strong>U.S.</strong></td>
</tr>
</tbody>
</table>

**Beauvais**

Department Manager:
- To manage the department;
- To define the means of production, and to do that, define the policy a for the manufacturing process.

- I want to make a good plant, that is a modern plant totally adapted to our labour force.

**Marquette**

Department Manager:
- Before all, try and get the production out;
- Output and costs of productions means.

**Detroit**

Department Manager:
- To put out an acceptable product at the date wanted. This is first and most inbred in manufacturing engineering;
- Value analysis for costs reductions;
- Energy savings;
- Legal, safety standards.

Chief Industrial Engineer:
- The control of labor standards and manpower plans is of prime importance. The only way to evaluate the standards is to compare the actuals to the standards. We should bring outside examiners to reaudit. We have not done it enough in the recent past. There has been too much emphasis on getting the product out. My own number one priority is to make proper standards to have a good base for measurement.

Chief Process Engineer:
- I am responsible for tooling up for a part in the most economical method. My priorities are:
  - to make a part to the print,
  - costs come after.

a L'esprit, i.e. literally the spirit.
- The more developed use of simple and quantified objectives and priorities in the U.S.
- The more standardized budgeting process in the U.S.
- The role of coordinator played by the Facilities department in France.

Of these four differences, the last two are difficult to attribute to cultural differences. The standardization of the budget process in the U.S. could be an effect of size. As discussed in Chapter IV, larger organizations tend to have more sophisticated and more formalized management systems. The role of the Facilities department has no clear relationship to cultural characteristics.

The participation of the foremen in budgeting in the U.S. is strongly related to a difference in the **Relational** dimension. A stronger Individualism orientation is expected to lead to a more democratic and participative process. As we have already seen, this hypothesis is supported by the statistical analysis of the questionnaire.

The more developed use of quantified and simple objectives, such as ratios, in the U.S. plants is a typical expression of a strong Doing orientation. As we have seen earlier, this hypothesis is not supported by the statistical analysis.

Finally, the characteristics of the priorities reported in the U.S. plants and at the Marquette plant in France—few, simple, operational—versus those reported at Beauvais—broad, complex, qualitative—suggested a stronger Doing orientation in the U.S. plants and at Marquette than at Beauvais, the latter showing a more Being-in-Becoming orientation (see Table 18). As already explained, the preference for
Being-in-Becoming could not be measured. But while both countries indicated a preference for Doing over Being, there were differences between locations with Detroit and Marquette scoring significantly lower than the other locations. Therefore, the hypothesized difference is not supported by the statistical analysis.

In summary, the strongest effect in terms of supporting evidence, therefore, when comparing the processes between French and U.S. plants, was that of the Relational dimension. However, the interview data suggested that there was also a significant difference on the Activity dimension between the two groups.
CHAPTER VII

CONCLUSION

This conclusion consists of three parts:

a) A summary of the research and a discussion of the research findings.

b) An evaluation of the research methods.

c) An examination of the possibilities for future research.

Summary of the Research and Discussion of the Research Findings

Summary of the Research

The objective was to explore some concrete implications of operating in different cultures for controlling operations in multinational organizations. As pointed out in Chapter I when discussing relevant existing research, there is a mass of cross-cultural research but this research usually suffers from important shortcomings. In particular, the studies are often of a comparative nature, describing the practices adopted in companies in one country, versus those adopted in companies in another country. They offer no measure of the cultural differences between the countries, nor frameworks defining culture in operational terms. Consequently, the results of these studies cannot be generalized to other settings, as the lack of analysis of the culture
variable precludes statements of the form. Such cultural difference tends to be revealed in such differences in management practices. A cultural framework is essential to help the multinational companies identify important similarities or differences between the cultures of their operating locations,
understand the potential effect of specific cultural values on the effectiveness and acceptability of specific management practices,
recognize resulting problems when they occur,
work out solutions.

This research was a first step toward a systematic inquiry into the effect of specific cultural values on budgeting and control practices in multinational companies. Some specific objectives were

to assess the scope and breadth of the potential effect of the culture variable on budgeting practices, and to draw some practical implications for budgeting in multinational companies,

to assess the suitability of the cultural framework developed by the anthropologists Kluckhohn and Strodtebeck (1961) for recognizing, classifying and explaining significant culture-related differences in management practices.

The research hypothesis was that cultural differences between subsidiaries of a company limit the degree of standardization which can be achieved in a worldwide budgeting system and, specifically, that even when the multinational corporate management attempts to standardize budgeting practices, actual practices differ among subsidiaries and a number of significant differences are related to cultural differences.

In order to test this hypothesis, data on culture and budgeting practices were collected in both a French and an American subsidiary of
Multi-Co., a U.S.-based multinational company, using a standardized worldwide budgeting and control system—Integrated Planning and Control (or IPC). Budgeting practices were researched through semi-structured interviews conducted both at headquarters and in two plants of each of the two subsidiaries, while cultural differences between the two subsidiaries were measured with the Kluckhohn et al. value-orientation questionnaire. The differences in budgeting practices followed by each subsidiary were then related to the cultural differences identified. To isolate the impact of culture on budgeting practices as much as possible, the two subsidiaries were chosen for their similarity in product, technology, age, and profitability—four factors which could otherwise have caused differences in budgeting practices. Although not well matched in size, the U.S. subsidiary being larger than the French one, this was mitigated by the fact that the two French plants were larger

The Kluckhohn and Strodtbeck value-orientation questionnaire and its underlying framework are described in detail in Chapter II. Briefly, Kluckhohn et al. have identified four basic problems to which all human groups must have answers: how to deal with 1) the physical environment, 2) time, 3) the human environment, and 4) how to express oneself through activity. For each of these problems they have identified a range of three possible solutions, all found in all cultural groups at any given time, but differentially preferred. The ranking of the three solutions adopted in a group for one problem is called value-orientation, which we have also labeled as cultural value throughout this research. Therefore culture is defined as the set of the four possible value-orientations.

- The Time value-orientation, a ranking of the three possible time focuses, Past, Present, and Future.
- The Man-Nature value-orientation, a ranking of the three possible ways offered to one to view one's relationships with one's environment, Subjugation to-, Harmony with-, and Mastery over-Nature.
- The Relational value-orientation, which deals with how one views one's relationship to others, a ranking of Individualism, Collaterality (the peer group approach), and Lineality (the hierarchically-ordered group).
- The Activity value-orientation, a ranking of the Being mode (emphasis on self-control and personal development), and of the Doing mode (emphasis on concrete and objectively-measurable accomplishments).
than their counterparts. This made it possible, in particular, to evaluate whether the differences in structures observed between the two companies were related to the differences in size rather than to the differences in culture. ²

The data reported on the cultural differences between the subsidiaries (Chapter IV), and on the actual budgeting practices—structures and processes—(Chapters V and VI) strongly support the research hypothesis. There were differences in the way that the two subsidiaries implemented and used the corporate system, strongly related conceptually to differences in the cultural values identified by Kluckhohn et al. ³

The important questions that remain to be answered are: What are the implications of these findings for budgeting in a multinational setting? What recommendations might be made to the multinational companies to help them improve their budgeting systems?

Is it possible, in particular, to conclude in the case of Multi-Co., that the IPC was not only implemented differently in the two subsidiaries, but that it was also less effective in the French company than in the U.S. one? Can we hypothesize that the French company might have been better managed with a different budgeting system, more

² Similar structural designs were consistently adopted at both headquarters and plants of both the U.S. and the French subsidiaries. This was paradoxical when demands of size should have resulted in a divergence between headquarters and plants structures in each subsidiary. One had to conclude, therefore, that the structures observed were an expression of preference rather than the outcome of size-related needs. (See Chapter V.)

³ In a few cases, however, the differences in the budgeting practices followed in the U.S. and in the French subsidiaries suggested differences in cultural value-orientations which were not supported by the statistical analysis of the responses to the Kluckhohn et al. questionnaire. This problem is discussed later in the evaluation of the research instruments.
congruent with the French culture? According to the contingency model of management outlined in Chapter I, a given set of management practices is not equally effective under all conditions. Its effectiveness is a function of its degree of fit with the characteristics of the environment, the firm and the organizational goals. It was hypothesized that culture was a relevant characteristic of environment in this model, and therefore, that to be effective, management practices had to be congruent with the local cultural values. In view of the cultural differences observed between the French and the U.S. subsidiaries, and of the fact that the IPC was developed in North America, assuming it to be a reasonable system, one would expect it to have been significantly more effective in the U.S. subsidiary than in the French one. In the next section, we examine whether there is any evidence in the data collected to support this hypothesis.

Discussion of the Research Findings

Might the French company have been better managed with a budgeting system more congruent with the French cultural values?

One way to answer this question is to determine whether the data available reveal that

a) the IPC was reasonably effective in the U.S. company,

b) this same formal system was significantly less effective in the French subsidiary,

c) the difference in effectiveness was related to differences in cultural values.
Ideally, the effectiveness of the budgeting system in each subsidiary should be measured by its contribution to overall performance, this being defined in terms of a final output, such as profit or return on investment. Such a contribution is difficult to isolate in practice as so many factors contribute to final outcomes and their interactions are very complex. Results of the many attempts to measure the impact of budgeting practices on performance have generally been inconclusive, essentially because the models were not controlling for a sufficiently large number of relevant variables (Merchant, 1981). This research is similarly limited. There were too many variables which could have affected differentially the performance of the degree of fit between the IPC and the local cultural values.4

An alternative approach is to measure the effectiveness of the budgeting system in each location in terms of variables other than ultimate performance—either inputs or outputs of a budgeting system—which have been hypothesized to be positively related to performance in the budgeting literature. The budgeting interview guide incorporated specific questions designed to obtain data on some of those variables which are frequently mentioned in the budgeting literature.5

- the quality of the final budget,
- the importance attached to budgeting,
- the degree of commitment felt towards the final budget,
- the attitudes towards budgeting and the final budget (favorable or unfavorable).

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4 See "Description of the Company" in Chapter II for details.

5 See "Description of the Instruments" in Chapter II for details.
As these variables come primarily from American management literature, there is a danger that the hypothesized relationship between these four variables and the effectiveness of a budgeting system might not be generalizable to other cultures. Unfortunately, there are no available studies either to confirm that this model could be applied in a French business context, or to indicate that it is culture-bound. A priori, however, there is no logical relationship between the existence of specific value-orientations in a group and the validity (or invalidity) of the model. In the absence of contrary evidence, it will therefore be retained for the French as well as the American cultural contexts.

Was the IPC reasonably effective in the U.S. company? Were the quality of the final budget, the importance attached to budgeting, the commitment felt towards the final budget higher, and the attitudes towards budgeting and the final budget more favorable in the U.S. company than in the French one? And if so, to what degree were the cultural differences between the two companies responsible?

The data presented in Chapter V and VI provide strong evidence that the French managers encountered many problems with the IPC and the way it was implemented by both the corporate and the European headquarters managers, but that these same problems were not experienced by their American counterparts. In fact, the latter did not appear to be

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6 The European headquarters were a geographically decentralized representation of the corporate headquarters. All communications between the corporate staff and the European companies—information requests from the corporate staff and reports from the European companies—were relayed through these regional headquarters. Similarly, the U.S. company had its own regional headquarters, the Americas headquarters. (See "Description of the Company" in Chapter II for details.)
experience any notable difficulties. To them the IPC approach, to budgeting and control, and the way it was enforced by the corporate management and the regional headquarters made perfect sense.

The IPC—a brief reminder.

The IPC was defined in the official document as:

... A set of annual planning and control practices which continually focus attention on the improvements that are brought about by the action of individual managers (Bishop Wilson, 1963, p. 2-1).

The themes of continuous focus on possibilities of improvements, of the importance of change to bring about these improvements, of the necessity that each individual manager be aware of his role in the improvement of the overall performance and accountable for his contribution, were central to the IPC. The IPC also aimed at developing a constant focus on the achievement of the total objectives set for the whole financial year, rather than on short-term— for instance, monthly—achievements. These emphases were well reflected in the characteristics of the IPC as it was on paper and as it was enforced by the corporate staffs.

Consistent with these overt objectives, some of the major characteristics of the IPC, which were also sources of major differences in the responses of the U.S. company, were the following.

The budgeting process was lengthy, and often took place over eight months, during which the budget content underwent almost continuous changes. On paper, the budget elaboration should have occurred in two major steps:

7 See Chapter III for a detailed description of the IPC.
The Goals, or preliminary budget, which were first elaborated in each company on the basis of the objectives of the strategic plan, modified following reviews with first the regional and then the worldwide headquarters, and finally approved by the corporate management.

The Plan, or final budget, which should have been essentially a detailed version of the approved Goals, and should have followed similar review steps before final approval.

In reality, the elaboration of the Plan became almost an entirely new planning process. Major revisions occurred well after the first set of reviews, and the final version was usually approved well after the beginning of the financial year it covered. (The elaboration of the Plan which should have taken no more than three months according to the official timetables, had been taking up to six months in the recent years.) A number of the revisions requested towards the end of the process took the form of blanket cost reductions assigned to the individual companies for incorporation into the final budget, as the corporate management attempted to bring the planned profit for the company as a whole to a more acceptable level. Other revisions were requested to update the forecasted results for the current financial year, which were used as a base for the projections and goals established for the following year's budget, for all latest known actual results. Although the official planning base was the 7+5 forecast status for the current year, i.e., current year costs and profits, forecasted at the point in time when actual results were known for the first seven months and forecasted for the last five, it was the practice
to amend the budget base for all latest actual results as they became known.

The forecasting system was also a central feature in the IPC. Full-year forecasts were prepared on a monthly basis, incorporating actual results known to date and forecasted results for the remainder of the financial year. These forecasts were used as major control tools, and the variance analyses between the current forecast and that of the previous month were as important for control as the analysis of the latest actual results versus the original budget. The latest forecast was regarded as an up-dated budget, and therefore as a better criterion for guiding decisions and evaluating performance.

The IPC in the U.S. Company

These characteristics of the IPC—both as it was on paper and as it was implemented by the corporate staffs at the time of the interviews—raised no issues in the U.S. company. All the managers involved in budgeting and reporting who were interviewed—managers from the controller's department and top managers at both plants and headquarters—had apparently internalized the IPC. They understood it, accepted it, and utilized it in the spirit in which it was intended. Where the IPC was not fulfilling the internal planning and control needs, the U.S. company had developed its own supplementary practices and integrated the two sets. Given the case format adopted to analyze and present the data on the budgeting practices, there is no quantitative score to measure the four variables examined. However, scanning the data in Chapters V and VI for positive, neutral, or negative indicators—i.e., comments or behaviors indicating high, medium, or low importance attached to
budgeting, commitment to the budget, and quality of the final goals, and favorable, neutral or unfavorable attitudes—there are no negative indicators for any of the four variables and many markedly positive ones.

- The U.S. managers attached a high importance to the final budget, and invested considerable effort into its preparation. They expressed no complaints regarding the volume of content changes throughout the budgeting process, nor in regard to the length of this process. They felt that the importance of the budget justified the work and time invested, and that there was a direct relationship between the number of changes, the length of the process, and the quality of the final budget.

- Commitment to achieving the budgeted goals was widely and strongly expressed, despite the requests from the corporate staffs to incorporate often severe cuts into the final budget. The U.S. managers felt that they still retained a fair amount of control in the negotiations over these final goals.

- The forecasting system, and the role of the forecasts made sense to the U.S. managers. They viewed the forecast-to-forecast comparisons, in particular, as a meaningful planning and control device, which kept the attention focused on full year results and provided up-dated criteria for evaluating performance, a view totally consistent with the intention of the designers of the IPC.

- The quality of the final goals is difficult to establish objectively. However, they were perceived in the U.S. company to be hard goals, but good goals.
The IPC in the French Company

In the French company, the situation was very different. Although budgeting was regarded as a vital management task, and the budget as a major tool for planning and control, the French managers felt negatively about a number of aspects of the IPC. Consequently, the indicators for the four variables examined, which were predominantly positive and at worse neutral in the U.S. company, became often negative in the French company.

- The volume of changes in content requested during the budget preparation was perceived to be excessive, likewise the amount of work required to prepare the monthly forecasts and generally fulfill the information requests from European headquarters. The French managers felt that the volume of data they had to submit was such, that they lost the sense of being responsible for the content of their budget, or forecasts, and that the form became more important than the content.

- They also objected to the practice of incorporating each change incrementally in the budget, as they felt that the cumulative effect of the numerous changes led to major inconsistencies between parts of the budget.

- For the French managers, the magnitude of differences between the budget they had originally prepared and the budget finally approved was unrealistic. The blanket costs reductions, in particular, allocated to the French company towards the end of the budgeting process as corporate management attempted to bring the consolidated financial goals to an acceptable level were a sensitive issue. They were thought an unreasonable practice which
eventually turned the financial goals which had been prepared with great care into meaningless numbers. In order to isolate the plants from what it viewed as an unreasonable practice, the French company did not incorporate the cost reductions into the plants' budgets, but held them centrally, in the controller's department at headquarters. The plants, therefore, performed to a version of the budget consistent with the one they had originally prepared, while the reports to corporate management staffs were made on the basis of the final version.

The value of the monthly forecasts as a control device was not understood. For the French managers control meant comparing actual results to the original plan adjusted for volume changes. Since part of the data was forecasted and, therefore, to their mind "not real," comparisons between consecutive forecasts provided no information.

The IPC was not helpful to the French managers who saw it only as taking time away from "real" planning and control. As a result, all three behavioral variables—importance of budgeting, commitment felt towards the budget, attitudes towards the budget—were negatively affected by some of the central characteristics of the IPC. Again, it is difficult to estimate to what degree the quality of the plan was affected. Certainly, the final budget was not perceived to be as good as it could have been, and given the feeling expressed that budgeting was being turned into a "number crunching" exercise, it is unlikely that the effort that went into the budget preparation was as enthusiastic and concentrated as it was in the U.S. company.
The French managers did not deliberately oppose the system. They understood the problems of coordination encountered in a multinational company, and seemed willing to accept the resulting constraints this imposed upon them. Rather, they felt overwhelmed by the demands for information from the European headquarters. They spent a great deal of time in trying to satisfy these demands, only to find their data was insufficient or incorrect. Not only this, but the data they had prepared was not even of use to them. They saw no solution to this problem. In their perception, to discuss it with the European headquarters would lead nowhere. Their company was too small a fish in a big pond to be able to influence decisions concerning organizational processes, and its relationship with headquarters was such that a problem-solving discussion was ruled out from the start.

Another approach which would have consisted of implementing its own system in conjunction with the IPC, as in the U.S. company, was not viewed as feasible by the French management because of the manpower it would require. The managing director, his lack of leadership, and his inability to negotiate with the corporate staff was often mentioned in that context. The French managers felt that changes within the company or in its interaction with the corporate staffs could not take place if the managing director were not willing to take a stand on the issue and actively support such changes.

The European headquarters perceived this situation from a totally different viewpoint, as indicated by one of their managers and by the French managers themselves. Headquarters' managers were of the opinion that the workload resulting from their data requests could be easily handled as most of the information they requested was already available.
Furthermore, they maintained that the monthly forecasts which were such a bone of contention between themselves and the French subsidiary did not need to be prepared in detail every month. Quarterly detailed forecasts were sufficient, and interim monthly forecasts needed only if major events had occurred. As an example in this respect, it seems that the German company had found a reasonable compromise between the corporate needs and its own, and in particular provided detailed forecasts on the quarterly basis mentioned above. Yet, when the French managers had tried to use this system, they had found that the volume of information requested on the interim forecasts was such that it was easier to work out full detailed forecasts each month.

Looking at these two short summaries of the data reported on the responses to the IPC in the French and the U.S. company, a number of questions come to mind: Why did the French both perceive and work with the IPC so differently than the Americans? Why did the corporate European staff disagree with the perceptions of the French managers? Why had the German company been able to work out a compromise, but not the French one?

The Cultural Effect

The description of the IPC and the data required on actual budgeting practices in the two subsidiaries strongly suggest that some of the answers to these questions lay in the fact that many aspects of the IPC were strongly rooted in American cultural values, but conflicted with French ones.
These cultural values, according to the definition used in this research, are basic beliefs concerning what is possible or not possible, and what is desirable or not desirable when dealing with various aspects of the human environment. They create a certain view of the world which limits the types of behaviors considered rational in given situations. The view of the world which was built into the IPC and shared by the American managers, can be described in the Kluckhohn and Strodtebeck terms as:

- A basic belief in Mastery over the physical environment rather than in Harmony or Subjugation.
- A preference for Future, over Past and Present, when choosing a time focus.
- A preference for Doing as a mode of expression and in choosing goals and criteria by which evaluating achievements, over Being-in-Becoming and Being.
- A preference for Individualism in solving problems related to interpersonal relations over Collaterality and Lineality.

The Mastery belief was incorporated in the IPC in the use of ambitious goals to motivate managers, the Future time focus in the importance attached to future-oriented data—in particular to the forecasts as control tools—, the Doing mode of expression in the importance attached to concrete and measurable outputs—such as the number of changes in the budget content and the length of the budgeting process which were perceived as indicators of quality—, and the individualistic mode of interpersonal relations in the importance attached to the involvement and commitment of the individual manager.
In the U.S. subsidiary where the prevailing view of the world was consistent with that reflected in the IPC, the managers had no difficulties in understanding and internalizing the IPC, and their behavior, even when disagreements arose, was consistent with the corporate management's way of thinking. In the French subsidiary, where a different view of the world prevailed, the same practices which made sense to the U.S. managers and aided their decision-making, were confusing and proved a hindrance rather than a help. The roots of the problem were not in ill-will, nor in the kind of misunderstanding which can be eradicated through explanation, but rather in the different perspective of the world held by the French managers.

Some Implications of the Conflict between the Harmony and Mastery Beliefs

Looking at the attitudes towards the budgeting process and the finally budgeted financial goals in the French and the U.S. subsidiaries of Multi-Co., this conflict in beliefs was expressed in the negative reactions of the French managers to the blanket cost reductions and more generally to the difficulty of the financial goals, two important issues in the French company which did not seem to exist in the U.S. one. Furthermore, the financial goals which were perceived unrealistically high by the French managers did not appear so to the corporate managers.

Stedry's experiments show that increases in the difficulty of the objectives will lead to improvements in performance, but only up to a certain point. Beyond that point, further increases in difficulty of objectives will lead to poor performance as the discrepancy between what is viewed as feasible and the set objectives is such that the objectives are perceived to be unattainable, no matter how much effort is expended.
(Stedry, 1960). Therefore, applying these findings to budgeting in a multi-cultural context, an important implication is that in a culture such as that of the United States where Mastery is strongly preferred, comparatively ambitious goals will result in the highest motivation. A relatively large discrepancy between actual results and goals will not be interpreted as a failure but, rather, a challenge leading to new action to come closer to these goals. On the other hand, in a culture where Harmony predominates such as in the French culture, small improvements rather than quantum jumps lead to the highest motivation and highest performance. Small discrepancies between actual results and goals will lead to corrective action, but relatively large discrepancies will produce a feeling that the goals are unreasonable and lead to a decrease of motivation. For Harmony oriented managers, the best way to achieve a high performance level is not to use aggressive action, but to maintain the necessary balance between the firm and its environment which requires considerably more subtle methods.

Some Implications of the Conflict between the Past and Future Time Focuses

Differences in the time focus between the two cultures reinforced the differences noted above in the types of goals that the corporate management and the French company would consider realistic. The French managers subscribed to Past, and therefore tended to view the future as somewhat unpredictable. They did not believe that dramatic improvements could be achieved within the time span of the budget year. Their approach to planning was first to obtain a good understanding of the current situation, then to plan reasonable improvements from there. Such a process, they felt, would yield goals congruent with reality
which would therefore help the company. To them, the process implemented at Multi-Co. used the steps in the reverse order by first setting the goals, and then developing plans to bridge the gap between these goals and the current reality. They felt that emphasis which should have been focused on the present state of the company, was directed to future objectives instead, and that the process was more one of wishful thinking than one of planning, thus resulting in goals too unrealistic to be used as guidelines.

Similarly, the forecasts which were a vital control device in the IPC, and used as such by the U.S. company, were of little value to the French managers. Again, what they needed to know was where the company was, not where it might be at the end of the budget year. The forecasts were speculative since they included future data and therefore could not be used for making decisions, while the management needed data and analyses on the current situation. The attention allotted to the forecasts and future results under IPC prevented interest and time from being focused on these needs.

Because a different time focus prevailed in each of the two cultures, the type of information which provided the relevant cue for decision-making and action-taking in one was confusing in the other, and led to frustration which decreased commitment to the objectives and elicited unfavorable attitudes towards the budgeting system. The relevant information in the U.S. culture, where future prevailed concerned future achievements while in the French culture where past prevailed, the relevant information concerned past and current experience and achievements. The issue was not that the right information was used in one company and not in the other, but that, given the different
lens through which they each viewed the world, information yielding the best results differed between the two companies.

Some Implications of the Conflict between the Being-in-Becoming and the Doing Modes of Expression

The IPC and the French culture also differed in what they valued as a mode of self-expression. The Doing mode, reflected in the IPC and also preferred by the U.S. company, is consistent with the preference for achievements which can be measured with objective, unambiguous, and quantitatively expressed criteria. The preference for the Doing mode was expressed strongly in the IPC in the length of the budgeting process, the large number of changes in goals which took place, and the numerous versions of the budget which were prepared.

The interviews suggested that the length of the process, the number of versions and the number of changes were used in the U.S. company as surrogate measures for the effort invested in the budget and for the quality of the goals. The French, on the other hand, who believed in a Being-in-Becoming mode of expression, attached considerably less importance to measurable, objective, and quantifiable outputs. They believed in more complex and qualitative targets, more representative of the complexity of reality. In budgeting, the quality of the inputs rather than the quantity of the changes and versions of the budget was the main objective. Unlike their American counterparts, they saw the two as conflicting. Too many changes and too many versions cut down substantially on the time which they felt should have been spent on thinking, analyzing, and reviewing. Such an approach, however, would have produced considerably less tangible evidence that effort was being
expanded than the U.S./IPC approach, and therefore one can hypothesize that it would have been misinterpreted by the corporate management as a sign that nothing was being done. This difference in philosophy explains also why the French managers felt so overwhelmed by the number of these requests from their corporate staff. They felt that the number of these requests was unreasonably high in view of what they perceived as corporate needs, while the corporate staff saw nothing unreasonable or unusual about their requests.

Again, the Doing mode of expression reflected in the IPC process, did not suit the decision-making processes in the French company. The concrete outputs associated with effort, commitment, and quality in the Doing culture, were associated in the Being-in-Becoming culture with meaningless and time-consuming number crunching, which led to frustration and loss of commitment towards the entire process.

Some Implications of the Conflict between the Collateral and Individualistic Modes of Interpersonal Relations.

Finally, the IPC attached a great deal of significance to the commitment and involvement of the individual manager in budgeting. The general emphasis was on the individual as a locus of decision, action, and responsibility. The U.S. company, consistent with Kluckhohn and Strodtbeck's Individualism, attached importance to participation in budgeting, and had adopted dual reporting lines which broke the traditional group structures in order to help individuals accomplish their tasks. In a group-oriented culture, however, the locus of decision, action, and responsibility is not the individual but the group. In the
collateral group, the members are peers, and decisions require face-to-
face discussions and consensus. In the lineal group, the individuals
are hierarchically organized and headed by one individual (or a group of
individuals) who is in charge and makes all the decisions. The main
locus of decision and responsibility is the top of the hierarchy.

In the French company, the decision-making processes were con-
sistent with both the lineal and the collateral mode. The company
operated, as a pyramid of groups which, going from the smaller to the
larger, consisted in people working for one supervisor, people working
in the same function (for example, Planning or Reporting), and people
working for the same department, such as controller's department or, at
the plant, Quality Control, and Facilities. At the plants, in particu-
lar, the departmental groupings and the functional groupings were very
apparent. Group members had a strong loyalty towards their group as
well as a marked feeling of differentiation from the other groups. They
participated in regular—often daily—face-to-face meetings with their
supervisors. At those meetings, which served both a work and a social
purpose, information was exchanged and current work issues were dis-
cussed, as well as topics of a personal and social nature. Following
these discussions, the supervisor decided on the actions to be taken and
himself handled the issues which needed to be resolved with his counter-
parts from other functions or departments. Discussions, explanations,
and face-to-face contacts were an essential part of the decision-making
process in the French company. The need for these interactions was
frequently reported during the interviews, and their usage was very
common both at headquarters and at the plants. This collateral and
lineal mode of organization did not create obvious problems between the
French company and the corporate staffs at the time of the interviews. There was no American expatriate management in the French company at the time, and therefore any conflict between this mode and the American individualistic mode was not apparent. However, one can hypothesize that severe difficulties would arise if American managers were sent to the French company and tried to implement a U.S.-type process, namely as few as possible face-to-face meetings and more individual participation. It can be hypothesized that responses would be disappointing, and that these managers would encounter what they would perceive to be a lack of willingness to assume responsibilities or a tendency to talk too much and do nothing.

There were a few practical implications, however, at the time of the interviews. Some of the problems existing between the corporate staff and the French company, partially explainable in terms of differences in the preferred modes of self-expression, seemed also related to differences in the preferred modes of interpersonal relations. By the standards of the French managers, there were not enough discussions between the corporate staff and themselves, therefore the requests for information and the imposed budget changes which could have been accepted (a behavior consistent with the authoritarian lineal values), were rejected because of the manner in which these were conveyed. Ingredients which would have made the requests more acceptable were:

- More face-to-face discussions between the two parties, and more explanations and justifications of requests by the corporate staffs.
Issuing the requests from the higher levels of corporate management, rather than from lower level analysts at the European headquarters.

Furthermore, given the lineal values, choosing the "right" managing director would have made a considerable difference. The ideal person would be a leader and decision-maker, able to "translate" between the corporate staff and the French managers.

Even more so than in the previous three cases, it would be very difficult to contend that the U.S. individualistic mode of organization would have yielded in the French company results superior to those which could be achieved with a collateral or lineal mode of organization. The success of Japanese management methods provides ample evidence that the latter modes are at least as effective as the individualistic mode, and that face-to-face meetings are not necessarily the waste of time that they were judged to be in the U.S. company (Ouchi, 1981). In fact, in this particular case, the French lineal and collateral modes could potentially have made it easier for Multi-Co's corporate management to obtain the collaboration of the French managers. Had their preferred mode of interpersonal relations been more individualistic, the French managers would have probably put up a stronger opposition to the aspects of IPC which conflicted with their ideas on budgeting and control procedures.

To conclude, there is strong evidence that the IPC was considerably less effective in the French company than in the U.S. one, and that this lower effectiveness was not due to faults inherent in the IPC design, for which somehow the U.S. company would have found solutions, but to major differences between French and U.S. cultural values. The
IPC had been designed to help the decision-making of managers who believed in Mastery over the environment, Future, Doing, and Individualism and, as such, it did not emphasize the type of information, activity, and processes which would be helpful to managers believing in Harmony with the environment, Past, Being-in-Becoming, and Collaterality/Lineality. As a result, the IPC which fostered good planning and control in the U.S. company, detracted from the accomplishment of these tasks in the French company.

In view of these data, what advice could be given to Multi-Co. to improve its worldwide budgeting system? The IPC had been designed by a well-respected American consulting firm. It incorporated practices which are normally presented as desirable in the management literature. It could have been the best possible budgeting and control system that could have been designed for Multi-Co. in the U.S. and would have still failed in a different cultural context because it could not be internalized by the local management. Possible approaches to design a better worldwide system are discussed under "Implications for future research" at the end of this conclusion.

**Evaluation of the Research Instruments**

The discussion will focus on the interview guide used for collecting the budgeting data, and on the Kluckhohn and Strodtbeck questionnaire used to measure cultural values in each country.
The data on the budgeting practices in each subsidiary were collected through semi-structured interviews using an interview guide with broad topics. The general approach used was that usually followed by anthropologists in field research and described for instance by William Foote Whyte (1960, p. 352) as having the following characteristics:

- The interviewer does not follow a standard order and wording of questions.
- The interview structure is designed to allow the respondent to introduce topics not anticipated by the interviewer.
- The interviewer does not remain passive but remains ready to request explanations when a statement is unclear, or to follow up on statements rich in data.

This form of interviewing is usually referred to as “non-directive”; although, as pointed out by Whyte, the term is not accurate and “semi-directive” might be more appropriate. The objective is not to interfere with the flow of the conversation and to let the interviewee speak as freely as possible.

Before this semi-directive form was finally adopted, a more structured approach was tried, using a version of the interview guide where the broad topics were broken down into a number of specific questions. The semi-directive approach was chosen as, not very surprisingly, it brought out a wealth of data far exceeding that elicited by the more structured approach. More importantly, however, the data obtained reflected a considerably more accurate representation of the
situation. This second set of data was often inconsistent with the first set. When such inconsistencies were discussed, the second set of data was usually determined as the more accurate one, for these reasons:

- The question had been misunderstood;
- Not enough thought had been given to the question;
- As the question was difficult to answer in simple terms, the answer was bound to be somewhat inaccurate.

The French respondents had notably more difficulty in answering the more detailed and restrictive version of the guide than the American respondents. They disliked trying to fit complex realities into simple categories, feeling that too much information was lost and that the result did not make sense. This reaction was consistent with the Being-in-Becoming belief attributed to the French sample in this research—despite results obtained from the Kluckhohn et al. questionnaire—and suggested that in cross-cultural studies, the use of a structured questionnaire might be a source of bias.

The Kluckhohn and Strodtbeck Value-orientation Questionnaire

The Kluckhohn and Strodtbeck instrument used here to measure culture proved well suited to this type of research. Despite the problems discussed below, it made a significant contribution to an understanding of the issues in this research. It offered an analytical framework which provided an excellent set of categories—the four value-orientations—to classify the differences in practices and proved extremely relevant in the context of an industrial organization. In many instances, in fact, the rationale given for accepting or rejecting
certain practices was expressed in terms almost identical to those used by Kluckhohn and Strodbeck to describe the meaning of their value-orientations. Another advantage was that the questionnaire was well received in both countries. Respondents had no major difficulties in filling it out, and often reported spontaneously that they had found it interesting and had been able to identify with the content. Furthermore, its use of simple language, and of situations taken from an agricultural setting, allowed translations which were relatively unbiased compared with most instruments used in cross-cultural research. Finally, despite its apparent simplicity, this questionnaire was able to identify fairly subtle differences in the Man-Nature and the Relational dimensions between respondents belonging to a Western industrial setting.

There were, however, problems with this questionnaire which were discussed earlier. The Activity dimension was not adequately measured because of the lack of questions relating to the Being-in-Becoming solution. As a result, the statistical results showed a similar preference for the Doing mode of Activity while the interview data clearly revealed that Doing was considerably weaker in the French company where the first choice would probably have been Being-in-Becoming had that alternative been offered.

The Time dimension also gave disappointing results. The statistical results showed no difference between the two countries, both ranking Future and Present in first place, and Past in third place. Again, these results were not confirmed by the interview data which yielded a strong Future focus in the U.S. company and a strong Past focus in the French one. As already mentioned in Chapter IV, the Time
dimension in the Kluckhohn and Strondtbeck instrument may be the least valid and reliable dimension in the instrument. However, the problem of a possible interdependency with the Man-Nature dimension which has been reported in the literature did not seem to be the cause of the problem in this research. Such an interdependency would have resulted in different beliefs with regards to Time, rather than similar beliefs since both the questionnaire results and the interview data agreed that there were strong differences between the two countries in their Man-Nature Beliefs. Two explanations for this situation come to mind. First, the Time beliefs might have been in a state of transition in France, so that whereas the choice of Future and Past may have been desirable intellectually, emotionally Past still influenced everyday life. Another possible explanation is that the Time dimension is not homogeneous. The Future solution indicates a belief that one's future situation will be better than the present one and that, in general, change brings improvement. The time period considered in the Kluckhohn et al. instrument is indefinite and often seems to encompass one's lifetime. The time periods considered during the interview were mostly one year and never exceeded five years. It is possible that the French respondents had considerably less optimism regarding what could be achieved in a relatively short period of time as opposed to what could be achieved over a lifetime. Therefore, it seems that the time frame might be an important sub-dimension of Time.

Some work, therefore, will be needed to improve the Activity and Time dimensions. It might be possible, in particular, to use other instruments in conjunction with the Kluckhohn et al. questionnaire.
Another shortcoming of the questionnaire is that it uses an ordinal scale to establish the preference patterns. If, for example, the ranking adopted by a group for the Time dimension is Past in first place, Future in second place, and Present in the third place, this tells us that in more than fifty percent of the cases Past has been ranked before Future and Present, and Future before Present, but gives no indication of the distance between choices. The step between Past and Future could be very large or very small, so that two groups with identical rankings could in fact be significantly different. The assessment of the differences between groups could be considerably more accurate if some idea of the distance between choices could be elicited. This would be particularly valuable for drawing implications for managing organizations, as the magnitude of the dissimilarities between companies is a key variable in determining solutions. Again, some work will be needed on this point.

In view of the problems with two of the four value-orientations, however, why not drop the questionnaire altogether, and only retain its framework to classify the interview data? This research has revealed the interview data to be the major source of information used to establish the cultural preferences within each group, since when the two sources differed, the interview data was determined to be the most accurate. There is no doubt, however, that the mixed methodology adopted in this research—structured culture questionnaire and semi-structured interviews—should be retained. The culture questionnaire played a key role. It helped confirm the interview data, or highlighted discrepancies, which raised new questions; led to a better understanding of the issue; and refined the framework. Even without a measure of the
distance between choices, this questionnaire provided a useful measure of the degree of homogeneity within a group, and of the magnitude of the differences between the groups. This formed a sound base for formulating hypotheses on the existence of other unobserved differences in practices. Specifically, it identified not only the first, but also the second and third choices for each cultural value-orientations, and provided information on their relative importance, in which the interview data were less effective. In fact, the culture questionnaire alone could prove a useful tool for a company trying to obtain a swift grasp for its cultural environment. The questionnaire is easy to administer, while interviews are time consuming and more difficult to set up. A great deal of preparatory work could be generated from the questionnaire at the onset of a project, with a follow-up using interviews as the project is taking shape, to avoid over-simplification.

**Implications for Future Research**

The contribution of this research was twofold.

- It presented data supporting the importance of culture as an independent variable in the contingency model of management.

- It identified a cultural framework, that of Kluckhohn and Strodtbeck, and explored its suitability for identifying and understanding culture-related differences in budgeting practices between culturally different subsidiaries of a multinational company. The bulk of cross-cultural studies are of a comparative nature, which seriously limits the generalizability of the findings and the ability to predict where difficulties between
culturally different parent and subsidiaries might be encountered. This research provided evidence that the Kluckhohn et al. framework makes sense in a business situation, although not specifically developed for that application, and would permit such generalizations and predictions.

Future research from here needs to address three points:

- Are the research results generalizable? This research was conducted in two subsidiaries of one company. Would similar results have been obtained had a different company or a larger number of companies been researched? To what extent were the findings influenced by idiosyncratic factors?

- The Kluckhohn and Strodtbeck questionnaire measures very basic and general values. To be of help to the multinational companies, these values need to be translated into very practical and specific preferences for certain budgeting and, generally, management practices.

- If domestic management practices are not the best for a culturally different subsidiary, and therefore should not be explored, what options are open to the multinational companies?

The first issue is perhaps the easiest to deal with. This research should be replicated both in the same cultures as those where it took place—French and American, and in different cultural settings to test whether the new findings of this research can be generalized to other companies and other cultures.

The second issue of bridging the gap between the cultural framework and business reality is more difficult to achieve. What is needed for each of the Kluckhohn and Strodtbeck value-orientations, is a list.
of potential implications for a budgeting and control system. It was originally planned to use in this research, in conjunction with the Kluckhohn and Strodtbeck questionnaire, a questionnaire designed to measure personal values of managers and therefore specifically designed for applications in a business context. This questionnaire, England's Personal Values Questionnaire, or PVQ, is considerably less general than the Kluckhohn et al. instrument and therefore more easily related to practical business situations. Rather than trying to relate specific budgeting and control practices directly to the Kluckhohn et al. value-orientations, it was therefore planned to use two steps:

- Relate specific types of budgeting and control practices to specific value profiles determined with the PVQ.
- Relate these value-profiles to specific Kluckhohn et al. value-orientations.

The PVQ was administered in the French company and had then to be abandoned because of the difficulties reported by the respondents. It was generally very badly received—some major criticisms being that it was extremely difficult to answer, time-consuming, and ambiguous. Respondents, in particular, had interpreted the questions differently, which made their answers non-comparable. However, it seems that using such an instrument could be of considerable help in tying basic cultural profiles to specific management practices. The possibilities of using a simplified version of the PVQ, or a similar instrument, should be explored in further research.

Finally, if exporting domestic management practices to the foreign subsidiaries decreases the effectiveness and results in lower rather than higher performance, what alternative solutions are offered to the
multinational companies? Specifically, what would a good budgeting system consist of for a given cultural environment? The literature provides few answers. Researchers usually conclude at this state that the management systems should be adapted to the cultures of the subsidiaries, but do not offer any framework describing how this could be done. Adler is one of the few who have given thought to this problem (Adler, 1980). She offers three models, cultural dominance, cultural compromise, and cultural synergy:

- **Cultural dominance** is the model whereby the parent company simply tries to export its domestic practices to all its subsidiaries, and is therefore the model for which alternatives are being sought.

- **Cultural compromise** is the model whereby the management practices adopted are chosen from a set of practices compatible with the cultural values of the organizations involved. In the areas where no common solution can be found, agreements are reached through negotiations. This process has the advantage that the resulting practices will be easily accepted and understood. There are, however, significant drawbacks. The set of mutually acceptable practices from which to choose is likely to be very narrow, and there is no guarantee that the practices which result will necessarily be the best that the management of the individual organizations could have adopted.

- **Cultural synergy** requires pooling all the cultural similarities and cultural differences of the organizations involved and designing a new set of organization practices. Implementing this model requires in-depth cultural analyses, followed by detailed
studies of how each culture can contribute to the other. The implementation of this model requires a great deal of work as well as willingness from each organization to learn from the others.

Of the two models, cultural compromise and cultural synergy, the cultural synergy model is by far the most attractive. This model, in particular, allows and, in fact, encourages worldwide mobility for managers, which is desirable both from the company standpoint, to facilitate communication, and from the management standpoint, to obtain international experience and to broaden career opportunities—a point of particular importance for local managers of smaller subsidiaries.

An important question remains: How would a multinational go about implementing a budgeting system based on a cultural synergy model? The task appears hopelessly overwhelming, especially as the number of cultures to be integrated increases.

A tentative strategy could be the following:

- Identify cultural differences and similarities between the subsidiaries, using the Kluckhohn and Strodtbeck framework, and identify clusters of culturally similar organizations.
- Map out at corporate levels areas where standardization of budgeting practices is either necessary or desirable.
- Using a team of managers drawn from the various subsidiaries, design a set of practices which could be both acceptable and effective in all locations.
- In the areas where standardization is not as critical, let the individual organizations or, if possible, the clusters identified earlier, work out their own practices. Again, this task could be given to a team of managers drawn from the organizations belonging
to the cluster, perhaps with some representation from the corporate staff to facilitate communications.

Once the process has begun, feedback on the implementation should be obtained on a regular basis to identify trouble spots or areas where the design might be improved. A permanent team of managers who have been exposed to a cultural training program should be set up to act as "translators" between the various cultures, and particularly between the individual subsidiaries and the corporate managers. (The Kluckhohn and Strodtebeck framework provides an excellent framework for such a training.) The team of translators has already proven its effectiveness in facilitating communication between two cultures as different as the American and the Japanese, in the context of a Japanese subsidiary operating in the United States (Amano, 1979).

Given the lack of developmental work in the literature, at this point in time a useful step would be to write a series of case studies on the experience already available. These case studies would focus on multinational companies which have either successfully or unsuccessfully dealt with their cultural diversity when designing budgeting and control systems. They would provide a good data bank from which to hypothesize what successful and unsuccessful models of adaptation might consist of. Such models would be of value both for researchers in the area and managers in multinational companies attempting to find solutions to the cross-cultural problem.
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APPENDIX I

THE BUDGETING PRACTICES INTERVIEW GUIDE

PART I

The English Version

203
Personal Data
How long have you been with Multi-Co?
How long have you had your present job?

Responsibilities and Priorities
What are your responsibilities?
What are your priorities in your work?
What is important in your work?

Participation in Setting Own Objectives
What are your objectives?
How are they communicated to you?
Do you participate* in setting these objectives?
Do you participate* in the preparation of the yearly plan?
In the preparation of the monthly forecasts?

*By participation, I mean:
Do you provide information (verbally, in written form)?
Do you propose/discuss objectives?
Do you decide on the objectives for your function?
Do you feel that these objectives are attainable?

Control Data
Do you prepare any reports on your activities?
(if yes) - Content
- Periodicity
- Receiver
Do you receive any reports?
Which reports do you think are the most important in your company?
(plant if interviewing at the plants)
Which reports do you use the most in your work?
What major items do you personally follow daily?
weekly?
monthly?

Interpersonal data
Can you describe a typical workday?
With whom do you have contact during the course of the day?
Do you attend any formal meetings?
Do you have any problems in working with the other departments?
What happens in case of conflict with another department?
APPENDIX I

PART II

The French Version
Personnel
Depuis quand êtes-vous chez Multi-Co.?
Depuis quand avez-vous ce poste?

Résponsabilités et Priorités
Quelles sont vos responsabilités?
Quelles sont vos priorités dans votre travail?
Quels sont les points importants dans votre travail?

Participation
Quel sont vos objectifs?
Par qui et comment vous sont-ils communiqués?
Participez-vous à la définition de ces objectifs?
Participez-vous à l'élaboration du plan annuel?
A la préparation des révisions mensuelles?

*Préparez-vous des données (verbalement ou par écrit)?
Proposez-vous/discutez-vous des objectifs?
Décidez-vous des objectifs pour votre fonction?

A votre avis, est-ce que ces objectifs sont réalisables?

Contrôle
Préparez-vous des rapports de gestion?
(sì oui) - Contenu
- Periodicité
- Destinataire
Recevez-vous des rapports de gestion?
A votre avis, quels sont ceux qui reçoivent le plus d'attention dans votre compagnie (usine)?
Lesquels utilisez-vous couramment?
Quels postes suivez-vous personnellement?
- journallement?
- une fois par semaine?
- une fois par mois?

Relations dans le travail
Pouvez-vous décrire une journée typique?
Qui voyez-vous pendant la journée?
Assistez-vous à des réunions formelles?
Avez-vous des difficultés à obtenir la coopération des autres départements?
Que fait-on en cas de conflit avec un autre département?
APPENDIX II

THE KLUCKHOHN AND STRODTBECK QUESTIONNAIRE

PART I

The Questions by Dimension
Activity Questions

Job Choice

A man needed a job and had a chance to work for two men. The two bosses were different.

I. Which do you think you would prefer to work for? Please rank order the two alternatives.

A. One boss was a fair enough man, and he gave somewhat higher pay than most men, but he was the kind of boss who insisted that men work hard and stick to the job. He did not like it at all when a worker sometimes just knocked off work for a while to go on a trip or to have a day or so of fun, and he thought it was right not to take such a worker back on the job. (DOING)

B. The other paid just average wages but he was not so firm. He understood that a worker would sometimes just not turn up would be off on a trip or having a little fun for a day or two. When his men did this he would take them back without saying too much. (BEING)

II. Which kind of boss do you believe to be better in most cases? Please rank order the two alternatives.

A. (DOING)
B. (BEING)

Ways of Living

There were two people talking about how they liked to live. They had different ideas. How would you rank these two ways of thinking?

A. One said: "What I care about most is accomplishing things -- getting things done just as well or better than other people do 'em. I like to see results and think they are worth working for." (DOING)
B. The other said: "What I care most about is to be left alone to think and act in the ways that best suit the way I really am. I don't always get much done but can enjoy life as I go along; that is the best way." (BEING)

Care of Fields

There were two men, both farmers. They lived differently. Which kind of man do you believe it is better to be? Please rank order the two alternatives.

A. One man kept the crops growing all right but didn't work on them more than he had to. He wanted to have extra time to visit with friends, go on trips, and enjoy life. This was the way he liked best. (BEING)

B. One man liked to work with his fields and was always putting in extra time keeping them clean of weeds and in fine condition. Because he did this extra work, he did not have much time left to be with friends, to go on trips, or to enjoy himself in other ways. But this was the way he really liked best. (DOING)

Housework

There were two women talking about the way they liked to live. Which of these ways do you think is usually best in cases like this? Please rank order the two alternatives.

A. One said that she was willing to work as hard as the average, but that she didn't like to spend a lot of time doing extra things in her house or taking up extra things outside. Instead she liked to have time free to enjoy visiting with people — to go on trips — or to just talk with whomever was around. (BEING)

B. The other woman said she liked best of all to find extra things to work on which would interest her. She said she was happiest when kept busy and was getting lots done. (DOING)

Nonworking Time

Two men spend their time in different ways when they have no work to do. Which of these men do you think you are more like? Please rank order the two alternatives.

A. One man spends most of this time learning or trying out things which will help him in his work. (DOING)

B. One man spends most of this time talking, telling stories, singing, and so on with his friends. (BEING)
Time Questions

Expectations about Change

If you are 20-40 years of age, respond to I. If you are 40 years old or more, answer section II.

I. Three young people were talking about what they thought their families would have one day as compared with their fathers and mothers. They each said different things. Which of these people do you think had the best idea? Indicate also your second and third choice.

A. The first said: "I expect my family to be better off in the future than the family of my father and mother or relatives if we work hard and plan right. Things in this country usually get better for people who really try." (FUTURE)

B. The second one said: "I don't know whether my family will be better off, the same, or worse off than the family of my father and mother or relatives. Things always go up and down even if people do work hard, so one can never really tell how things will be." (PRESENT)

C. The third one said: "I expect my family to be about the same as the family of my father and mother or relatives. The best way is to work hard and plan ways to keep up things as they have been in past." (PAST)

II. Three older people were talking about what they thought their children would have when they were grown. Which of these people do you think had the best idea? Indicate also your second and third choices.

A. One said: "I really expect my children to have more than I have had if they work hard and plan right. There are always good chances for people who try." (FUTURE)

B. The second one said: "I don't know whether my children will be better off, worse off, or just the same. Things always go up and down even if one works hard, so we can't really tell." (PRESENT)

C. The third one said: "I expect my children to have just about the same as I have had or bring things back as they once were. It is their job to work hard and find ways to keep things going as they have been in the past." (PAST)
Philosophy of Life

People often have very different ideas about what has gone before and what we can expect in life. Here are three ways of thinking about these things. Which of these ways of looking at life do you think is best. Indicate also your second and third choices.

A. Some people believe it is best to give most attention to what is happening now in the present. They say that the past has gone and the future is much too uncertain to count on. Things do change, but it is sometimes for the better and sometimes for the worse, so in the long run it is about the same. These people believe the best way to live is to keep those of the old ways that one can -- or that one likes -- but to be ready to accept the new ways which will help to make life easier and better as we live from year to year. (PRESENT)

B. Some people think that the ways of the past (ways of the old people or traditional ways) were the most right and the best, and as changes come things get worse. These people think the best way to live is to work hard to keep up the old ways and try to bring them back when they are lost. (PAST)

C. Some people believe that it is almost always the ways of the future -- the ways which are still to come -- which will be best, and they say that even though there are sometimes small setbacks, change brings improvements in the long run. These people think the best way to live is to look a long time ahead, work hard, and give up many things now so that the future will be better. (FUTURE)

Water Allocation

The government is going to help a community like yours to get more water by redrilling and cleaning out a community well. The government officials suggest that the community should have a plan for dividing the extra water, but don't say what kind of plan. Since the amount of extra water that may come in is not known, people feel differently about planning. Which of these ways do you think is usually best in cases like this? Indicate also your second and third choice.

A. Some say that whatever water comes in should be divided just about like water in past was always divided. (PAST)

B. Others want to work out a really good plan ahead of time for dividing whatever water comes in. (FUTURE)

C. Still others want to just wait until the water comes in before deciding on how it will be divided. (PRESENT)
Children Training

Some people were talking about the way children should be brought up. Here are three different ideas. Which of these people had the best idea about how children should be taught? Indicate also your second and third choices.

A. Some people say that children should always be taught well the traditions of the past (the ways of the old people). They believe the old ways are best, and that it is when children do not follow them too much that things go wrong. (PAST)

B. Some people say that children should be taught some of the old traditions (ways of the old people), but it is wrong to insist that they stick to these ways. These people believe that it is necessary for children always to learn about and take on whatever of the new ways will best help them get along in the world of today. (PRESENT)

C. Some people do not believe children should be taught much about traditions (the ways of the old people) at all except as an interesting story of what has gone before. These people believe that the world goes along best when children are taught the things that will make them want to find out for themselves new ways of doing things to replace the old. (FUTURE)

Ceremonial Innovation

Some people in a community like your own saw that the religious ceremonies (the church services) were changed from what they used to be. Which of these three said most nearly what you would believe is right? Indicate also your second and third choices.

A. Some people were really pleased because of the changes in religious ceremonies. They felt that new ways are usually better than old ones, and they like to keep everything -- even ceremonies -- moving ahead. (FUTURE)

B. Some people were unhappy because of the change. They felt that religious ceremonies should be kept exactly -- in every way -- as they had been in the past. (PAST)

C. Some people felt that the old ways for religious ceremonies were best but you just cannot hang on to them. It makes life easier just to accept some changes as they come along. (PRESENT)
Relational Questions

Livestock Inheritance

Some sons and daughters have been left some livestock by a father or mother who has died. All of these sons and daughters are grown up, and they live near each other. There are three different ways they can run the livestock. Which way do you think is usually best in most cases? Indicate also your second and third choices.

A. In some groups of people it is usually expected that the oldest able person will take charge of, or manage, all the stock held by himself and the other sons and daughters. (LINEALITY)

B. In some groups of people it is usually expected that each of the sons and daughters will prefer to take his or her own share of the stock and run his or her own business completely separate from all the others. (INDIVIDUALITY)

C. In some groups of people it is usually expected that all the sons and daughters will keep all their cattle and sheep together and work together and decide among themselves who is best able to take charge of things, not necessarily the oldest, when a boss is needed. (COLLATERALITY)

Land Inheritance

Now I want to ask a similar question concerning farm and grazing land instead of livestock. Some sons and daughters have been left some farm and grazing land by a father or mother who has died. All these sons and daughters are grown and live near each other. There are three ways they can handle the property. Which way do you think is usually best in most cases? Indicate also your second and third choices.

A. In some groups of people it is usually expected that the oldest able person will take charge of or manage the land for himself and all other sons and daughters, even if they all share it. (LINEALITY)

B. In some groups of people it is usually expected that each son and daughter will take his own share of land and do with it what he wants -- separate from all the others. (INDIVIDUALITY)

C. In some groups of people it is usually expected that all the sons and daughters will make use of the land together. When a boss is needed, they all get together and agree to choose someone of the group, not necessarily the oldest, to take charge of things. (COLLATERALITY)
Family Work Relations

I'm going to tell you about three different ways families can arrange work. These families are related and they live close together. Which of these three ways do you think is usually best in most cases? Indicate your second and third choices.

A. In some groups (or communities) it is usually expected that each of the separate families (by which we mean just husband, wife and children) will look after its own business separate from all others and not be responsible for the others. (INDIVIDUALITY)

B. In some groups (or communities) it is usually expected that the close relatives in the families will work together and talk over among themselves the way to take care of whatever problems come up. When a boss is needed they usually choose one person, not necessarily the oldest able person, to manage things. (COLLATERALITY)

C. In some groups (or communities) it is usually expected that the families which are closely related to each other will work together and have the oldest person be responsible for and take charge of most important things. (LINEALITY)

Choice of Delegate

A group is to send a delegate -- a representative -- to a meeting away from here (this can be any sort of meeting). Which of the following ways of choosing the delegate do you think is usually best in cases like this? Indicate also your second and third choices.

A. It is best that a meeting be called and everyone discuss things until almost everyone agrees so that when a vote is taken almost all people would agree on the same person. (COLLATERALITY)

B. It is best that the older, important, leaders take the main responsibility for deciding who should represent the people since they are the ones who have had the long experience in such matters. (LINEALITY)

C. It is best that a meeting be called, names be put up, a vote be taken, then send the man who gets the majority of votes even if there are many people who are still against this man. (INDIVIDUALITY)
Well Arrangements

When a community has to make arrangements for water, such as drill a well, there are three different ways they can decide to arrange things like location, and who is going to do the work. Which way do you think is usually best in such cases? Indicate also your second and third choices.

A. There are some communities where it is mainly the older or recognized leaders of the important families who decide the plans. Everyone usually accepts what they say without much discussion since they are the ones who are used to deciding such things and are the ones who have had the most experience. (LINEALITY)

B. There are some communities where most people in the group have a part in making the plans. Lots of different people talk, but nothing is done until almost everyone comes to agree as to what is best to be done. (COLLATERALITY)

C. There are some communities where everyone holds to his own opinion, and they decide the matter by vote. They do what the largest number want even though there are still a very great many people who disagree and object to the action. (INDIVIDUALITY)

Help in Misfortune

A man had a crop failure, or, let us say, had lost most of his sheep or cattle. He and his family had to have help from someone if they were going to get through the winter. There are different ways of getting help. Which of these three ways of getting the help do you think would usually be best? Indicate also your second and third choices.

A. Would it be best if he depended mostly on his brothers and sisters or other relatives all to help him out as much as each one could? (COLLATERALITY)

B. Would it be best for him to try to raise money on his own outside the community (his own people) from people who are neither relatives nor employers? (INDIVIDUALITY)

C. Would it be best for him to go to a boss or to an older important relative who is used to managing things in his group, and ask him to help out until things get better? (LINEALITY)
Wage Work

There are three ways in which men who do not employ other people may work. Which of these ways do you think is usually best for the man who is not himself an employer? Indicate also your second and third choices.

A. One way is working on one's own as an individual. In this case a man is pretty much his own boss. He decides most things himself, and how he gets along is his own business. He only has to take care of himself and he doesn't expect others to look out for him. (INDIVIDUALITY)

B. One way is working in a group of men where all the men work together without there being one main boss. Every man has something to say in the decisions that are made, and all the men can count on each other. (COLLATERALITY)

C. One way is working for an owner, a big boss; or a man who has been running things for a long time. In this case, the men do not take part in deciding how the business will be run, but they know they can depend on the boss to help them out in many ways. (LINEALITY)

Use of Fields

There were three men who were farmers. The three men had quite different ways of planting and taking care of crops. Which of these ways do you believe is usually the best? Indicate also your second and third choice.

A. One man put in his crops, worked hard, and also set himself to living in right and proper ways. He felt that it is the way a man works and tries to keep himself in harmony with the forces of nature that has the most effect on conditions and the way crops turn out. (HARMONY)

B. One man put in his crops. Afterwards he worked on them sufficiently but did not do more than was necessary to keep them going along. He felt that it mainly depended on weather conditions how they would turn out, and that nothing extra that people do could change things much. (SUBJUGATION)

C. One man put in his crops and then worked on them a lot of time and made use of all the new scientific ideas he could find out about. He felt that by doing this he would in most years prevent many of the effects of bad conditions. (MASTERY)
Length of Life

Three men were talking about whether people themselves can do anything to make the lives of men and women longer. Which of these three said most nearly what you would think is right? Indicate also your second and third choices.

A. One said: "It is already true that people like doctors and others are finding the way to add many years to the lives of most men by discovering new medicines, by studying foods, and doing other such things as vaccinations. If people will pay attention to all these new things they will almost always live longer." (MASTERY)

B. The second one said: "I really do not believe that there is much human beings themselves can do to make the lives of men and women longer. It is my belief that every person has a set time to live, and when that time comes it just comes." (SUBJUGATION)

C. The third one said: "I believe that there is a plan to life, which works to keep all living things moving together, and if a man will learn to live his whole life in accord with that plan, he will live longer than other men." (HARMONY)

Facing Conditions

There are different ways of thinking about how God is related to man and to weather and all other natural conditions which make the crops and animals live or die. Here are three possible ways. Which of these ways of looking at things do you think is best? Indicate also your second and third choices.

A. God and people all work together all the time; whether the conditions which make the crops and animals grow are good or bad depends upon whether people themselves do all the proper things to keep themselves in harmony with God and with the forces of nature. (HARMONY)

B. God does not directly use his power to control all the conditions which affect the growth of crops or animals. It is up to the people themselves to figure out the ways conditions change and to try hard to find the ways of controlling them. (MASTERY)

C. Just how God will use his power over all conditions which affect the growth of crops and animals cannot be known by man. But it is useless for people to think they can change conditions very much for very long. The best way is to take conditions as they come and do as well as one can. (SUBJUGATION)
Livestock Dying

One time a man had a lot of livestock. Most of them died off in different ways. People talked about this and said different things. Which of these reasons do you think is most usually true? Indicate also your second and third choices.

A. Some people said you just can't blame a man when things like this happen. There are so many things that can and do happen, and a man can do almost nothing to prevent such losses when they come. We all have to learn to take the bad with the good. (SUBJUGATION)

B. Some people said that it was probably the man's own fault that he lost so many. He probably didn't use his head to prevent the losses. They said that it is usually the case that men who keep up on new ways of doing things, and really set themselves to it, almost always find a way to keep out of such trouble. (MASTERY)

C. Some people said that it was probably because the man had not lived his life right -- had not done things in the right way to keep harmony between himself and the forces of nature (i.e., the ways of nature like the rain, winds, snow, etc.). (HARMONY)

Belief in Control

Three men from different areas were talking about the things that control the weather and other conditions. Which of these men do you think had the best idea? Indicate also your second and third choices.

A. One man said: "Man has never controlled the rain, wind, and other natural conditions and probably never will. There have always been good years and bad years. That is the way it is, and if you are wise you will take it as it comes and do the best you can." (SUBJUGATION)

B. The second man said: "We believe that it is a man's job to find ways to overcome weather and other conditions just as well have overcome so many things. We believe we will one day succeed in doing this and may even overcome drought and floods." (MASTERY)

C. The third man said: "We help conditions and keep things going by working to keep in close touch with all the forces which make the rain, the snow, and other conditions. It is when we do the right things -- live in the proper way -- and keep all that we have -- the land, the stock, and the water -- in good condition, that all goes along well." (HARMONY)
PART II

The English Version
In Part II, you are given twenty-two situations followed by descriptions of two or three ways people may think or behave in such situations. For each situation, please give a rank to each of the solutions offered, assigning 1 to the one you prefer, 2 to your second choice and if there are three solutions offered, 3 to the one you like the least.

The solution you rank as 1 does not necessarily represent what you would do or think in a similar situation. It is only the solution you prefer among the two or three solutions offered for each situation.

The "Water Allocation" situation is reproduced below to give you an example of the lay-out of each question. The description of the situation is followed by three alternative ways, labelled A, B, and C, of handling the situation. Here the respondent has identified alternative A as his first choice, C as his second choice, and B as his third choice.

20. Water Allocation

The government is going to help a community like yours to get more water by redrilling and cleaning out a community well. The government officials suggest that the community should have a plan for dividing the extra water, but don't say what kind of plan. Since the amount of extra water that may come in is not known, people feel differently about planning. Which of these ways do you think is usually best in cases like this? Indicate also your second and third choice.

A. Some say that whatever water comes in should be divided just as it is; the water in the past was always divided.

B. Others want to work out a really good plan ahead of time for dividing whatever water comes in.

C. Still others want to just wait until the water comes in before deciding on how it will be divided.

You may find it difficult to answer some of the questions. If it is because none of the alternatives is clearly the best for you, you may find it helpful to start by eliminating the alternative(s) you think would be the least appropriate, given the problem described. If it is because you cannot place yourself in some of the situations described, you might try and think of situations in your work or personal life where a similar problem could be debated.

1. Job Choice

A man needed a job and had a chance to work for two men. The two bosses were different.
I. Which do you think you would prefer to work for? Please rank order the two alternatives.

A. One boss was a fair enough man, and he gave somewhat higher pay than most men, but he was the kind of boss who insisted that men work hard and stick to the job. He did not like it at all when a worker sometimes just knocked off work for a while to go on a trip or to have a day or so of fun, and he thought it was right not to take such a worker back on the job.

B. The other paid just average wages but he was not so firm. He understood that a worker would sometimes just not turn up -- would be off on a trip or having a little fun for a day or two. When his men did this he would take them back without saying too much.

II. Which kind of boss do you believe to be better in most cases? Please rank order the two alternatives.

A. 

B. 

2. Well Arrangements

When a community has to make arrangements for water, such as drill a well, there are three different ways they can decide to arrange things like location, and who is going to do the work. Which way do you think is usually best, in such cases? Indicate also your second and third choices.

A. There are some communities where it is mainly the older or recognized leaders of the important families who decide the plans. Everyone usually accepts what they say without much discussion since they are the ones who are used to deciding such things and are the ones who have had the most experience.

B. There are some communities where most people in the group have a part in making the plans. Lots of different people talk, but nothing is done until almost everyone comes to agree as to what is best to be done.
C. There are some communities where everyone holds to his own opinion, and they decide the matter by vote. They do what the largest number want even though there are still a very great many people who disagree and object to the action.

3. Child Training

Some people were talking about the way children should be brought up. Here are three different ideas. Which of these people had the best idea about how children should be taught? Indicate also your second and third choices.

A. Some people say that children should always be taught well the traditions of the past (the ways of the old people). They believe the old ways are best, and that it is when children do not follow them too much that things go wrong.

B. Some people say that children should be taught some of the old traditions (ways of the old people), but it is wrong to insist that they stick to these ways. These people believe that it is necessary for children always to learn about and take on whatever of the new ways will best help them get along in the world of today.

C. Some people do not believe children should be taught much about past traditions (the ways of the old people) at all except as an interesting story of what has gone before. These people believe that the world goes along best when children are taught the things that will make them want to find out for themselves new ways of doing things to replace the old.

4. Livestock Dying

One time a man had a lot of livestock. Most of them died off in different ways. People talked about this and said different things. Which of these reasons do you think is most usually true? Indicate also your second and third choices.

A. Some people said you just can’t blame a man when things like this happen. There are so many things that can and do happen, and a man can do almost nothing to prevent such losses when they come. We all have to learn to take the bad with the good.
B. Some people said that it was probably the man's own fault that he lost so many. He probably didn't use his head to prevent the losses. They said that it is usually the case that men who keep up on new ways of doing things, and really set themselves to it, almost always find a way to keep out of such trouble.

C. Some people said that it was probably because the man had not lived his life right -- had not done things in the right way to keep harmony between himself and the forces of nature (i.e., the ways of nature like the rain, winds, snow, etc.).

5. Expectations about Change

If you are 20-40 years of age, respond to I. If you are 40 years old or more, answer section II.

I. Three young people were talking about what they thought their families would have one day as compared with their fathers and mothers. They each said different things. Which of these people do you think had the best idea? Indicate also your second and third choice.

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B. The second one said: "I don't know whether my family will be better off, the same, or worse off than the family of my father and mother or relatives. Things always go up and down even if people do work hard. So one can never really tell how things will be."

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II. Three older people were talking about what they thought their children would have when they were grown. Which of these people do you think had the best idea? Indicate also your second and third choices.

A. One said: "I really expect my children to have more than I have had if they work hard and plan right. There are always good chances for people who try."
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C. The third one said: "I expect my children to have just about the same as I have had or bring things back as they once were. It is their job to work hard and find ways to keep things going as they have been in the past."

6. Facing Conditions

There are different ways of thinking about how God is related to man and to weather and all other natural conditions which make the crops and animals live or die. Here are three possible ways. Which of these ways of looking at things do you think is best? Indicate also your second and third choices.

A. God and people all work together all the time; whether the conditions which make the crops and animals grow are good or bad depends upon whether people themselves do all the proper things to keep themselves in harmony with God and with the forces of nature.

B. God does not directly use his power to control all the conditions which affect the growth of crops or animals. It is up to the people themselves to figure out the ways conditions change and to try hard to find the ways of controlling them.

C. Just how God will use his power over all conditions which affect the growth of crops and animals cannot be known by man. But it is useless for people to think they can change conditions very much for very long. The best way is to take conditions as they come and do as well as one can.

7. Help in Misfortune

A man had a crop failure, or, let us say, had lost most of his sheep or cattle. He and his family had to have help from someone if they were going to get through the winter. There are different ways of getting help. Which of these three ways of getting the help do you think would usually be best? Indicate also your second and third choices.

A. Would it be best if he depended mostly on his brothers and sisters or other relatives all to help him out as much as each one could?
B. Would it be best for him to try to raise money on his own outside the community (his own people) from people who are neither relatives nor employers?

C. Would it be best for him to go to a boss or to an older important relative who is used to managing things in his group, and ask him to help out until things get better?

8. Family Work Relations

I'm going to tell you about three different ways families can arrange work. These families are related and they live close together. Which of these three ways do you think is usually best in most cases? Indicate your second and third choices.

A. In some groups (or communities) it is usually expected that each of the separate families (by which we mean just husband, wife and children) will look after its own business separate from all others and not be responsible for the others.

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9. Choice of Delegate

A group is to send a delegate — a representative — to a meeting away from here (this can be any sort of meeting). Which of the following ways of choosing the delegate do you think is usually best in cases like this? Indicate also your second and third choices.

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10. Use of Fields

There were three men who were farmers. The three men had quite different ways of planting and taking care of crops. Which of these ways do you believe is usually the best? Indicate also your second and third choice.

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B. One man put in his crops. Afterwards he worked on them sufficiently but did not do more than was necessary to keep them going along. He felt that it mainly depended on weather conditions how they would turn out, and that nothing extra that people do could change things much.

C. One man put in his crops and then worked on them a lot of time and made use of all the new scientific ideas he could find out about. He felt that by doing this he would in most years prevent many of the effects of bad conditions.

11. Philosophy of Life

People often have very different ideas about what has gone before and what we can expect in life. Here are three ways of thinking about these things. Which of these ways of looking at life do you think is best. Indicate also your second and third choices.

A. Some people believe it is best to give most attention to what is happening now in the present. They say that the past has gone and the future is much too uncertain to count on. Things do change, but it is sometimes for the better and sometimes for the worse, so in the long run it is about the same. These people believe the best way to live is to keep those of the old ways that one can -- or that one likes -- but to be ready to accept the new ways which will help to make life easier and better as we live from year to year.
B. Some people think that the ways of the past (ways of the old people or traditional ways) were the most right and the best, and as changes come things get worse. These people think the best way to live is to work hard to keep up the old ways and try to bring them back when they are lost.

C. Some people believe that it is almost always the ways of the future -- the ways which are still to come -- which will be best, and they say that even though there are sometimes small setbacks, change brings improvements in the long run. These people think the best way to live is to look a long time ahead, work hard, and give up many things now so that the future will be better.

12. Wage Work

There are three ways in which men who do not employ other people may work. Which of these ways do you think is usually best for the man who is not himself an employer? Indicate also your second and third choices.

A. One way is working on one's own as an individual. In this case a man is pretty much his own boss. He decides most things himself, and how he gets along is his own business. He only has to take care of himself and he doesn't expect others to look out for him.

B. One way is working in a group of men where all the men work together without there being one main boss. Every man has something to say in the decisions that are made, and all the men can count on each other.

C. One way is working for an owner, a big boss, or a man who has been running things for a long time. In this case, the men do not take part in deciding how the business will be run, but they know they can depend on the boss to help them out in many ways.

13. Belief in Control

Three men from different areas were talking about the things that control the weather and other conditions. Which of these men do you think had the best idea? Indicate also your second and third choices.
A. One man said: "Man has never controlled the rain, wind, and other natural conditions and probably never will. There have always been good years and bad years. That is the way it is, and if you are wise you will take it as it comes and do the best you can."

B. The second man said: "We believe that it is a man's job to find ways to overcome weather and other conditions just as well as we have overcome so many things. We believe we will one day succeed in doing this and may even overcome drought and floods."

C. The third man said: "We help conditions and keep things going by working to keep in close touch with all the forces which make the rain, the snow, and other conditions. It is when we do the right things — live in the proper way — and keep all that we have — the land, the stock, and the water — in good condition, that all goes along well."

14. Ceremonial Innovation

Some people in a community like your own saw that the religious ceremonies (the church services) were changed from what they used to be. Which of these three said most nearly what you would believe is right? Indicate also your second and third choices.

A. Some people were really pleased because of the changes in religious ceremonies. They felt that new ways are usually better than old ones, and they like to keep everything — even ceremonies — moving ahead.

B. Some people were unhappy because of the change. They felt that religious ceremonies should be kept exactly — in every way — as they had been in the past.

C. Some people felt that the old ways for religious ceremonies were best but you just cannot hang on to them. It makes life easier just to accept some changes as they come along.

15. Ways of Living

There were two people talking about how they liked to live. They had different ideas. How would you rank these two ways of thinking?
A. One said: "What I care about most is accomplishing things -- getting things done just as well or better than other people do them. I like to see results and think they are worth working for."

B. The other said: "What I care most about is to be left alone to think and act in the ways that best suit the way I really am. I don't always get much done but can enjoy life as I go along; that is the best way."

16. Livestock Inheritance

Some sons and daughters have been left some livestock by a father or mother who has died. All of these sons and daughters are grown up, and they live near each other. There are three different ways they can run the livestock. Which way do you think is usually best in most cases? Indicate also your second and third choices.

A. In some groups of people it is usually expected that the oldest able person will take charge of, or manage, all the stock held by himself and the other sons and daughters.

B. In some groups of people it is usually expected that each of the sons and daughters will prefer to take his or her own share of the stock and run his or her own business completely separate from all the others.

C. In some groups of people it is usually expected that all the sons and daughters will keep all their cattle and sheep together and work together and decide among themselves who is best able to take charge of things, not necessarily the oldest, when a boss is needed.

17. Land Inheritance

Now I want to ask a similar question concerning farm and grazing land instead of livestock. Some sons and daughters have been left some farm and grazing land by a father or mother who has died. All these sons and daughters are grown and live near each other. There are three ways they can handle the property. Which way do you think is usually best in most cases? Indicate also your second and third choices.

A. In some groups of people it is usually expected that the oldest able person will take charge of or manage the land for himself and all other sons and daughters, even if they all share it.
B. In some groups of people it is usually expected that each son and daughter will take his own share of land and do with it what he wants—separate from all the others.

C. In some groups of people it is usually expected that all the sons and daughters will make use of the land together. When a boss is needed, they all get together and agree to choose someone of the group, not necessarily the oldest, to take charge of things.

18. Care of Fields

There were two men, both farmers. They lived differently. Which kind of man do you believe it is better to be? Please rank order the two alternatives.

A. One man kept the crops growing all right but didn't work on them more than he had to. He wanted to have extra time to visit with friends, go on trips, and enjoy life. This was the way he liked best.

B. One man liked to work with his fields and was always putting in extra time keeping them clean of weeds and in fine condition. Because he did this extra work, he did not have much time left to be with friends, to go on trips, or to enjoy himself in other ways. But this was the way he really liked best.

19. Length of Life

Three men were talking about whether people themselves can do anything to make the lives of men and women longer. Which of these three said most nearly what you would think is right? Indicate also your second and third choices.

A. One said: "It is already true that people like doctors and others are finding the way to add many years to the lives of most men by discovering new medicines, by studying foods, and doing other such things as vaccinations. If people will pay attention to all these new things they will almost always live longer."

B. The second one said: "I really do not believe that there is much human beings themselves can do, to make the lives of men and women longer. It is my belief that every person has a set time to live, and when that time comes it just comes."
C. The third one said: "I believe that there is a plan to life, which works to keep all living things moving together, and if a man will learn to live his whole life in accord with that plan, he will live longer than other men."

20. Water Allocation

The government is going to help a community like yours to get more water by redrilling and cleaning out a community well. The government officials suggest that the community should have a plan for dividing the extra water, but don't say what kind of plan. Since the amount of extra water that may come in is not known, people feel differently about planning. Which of these ways do you think is usually best in cases like this? Indicate also your second and third choice.

A. Some say that whatever water comes in should be divided just about like water in past was always divided.

B. Others want to work out a really good plan ahead of time for dividing whatever water comes in.

C. Still others want to just wait until the water comes in before deciding on how it will be divided.

21. Housework

There were two women talking about the way they liked to live. Which of these ways do you think is usually best in cases like this? Please rank order the two alternatives.

A. One said that she was willing to work as hard as the average, but that she didn't like to spend a lot of time doing extra things in her house or taking up extra things outside. Instead, she liked to have time free to enjoy visiting with people -- to go on trips -- or to just talk with whomever was around.

B. The other woman said she liked best of all to find extra things to work on which would interest her. She said she was happiest when kept busy and was getting lots done.

22. Nonworking Time

Two men spend their time in different ways when they have no work to do. Which of these men do you think you are more like? Please rank order the two alternatives.
A. One man spends most of this time learning or trying out things which will help him in his work.

B. One man spends most of this time talking, telling stories, singing, and so on with his friends.
PART III

The French Version
Cette partie consiste en une série de vingt-deux situations, chacune suivie d'un choix de deux ou trois manières de voir les choses ou de résoudre le problème posé. Pour chacune des situations, veuillez indiquer votre ordre de préférence pour les solutions présentées. Assignez le chiffre 1 à la solution qui, étant donné le type de problème posé, vous paraît la meilleure, puis le chiffre 2 à votre deuxième choix, et enfin le chiffre 3 à la solution restante.

**Exemple**

Prenons par exemple la question 16 qui est reproduite ci-dessous.

Si vous pensez que la solution A est la meilleure, assignez-lui le chiffre 1 dans l'emplacement prévu. Si la solution C vous paraît être la meilleure des deux restantes, assignez-lui le chiffre 2. Enfin, donnez un 3 à la solution B.

16. **Héritage de bétail**

Des frères et soeurs héritèrent de bétail de leurs parents. Tous étaient adultes et vivaient à proximité les uns des autres. Ce bétail peut être géré de trois façons différentes. Indiquez celle qui vous semble en général la meilleure, ainsi que votre deuxième et votre troisième choix.

**RANG**

A. Dans certaines communautés, il est normal que l'aîné prenne en charge et gère le bétail qui lui appartient ainsi que celui de ses frères et soeurs.

B. Dans d'autres communautés, il est normal que chacun prenne sa part et mène son affaire séparément.

C. Dans d'autres communautés, enfin, il est normal que tous mettent leur bétail en commun et le gèrent ensemble. Si besoin est, l'un d'entre eux est désigné pour diriger l'affaire, pas forcément l'aîné.

Si vous avez des difficultés à vous mettre dans l'esprit de certaines situations, essayez de penser à des situations qui vous sont plus familières et de tels problèmes peuvent se poser.

Enfin, si pour certaines situations aucune des solutions présentées ne vous convient vraiment, essayez de faire l'exercice à l'envers. Essayez d'identifier celle qui vous paraît la pire et mettez-lui le chiffre 3 (mettez un 2 si vous n'avez que deux options), et ainsi de suite.
1. **Choix d'un emploi**

Une personne à la recherche d'un emploi avait le choix entre deux patrons très différents.

**I. Pour lequel des deux pensez-vous qu'il soit en général préférable de travailler?**

<table>
<thead>
<tr>
<th>Rang</th>
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<tr>
<td>A. Le premier était un homme juste. Il payait mieux que la plupart de ses collègues mais exigait un retour un travail assidu. Il ne supportait pas que ses employés délaissonnent leur travail et prennent un jour ou deux de congé sous des prétextes divers. Il se trouvait dans son droit de ne pas reprendre de tels employés.</td>
</tr>
<tr>
<td>B. L'autre payait des salaires moyens mais n'était pas aussi exigeant que son collègue. Il comprenait très bien qu'à l'occasion un employé ne se présente pas à son travail et prenne quelques jours de loisirs. Lorsqu'un tel employé revenait de son &quot;escapade&quot; il le reprenait sans trop se fâcher.</td>
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**II. A votre avis, quel genre de patron va-t-il mieux être dans la plupart des cas?**

| A. |
| B. |

2. **Forage d'un puits**

Supposons qu'une communauté veuille forer un puits. Les décisions concernant le forage, telles que le choix d'un emplacement ou le choix des personnes qui feront le travail, peuvent être prises de trois façons différentes. Indiquez celle qui vous paraîtrait être la meilleure, puis votre deuxième et votre troisième choix.

| A. Dans certaines communautés, seules les personnes les plus âgées ou les chefs des familles importantes prennent les décisions. Généralement, tout le monde accepte sans discuter parce que c'est leur rôle et qu'ils ont l'expérience nécessaire. |
| B. Dans d'autres communautés, chacun participe à la décision. Rien ne se fait avant que pratiquement tout le monde ne se mette d'accord. |
| C. Il y a enfin des communautés où tout se décide par vote. La décision finale est celle de la majorité même s'il reste un groupe important qui s'y oppose.
3. **Education des enfants**

Plusieurs personnes discutaient de la manière d'éduquer les enfants et comparaient plusieurs opinions. Indiquez celle qui vous semble la meilleure, ainsi que votre deuxième et votre troisième choix.

A. Certains disent qu'il faut apprendre les traditions aux enfants. Ils pensent que les valeurs traditionnelles sont les meilleures et que les choses tournent mal quand les enfants ne s'y tiennent pas.

B. Certains disent qu'il faut apprendre certaines traditions aux enfants, mais qu'il ne faut pas exiger qu'ils les suivent à la lettre. Ils pensent qu'il est bon que les enfants apprennent le plus possible des valeurs modernes et adoptent celles qui les aideront le mieux à vivre dans le monde d'aujourd'hui.

C. D'autres, enfin, pensent que les traditions n'ont qu'un intérêt historique. À leur avis, il faut dans l'intérêt général stimuler chez les enfants le besoin de découvrir de nouvelles manières de vivre pour remplacer les anciennes.

4. **Mort du bétail**

Un fermier avait beaucoup de bétail. La plupart des bêtes moururent pour des raisons diverses. Les gens des environs en discutèrent et se trouvèrent de trois opinions différentes. Indiquez celle qui vous semble vraie dans la plupart des cas, ainsi que votre deuxième et votre troisième choix.

A. Certains dirent que l'on ne peut pas tenir une personne responsable de ces accidents. On ne peut pas faire grand chose pour les éviter et il faut apprendre à accepter les événements, bons et mauvais, avec philosophie.

B. D'autres dirent que c'était probablement de la faute du fermier qu'auvant de bêtes soient mortes; il aurait dû trouver une solution pour éviter ces pertes.

C. D'autres, enfin, dirent que la raison de ces pertes était que le fermier ne menait pas sa vie comme il faut et qu'il n'avait pas fait ce qu'il fallait pour rester en harmonie avec les forces de la nature.
5. Prévisions pour l'avenir

Si vous avez moins de quarante ans, répondez à la section I.
Si vous avez quarante ans ou plus, répondez à la section II.

I. Trois jeunes gens parlaient de leur situation financière future en comparaison avec celle de leurs parents. Indiquez celui qui à votre avis a la manière la plus raisonnable de voir les choses, ainsi que votre deuxième et votre troisième choix.

A. Le premier dit: "En travaillant dur et en planifiant bien, je pense que ma famille et moi réussirons mieux que nos parents. Celui qui travaille beaucoup peut généralement améliorer sa situation."

B. Le second répliqua: "Je ne sais vraiment pas si nous serons plus ou moins à l'aise, ou comme nos parents. Même si on travaille beaucoup, les choses peuvent aussi bien tourner mal que tourner bien, et il est difficile de prévoir ce qui peut se passer."

C. Le troisième dit: "Pour ma part, je m'attends à peu de changement par rapport à nos parents. Le mieux, c'est de travailler dur et de faire de son mieux pour maintenir l'état des choses."

II. Trois personnes parlaient de la situation financière future de leurs enfants et étaient d'avis différents.

Indiquez celle qui à votre avis a la manière la plus raisonnable de voir les choses, ainsi que votre deuxième et votre troisième choix.

A. L'une dit: "Je m'attends à ce que mes enfants fassent mieux que moi, à condition qu'ils travaillent fort et planifient bien. Les efforts sont généralement récompensés."

B. Le second dit: "Je ne sais vraiment pas si mes enfants seront plus ou moins à l'aise que moi, ou comme moi. Même en travaillant dur, les choses peuvent aussi bien tourner mal que tourner bien, et il est difficile de prédire quoi que ce soit."

C. La troisième dit: "Je m'attends à ce que mes enfants soient à peu près comme moi. Le mieux pour eux, c'est de beaucoup travailler et de faire de leur mieux pour maintenir l'état des choses."
6. Les conditions de vie

Il y a diverses manières d'envisager les relations entre Dieu, d'une part, et, d'autre part, les hommes, le temps et autre conditions naturelles qui affectent, par exemple, le bétail et les récoltes. Voici trois manières d'envisager la part de Dieu. Indiquez celle qui vous semble la plus juste, ainsi que votre deuxième et votre troisième choix.

A. Dieu et les hommes travaillent constamment en collaboration. Les conditions qui influent sur l'état du bétail ou des récoltes sont favorables ou défavorables selon que les hommes font ou non ce qu'il faut pour se maintenir en harmonie avec Dieu et les forces de la nature.

B. Dieu n'utilise pas directement sa force pour contrôler les conditions naturelles. C'est aux hommes de découvrir pourquoi et comment ces conditions changent, ainsi que les moyens des les contrôler.

C. Il est impossible de prévoir comment Dieu utilisera sa force sur les conditions naturelles. Il n'est pas raisonnable de croire que les hommes peuvent modifier substantiellement ces conditions sur de longues périodes.

7. Aide dans l'infortune

Supposons qu'un fermier ait eu une mauvaise récolte ou ait perdu la plupart de son bétail. Ce fermier et sa famille ont besoin d'aide pour passer l'hiver. Cette aide peut être obtenue de diverses façons. En voici trois possibles; veuillez indiquer celle qui vous semble la meilleure, puis votre deuxième et votre troisième choix.

A. Ce fermier pourrait compter pratiquement complètement sur ses frères et soeurs, ou autres membres de sa famille, pour couvrir ses besoins, chacun contribuant selon ses possibilités.

B. Ce fermier pourrait essayer d'emprunter l'argent nécessaire de sa propre initiative, en dehors de son entourage immédiat, c'est-à-dire auprès de personnes sans liens de travail ou de parenté.

C. Ce fermier pourrait enfin aller auprès d'un patron ou d'un parent plus âgé ayant une situation importante au sein de la communauté et habitué à mener les affaires. Il pourrait demander à cette personne de l'aider jusqu'à ce que tout rentre dans l'ordre.
8. Relations de travail dans la famille

Prenons trois familles (une famille consistant du mari, de la femme et des enfants) liées entre elles par certains liens de parenté et vivant à proximité les unes des autres. Ces familles peuvent envisager leurs relations de travail de trois façons différentes. Indiquez celle qui vous paraît la meilleure dans la plupart des cas, ainsi que votre deuxième et votre troisième choix.

A. Dans certaines communautés, il est normal que chaque famille mène ses affaires séparément et n'ait aucune responsabilité envers les autres.

B. Dans certaines communautés, il est normal que les proches parents travaillent ensemble et résolvent entre eux les problèmes qui peuvent se poser. S'il faut un chef, on choisit une personne, pas forcément la plus âgée, pour diriger l'affaire.

C. Dans certains communautés, enfin, les familles proches parentes travaillent normalement ensemble et désignent la personne la plus âgée parmi celles qui peuvent travailler pour prendre la responsabilité de mener l'affaire.

9. Choix d'un délégué

Supposons qu'un groupe ait à envoyer un délégué pour les représenter à une conférence. Ce délégué peut être choisi de plusieurs façons. Indiquez celle des trois ci-dessous qui vous semble en général être la meilleure, ainsi que votre deuxième et troisième choix.

A. Le groupe peut se réunir et discuter des possibilités jusqu'à ce que tous les membres, ou presque, soient d'accord sur une personne.

B. On peut abandonner la responsabilité du choix du délégué aux leaders les plus âgés et les plus importants.

C. Le groupe peut enfin se réunir, établir une liste de candidats et voter. Le délégué sera celui qui aura la majorité des votes, même s'il reste une partie importante du groupe qui n'est pas d'accord.

10. Manière de tirer partie d'un champ

Trois fermiers tiraient partie de leurs champs de manières très différentes. Indiquez celui qui à votre avis aurait raison la plupart du temps, ainsi que votre deuxième et votre troisième choix.
A. Le premier travaillait dur et s'efforçait également de vivre de manière juste et correcte. Il pensait que la manière dont un homme travaille et essaie de se maintenir en harmonie avec les forces de la nature est ce qui influe le plus sur les conditions naturelles et le résultat final du travail.

B. Le deuxième ensemençait ses champs puis faisait le nécessaire, mais sans plus, pour obtenir ses récoltes. Il pensait que le résultat dépend surtout du temps et qu'il n'y a pas grand-chose que l'on puisse faire pour changer le cours des choses.

C. Le dernier ensemençait ses champs, puis passait énormément de temps à y travailler, utilisant les dernières méthodes scientifiques avec les quelles il avait pu se familiariser. Il pensait qu'il pourrait ainsi éviter, la plupart du temps, la majeure partie des ennui que peuvent causer des conditions défavorables.

11. Philosophie de la vie

Les gens ont souvent des opinions très différentes quand ils parlent du passé ou de leurs vues sur le futur. Voici trois manières d'envisager la vie. Indiquez celle qui vous semble la meilleure, ainsi que votre deuxième et votre troisième choix.

A. Certains pensent qu'il faut concentrer son attention sur ce qui se passe dans le présent. Pour eux, le passé n'est plus, et on ne peut pas compter sur le futur qui renferme trop d'incertitude. Les choses changent, mais cela tantôt pour le meilleur et tantôt pour le pire, si bien qu'à long terme il y a peu de changement. Pour ces personnes, la meilleure façon de vivre c'est de garder autant de traditions que possible tout en étant prêt à accepter les nouvelles façons de vivre qui peuvent aider à améliorer la vie.

B. Pour d'autres, les façons de vivre du passé sont les meilleures. Avec le changement, les choses empirent. Pour ces personnes, la meilleure façon de vivre est de travailler dur et de maintenir les traditions.

C. D'autres, enfin, pensent que ce sont les façons de vivre à venir qui sont en général les meilleures. Le changement à la longue apporte toujours des améliorations. Pour eux, la meilleure manière de vivre est de regarder loin en avant, de travailler dur, et d'abandonner maintenant certaines choses du présent pour préparer le futur.
12. Le travail salarié

Il y a trois façons de travailler pour ceux qui ne sont pas eux-mêmes des employeurs. Indiquez celle qui vous semble la meilleure, ainsi que votre deuxième et votre troisième choix.

A. On peut travailler pour soi et être son propre patron. On décide alors de la plupart des choses par soi-même et on gère son affaire comme on veut. On n'a de responsabilité qu'envers soi-même et on ne s'attend pas à ce que les autres s'occupent de soi.

B. On peut aussi travailler au sein d'un groupe ou tous travaillent ensemble sans chef formel. Chacun a son mot à dire dans les décisions et peut compter sur les autres.

C. On peut enfin travailler pour un patron. Dans ce cas, on ne participe pas aux décisions concernant la direction de l'affaire mais on peut compter sur le patron en cas de besoin.

13. Contrôle des événements

Trois personnes parlaient du contrôle du temps et autres conditions naturelles. Indiquez celle qui à votre avis a la meilleure façon d'envisager les choses, ainsi que votre deuxième et votre troisième choix.

A. La Première dit: "Nous n'avons jamais pu contrôler le vent, la pluie et autres conditions naturelles, et probablement ne le pourront jamais. Il y a toujours eu de bonnes et de mauvaises années. La raison demande que l'on prenne les choses comme elles viennent et que l'on fasse de son mieux en toutes circonstances."

B. La seconde dit: "Je pense que c'est à l'homme de trouver les moyens de surmonter les conditions atmosphériques et autres, comme il a déjà surmonté beaucoup de choses. Je pense que nous y arriveront éventuellement."

C. La troisième dit: "On peut améliorer les conditions et veiller à la bonne marche des choses en gardant un contact constant avec les forces qui influencent la pluie, la neige et autres conditions. C'est lorsque l'on vit comme il faut et que l'on maintient ce que l'on a, par exemple bétail ou terres, en bon état que les choses vont bien."
14. Changement dans les cérémonies

Plusieurs personnes parlaient des changements qu'elles avaient observés dans les cérémonies religieuses. Indiquez celle avec laquelle vous êtes le plus d'accord, ainsi que votre deuxième et votre troisième choix.

A. Certaines étaient contentes des changements dans les cérémonies. D'après elles, les nouvelles méthodes sont généralement préférables aux anciennes et il est bon de voir les choses évoluer.

B. D'autres étaient mécontentes de ces changements. D'après elles, les cérémonies religieuses devraient être conservées exactement comme par le passé.

C. D'autres, enfin, trouvaient que les anciennes méthodes étaient les meilleures mais qu'on ne pouvait pas s'y accrocher. Pour elles, cela simplifie la vie que d'accepter certains changements quand ils se présentent.

15. Manière de vivre

Deux personnes parlaient de la manière dont elles aimaient vivre. Indiquez celle qui à votre avis a la meilleure optique.

A. L'une dit: "Pour moi, ce qui importe le plus c'est de faire ce que je fais aussi bien ou mieux que les autres. J'aime voir des résultats et je trouve que cela vaut la peine de travailler pour les obtenir."

B. L'autre dit: "Pour moi, ce qui importe le plus, c'est d'être libre de penser et d'agir comme je l'entend. Je n'accomplis pas toujours beaucoup, mais je jouis de la vie et, pour moi, c'est important."

16. Héritage de bétail

Des frères et soeurs héritèrent de bétail de leurs parents. Tous étaient adultes et vivaient à proximité les uns des autres. Ce bétail peut être géré de trois façons différentes. Indiquez celle qui vous semble en général la meilleure, ainsi que votre deuxième et votre troisième choix.

A. Dans certaines communautés, il est normal que l'aîné prenne en charge et gère le bétail qui lui appartient ainsi que celui de ses frères et soeurs.

B. Dans d'autres communautés, il est normal que chacun prenne sa part et mène son affaire séparément.
C. Dans d'autres communautés, enfin, il est normal que tous mettent leur bétail en commun et le gèrent ensemble. Si besoin est, l'un d'entre eux est désigné pour diriger l'affaire, pas forcément l'aîné.

17. **Héritage de champs**

Un problème similaire peut être étudié dans le cadre d'un héritage de champs et pâturages par des frères et sœurs, également adultes et vivant à proximité les uns des autres. Indiquez la solution qui vous semble être en général la meilleure, ainsi que votre deuxième et votre troisième choix.

A. Dans certaines communautés, on s'attend à ce que l'aîné prenne en charge et gère la portion lui revenant ainsi que celle de ses frères et sœurs.

B. Dans d'autres communautés, on s'attend à ce que chacun prenne sa part et en fasse ce qu'il veut, sans tenir compte des autres.

C. Dans d'autre communautés, enfin, on s'attend à ce que les enfants gèrent les terres en commun. S'il faut mettre quelqu'un en charge, ils désignent l'un d'entre eux, pas forcément l'aîné.

18. **L'entretien des champs**

Voici deux fermiers qui s'occupaient de leurs champs de manières très différentes. Indiquez celui qui, à votre avis, il vaudrait mieux être.

A. L'un faisait ce qu'il fallait pour ses récoltes mais n'y travaillait pas plus qu'il n'était nécessaire. Il voulait des loisirs pour rendre visite à ses amis, voyager et profiter de la vie. C'est ainsi qu'il voulait vivre.

B. L'autre aimait se consacrer à ses champs et passait beaucoup de temps à éliminer les mauvaises herbes et garder ses champs en parfait état. Tout ce travail ne lui laissait guère de temps pour bavarder avec ses amis, voyager ou autre. Mais c'est ainsi qu'il désirait vivre.

19. **Durée de vie**

Trois personnes discutaient des possibilités de prolonger la vie. Indiquez celle qui à votre avis a probablement raison, ainsi que votre deuxième et votre troisième choix.
A. L'une dit: "Des docteurs et autres chercheurs ont déjà trouvé le moyen de prolonger la vie de plusieurs années, grâce aux nouveaux médicaments, aux vaccins, à la diététique, etc. Les gens qui se mettent au courant des dernières découvertes sont pratiquement certains de vivre plus vieux.

B. La deuxième dit: "Je ne crois pas que l'on puisse faire grand-chose pour prolonger la vie. Chacun a un certain nombre d'années à vivre et quand l'heure est venue, il n'y a rien à faire."

C. La troisième dit: "Je crois qu'il y a un plan de la vie qui maintient un équilibre entre toutes les choses. Celui qui apprend à mener sa vie en accord avec le plan vivra plus longtemps que les autres."

20. Répartition de l'eau

Supposons que le gouvernement décide d'aider une communauté à accroître ses réserves d'eau. Les fonctionnaires suggèrent que la communauté établisse un plan pour l'utilisation de la capacité additionnelle. Cette capacité additionnelle n'est pas connue, et les gens ont du mal à se mettre d'accord pour son utilisation éventuelle. Indiquez le plan qui vous paraît le plus raisonnable, ainsi que votre deuxième et votre troisième choix.

A. Pour certains, la capacité additionnelle doit être divisée entre différents utilisateurs dans la même proportion que la capacité existante.

B. D'autres veulent établir un nouveau plan, d'avance, pour cette capacité additionnelle.

C. D'autres, enfin, veulent attendre que la nouvelle capacité soit installée pour faire des plans.

21. Travail ménager

Deux femmes parlaient de la manière dont elles aimaient vivre. Indiquez celle qui vous paraît la meilleure.

A. L'une dit qu'elle était prête à faire le nécessaire mais qu'elle ne tenait pas à passer tout son temps à travailler chez elle ou à l'extérieur. Elle préférait avoir des loisirs pour voir ses amies et bavarder.

B. L'autre trouvait toujours quelque chose à faire qui l'intéressait. Elle n'était jamais plus heureuse que quand elle était pleinement occupée et accomplissait beaucoup.
22. **Loisirs**

Deux hommes avaient des vues très différentes sur la manière d'occuper leurs loisirs. Indiquez la manière qui vous paraît la meilleure.

A. L'un passait la plupart de son temps à développer ses connaissances ou étudier ce qui pouvait lui être utile dans son travail.

B. L'autre passait la plupart de son temps à bavarder avec ses amis, raconter des histoires, etc.
APPENDIX III

THE VALUE-ORIENTATIONS IN THE FRENCH AND THE U.S. GROUPS--
DETAILED RESULTS OF THE STATISTICAL ANALYSIS

PART I

The Cultural Differences Between the Two Groups

by Dimension.
The Activity Dimension

TABLE 1

THE VALUE-ORIENTATIONS WITHIN EACH GROUP

<table>
<thead>
<tr>
<th>Preference for</th>
<th>Mean Frequencies</th>
<th>Standard Error</th>
<th>t</th>
<th>t-Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doing &gt; Being</td>
<td>Observeda</td>
<td>Expectedb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>France D &gt; B</td>
<td>4.56</td>
<td>3.00</td>
<td>0.22</td>
<td>7.04*</td>
</tr>
<tr>
<td>U.S. D &gt; B</td>
<td>4.48</td>
<td>3.00</td>
<td>0.23</td>
<td>6.42*</td>
</tr>
</tbody>
</table>

a Computed as absolute frequencies \times number of respondents.
b 50% \times number of questions in the dimension.
c Standard error = \frac{s}{\sqrt{N-1}}
d * indicates that t is significant at the .05 level.

TABLE 2

THE DIFFERENCES IN VALUE-ORIENTATIONS BETWEEN GROUPS

<table>
<thead>
<tr>
<th>Preference for Doing &gt; Being</th>
<th>df.a</th>
<th>Mssb</th>
<th>F-Ratio c</th>
<th>F-Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source of Variation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>1</td>
<td>0.0024</td>
<td>0.045</td>
<td>0.8326</td>
</tr>
<tr>
<td>Error</td>
<td>67</td>
<td>0.0527</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Degrees of freedom.
b Mean sum of squares computed from individual mean frequencies.
c * indicates that F is significant at the .05 level.

There were problems with the data on the Activity dimension. When looking at the answers on a question-by-question basis—in both countries, there were two very distinct patterns of answers (see Table 3 below). On the first three Activity questions, the consensus was high, ranging from 0.52 to 0.88. Between 86% and 94% of the respondents chose
Doing > Being. On the remaining three Activity questions, W was much lower, and in most cases, not significantly different from 0.

TABLE 3
DISTRIBUTION OF VALUE-ORIENTATIONS BETWEEN RESPONDENTS BY QUESTION

<table>
<thead>
<tr>
<th>Activity Questions</th>
<th>D&gt;B</th>
<th>B&gt;D</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>France (%)</td>
<td>U.S. (%)</td>
<td>France (%)</td>
</tr>
<tr>
<td>1.A Job Choice</td>
<td>92</td>
<td>94</td>
<td>8</td>
</tr>
<tr>
<td>1.B Job Choice</td>
<td>94</td>
<td>97</td>
<td>6</td>
</tr>
<tr>
<td>15 Ways of Living</td>
<td>86</td>
<td>91</td>
<td>14</td>
</tr>
<tr>
<td>18 Care of field</td>
<td>44</td>
<td>42</td>
<td>56</td>
</tr>
<tr>
<td>21 Housework</td>
<td>61</td>
<td>39</td>
<td>64</td>
</tr>
<tr>
<td>22 Non-Working Time</td>
<td>78</td>
<td>22</td>
<td>61</td>
</tr>
</tbody>
</table>

aPercentage of respondents sharing a given value-orientation. Abbreviations are as follows: D=Doing; B=Being.

bSee chapter IV, for the meaning of W.

The lack of consensus on the last Activity questions could have had several explanations. Respondents might genuinely have been split into two almost equal groups, one preferring Doing > Being and the other Being > Doing, or, alternatively, respondents might not have been satisfied with either of the positions offered and therefore answer somewhat randomly. If the latter is true, there should be a low correlation between the respondents' answers to the six Activity questions, and the correlation ought to increase when deleting the questions for which the answers appear to be random.
Cronbach's coefficient $\alpha$ computed on the answers to the six Activity questions indicates a satisfactory level of correlation in both countries. Moreover, when deleting one at a time, each of the three last Activity questions, $\alpha$ goes down substantially (Table 4). The aggregation of the six Activity questions therefore constitutes a valid scale in both France and the U.S. (Nunnally, 1977).

**TABLE 4**

**TESTING THE ACTIVITY SCALE RELIABILITY**

<table>
<thead>
<tr>
<th>Cronbach's Average</th>
<th>France</th>
<th>U.S.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation coefficient $\alpha$:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On 6 Activity questions</td>
<td>0.58</td>
<td>0.69</td>
</tr>
<tr>
<td>On 5 Activity questions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>question 1.A deleted</td>
<td>0.61</td>
<td>0.60</td>
</tr>
<tr>
<td>question 1.B deleted</td>
<td>0.62</td>
<td>0.65</td>
</tr>
<tr>
<td>question 15 deleted</td>
<td>0.54</td>
<td>0.56</td>
</tr>
<tr>
<td>question 18 deleted</td>
<td>0.50</td>
<td>0.52</td>
</tr>
<tr>
<td>question 21 deleted</td>
<td>0.53</td>
<td>0.58</td>
</tr>
<tr>
<td>question 22 deleted</td>
<td>0.47</td>
<td>0.64</td>
</tr>
</tbody>
</table>

These results support the hypothesis.

$\alpha$ is an average correlation coefficient between the answers to the various questions in a given scale to test the scale reliability.
### The Time Dimension

#### TABLE 5

**THE VALUE-ORIENTATIONS WITHIN EACH GROUP**

<table>
<thead>
<tr>
<th>Pair-wise Preferences:</th>
<th>Observed</th>
<th>Expected</th>
<th>Standard Error</th>
<th>t</th>
<th>t-Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>France</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F &gt; P</td>
<td>4.31</td>
<td>2.50</td>
<td>0.14</td>
<td>12.83*</td>
<td>0.001</td>
</tr>
<tr>
<td>F &gt; R</td>
<td>2.81</td>
<td>2.50</td>
<td>0.18</td>
<td>1.72</td>
<td>0.199</td>
</tr>
<tr>
<td>R &gt; P</td>
<td>3.92</td>
<td>2.50</td>
<td>0.15</td>
<td>12.28*</td>
<td>0.001</td>
</tr>
<tr>
<td><strong>U.S.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F &gt; P</td>
<td>4.18</td>
<td>2.50</td>
<td>0.16</td>
<td>10.38*</td>
<td>0.003</td>
</tr>
<tr>
<td>F &gt; R</td>
<td>2.85</td>
<td>2.50</td>
<td>0.19</td>
<td>1.82</td>
<td>0.187</td>
</tr>
<tr>
<td>R &gt; P</td>
<td>3.61</td>
<td>2.50</td>
<td>0.17</td>
<td>6.49*</td>
<td>0.016</td>
</tr>
</tbody>
</table>

*a Absolute frequencies + number of respondents. 
*b 50% x number of questions in the dimension. 
*c Standard error, = \( \sqrt{\frac{s}{N-1}} \). 
*d * indicates that t is significant at the .05 level.
### Table 6: The Differences in Value-Orientations Between Groups

<table>
<thead>
<tr>
<th>Source of Variation:</th>
<th>df</th>
<th>Mss</th>
<th>F-Ratio</th>
<th>P-Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>1</td>
<td>0.0664</td>
<td>1.9653</td>
<td>0.1656</td>
</tr>
<tr>
<td>Error</td>
<td>67</td>
<td>0.0388</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Preference for Future > Past

### Table 7: Distribution of Value-Orientations Between Respondents

<table>
<thead>
<tr>
<th>Country</th>
<th>P&gt;R&gt;P</th>
<th>R&gt;P&gt;F</th>
<th>R&gt;P&gt;P</th>
<th>P&gt;R&gt;P</th>
<th>P&gt;P&gt;R</th>
<th>P&gt;F&gt;R</th>
</tr>
</thead>
<tbody>
<tr>
<td>France (W=0.33)</td>
<td>1%</td>
<td>11%</td>
<td>32%</td>
<td>36%</td>
<td>18%</td>
<td>2%</td>
</tr>
<tr>
<td>U.S. (W=0.25)</td>
<td>2%</td>
<td>10%</td>
<td>31%</td>
<td>32%</td>
<td>21%</td>
<td>4%</td>
</tr>
</tbody>
</table>

| France (W=0.33) | P>R>P | R>P>F | R>P>P | P>R>P | P>P>R | P>F>R |
| U.S. (W=0.25)   | 2%    | 10%   | 31%   | 32%   | 21%   | 4%    |

| a Percentage of respondents sharing a given value-orientation. Abbreviations as follows: P=Past, R=Present, F=Future. |
| b See chapter IV for the meaning of W. |
The Relational Dimension

**TABLE 8**

THE VALUE-ORIENTATIONS WITHIN EACH GROUP

<table>
<thead>
<tr>
<th>Pair-wise Preferences</th>
<th>Mean Frequencies</th>
<th>Standard Error</th>
<th>t&lt;sup&gt;d&lt;/sup&gt;</th>
<th>t-Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Observed&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Expected&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I &gt; L</td>
<td>5.44</td>
<td>3.50</td>
<td>0.33</td>
<td>5.89*</td>
</tr>
<tr>
<td>I &gt; C</td>
<td>3.81</td>
<td>3.50</td>
<td>0.29</td>
<td>1.03</td>
</tr>
<tr>
<td>C &gt; L</td>
<td>5.22</td>
<td>3.50</td>
<td>0.20</td>
<td>8.50*</td>
</tr>
<tr>
<td>U.S.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I &gt; L</td>
<td>5.55</td>
<td>3.50</td>
<td>0.29</td>
<td>7.12*</td>
</tr>
<tr>
<td>I &gt; C</td>
<td>4.64</td>
<td>3.50</td>
<td>0.38</td>
<td>4.10</td>
</tr>
<tr>
<td>C &gt; L</td>
<td>4.70</td>
<td>3.50</td>
<td>0.26</td>
<td>4.64*</td>
</tr>
</tbody>
</table>

<sup>a</sup> Computed on individual absolute frequencies.

<sup>b</sup> 50% x number of questions in the dimension.

<sup>c</sup> Standard error = \( \frac{s}{\sqrt{N-1}} \).

<sup>d</sup> * indicates that t is significant at the .05 level.
TABLE 9
THE DIFFERENCES IN VALUE-ORIENTATIONS BETWEEN GROUPS

<table>
<thead>
<tr>
<th>Preference for Individualism &gt; Lineality</th>
<th>df.</th>
<th>Mss</th>
<th>F-Ratio</th>
<th>F-Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source of Variation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>1</td>
<td>0.0019</td>
<td>0.0391</td>
<td>0.8440</td>
</tr>
<tr>
<td>Error</td>
<td>67</td>
<td>0.0485</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preference for Individualism &gt; Collaterality</th>
<th>df.</th>
<th>Mss</th>
<th>F-Ratio</th>
<th>F-Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source of Variation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>1</td>
<td>0.2426</td>
<td>4.3506*</td>
<td>0.0409</td>
</tr>
<tr>
<td>Error</td>
<td>67</td>
<td>0.0558</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preference for Collaterality &gt; Lineality</th>
<th>df.</th>
<th>Mss</th>
<th>F-Ratio</th>
<th>F-Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source of Variation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>1</td>
<td>0.1074</td>
<td>43.6107*</td>
<td>0.0618</td>
</tr>
<tr>
<td>Error</td>
<td>67</td>
<td>0.0297</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Degrees of freedom.
b Mean sum of squares computed from individual mean frequencies.
c* indicates that F is significant at the .05 level.

TABLE 10
DISTRIBUTION OF VALUE-ORIENTATIONS BETWEEN RESPONDENTS

<table>
<thead>
<tr>
<th></th>
<th>L&gt;I&gt;C</th>
<th>I&gt;L&gt;C</th>
<th>I&gt;C&gt;L</th>
<th>C&gt;I&gt;L</th>
<th>C&gt;L&gt;I</th>
<th>L&gt;C</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>France (W = 0.22)</td>
<td>6%</td>
<td>18%</td>
<td>30%</td>
<td>30%</td>
<td>15%</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>U.S. (W = 0.21)</td>
<td>4%</td>
<td>24%</td>
<td>38%</td>
<td>17%</td>
<td>12%</td>
<td>5%</td>
<td></td>
</tr>
</tbody>
</table>

a Percentage of respondents sharing a given value-orientation. Abbreviations are: L=Lineality, I=Individualism, C=Collaterality.
b See chapter IV for the meaning of W.
### The Man-Nature Dimension

#### TABLE 11

**THE VALUE-ORIENTATIONS WITHIN EACH GROUP**

<table>
<thead>
<tr>
<th>Pair-wise Preferences</th>
<th>Mean Frequencies</th>
<th>Standard Error</th>
<th>t</th>
<th>t-Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Observed</td>
<td>Expected</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>France</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M &gt; S</td>
<td>4.17</td>
<td>2.50</td>
<td>0.14</td>
<td>17.81*</td>
</tr>
<tr>
<td>M &gt; H</td>
<td>3.36</td>
<td>2.50</td>
<td>0.20</td>
<td>4.28</td>
</tr>
<tr>
<td>H &gt; S</td>
<td>3.69</td>
<td>2.50</td>
<td>0.21</td>
<td>5.60*</td>
</tr>
<tr>
<td><strong>U.S.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M &gt; S</td>
<td>4.09</td>
<td>2.50</td>
<td>0.15</td>
<td>10.88*</td>
</tr>
<tr>
<td>M &gt; H</td>
<td>4.27</td>
<td>2.50</td>
<td>0.14</td>
<td>13.11*</td>
</tr>
<tr>
<td>H &gt; S</td>
<td>2.55</td>
<td>2.50</td>
<td>0.23</td>
<td>0.20</td>
</tr>
</tbody>
</table>

*a* Computed on individual frequencies.

*b* $50\%$ x number of questions in the dimension.

$c$ Standard error = $\sqrt{\frac{s}{N-1}}$.

$d*$ indicates that $t$ is significant at the .05 level.
### TABLE 12

**THE DIFFERENCES IN VALUE-ORIENTATIONS BETWEEN GROUPS**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df.</th>
<th>$M_{ss}$</th>
<th>$F$-Ratio</th>
<th>$F$-Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preference for Mastery &gt; Subjugation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>1</td>
<td>0.0040</td>
<td>0.1232</td>
<td>0.7267</td>
</tr>
<tr>
<td>Error</td>
<td>67</td>
<td>0.0321</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Preference for Mastery &gt; Harmony</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>1</td>
<td>0.5723</td>
<td>13.9232*</td>
<td>0.0004</td>
</tr>
<tr>
<td>Error</td>
<td>68</td>
<td>0.0411</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Preference for Harmony &gt; Subjugation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>1</td>
<td>0.9092</td>
<td>13.872*</td>
<td>0.0005</td>
</tr>
<tr>
<td>Error</td>
<td>67</td>
<td>0.0656</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a Degrees of freedom.  
*b Mean sum of squares computed on individual mean frequencies.  
*c Indicates that $F$ is significant at the .05 level.

### TABLE 13

**DISTRIBUTION OF VALUE-ORIENTATIONS BETWEEN RESPONDENTS**

<table>
<thead>
<tr>
<th></th>
<th>S&gt;M&gt;H</th>
<th>S&gt;M&gt;H</th>
<th>M&gt;S&gt;H</th>
<th>M&gt;H&gt;S</th>
<th>H&gt;M&gt;S</th>
<th>M&gt;S&gt;M</th>
</tr>
</thead>
<tbody>
<tr>
<td>France (W = 0.29)</td>
<td>4%</td>
<td>7%</td>
<td>15%</td>
<td>45%</td>
<td>23%</td>
<td>6%</td>
</tr>
<tr>
<td>U.S. (W = 0.35)</td>
<td>5</td>
<td>11%</td>
<td>33%</td>
<td>41%</td>
<td>8%</td>
<td>2%</td>
</tr>
</tbody>
</table>

*a Percentage of respondents sharing a given value-orientation. Abbreviations are: S=Subjugation, H=Harmony, M=Mastery.  
*b See Chapter IV for the meaning of W.
PART II

Significant Results of the Analysis of Variance Performed Using Independent Variables Other Than Country
The Effect of Location on Value-Orientations

**TABLE 14**

NUMBER OF RESPONDENTS IN EACH CELL

<table>
<thead>
<tr>
<th>Location</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paris</td>
<td>10</td>
</tr>
<tr>
<td>Beauvais</td>
<td>13</td>
</tr>
<tr>
<td>Marquette</td>
<td>13</td>
</tr>
<tr>
<td>Des Moines Headquarters</td>
<td>10</td>
</tr>
<tr>
<td>Des Moines Plant</td>
<td>9</td>
</tr>
<tr>
<td>Detroit</td>
<td>14</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>69</strong></td>
</tr>
</tbody>
</table>

**TABLE 15**

SIGNIFICANT RESULTS IN THE ONE-WAY ANALYSES OF VARIANCE PERFORMED BETWEEN LOCATIONS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df.</th>
<th>Mss</th>
<th>F-Ratio</th>
<th>F-Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference for Doing &gt; Being</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Source of Variation:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Locations</td>
<td>5</td>
<td>0.1089</td>
<td>2.2953</td>
<td>0.055</td>
</tr>
<tr>
<td>Within</td>
<td>6</td>
<td>0.0474</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Man-Nature:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference for Mastery &gt; Subjugation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Source of Variation:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Locations</td>
<td>5</td>
<td>0.0679</td>
<td>2.3598</td>
<td>0.059</td>
</tr>
<tr>
<td>Within</td>
<td>63</td>
<td>0.02878</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Multivariable F from test for Equality of Mean Vectors on the ten pair-wise preferences: 1.5445 0.0169

\( a \) Degrees of Freedom.
\( b \) Mean sum of squares computed from individual mean frequencies.
The Effect of Function on Value-Orientations

TABLE 16

NUMBER OF RESPONDENTS IN EACH CELL

<table>
<thead>
<tr>
<th>Function</th>
<th>Country</th>
<th></th>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>France</td>
<td>U.S.A.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>25</td>
<td>21</td>
<td></td>
<td>46</td>
</tr>
<tr>
<td>Control</td>
<td>9</td>
<td>9</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>TOTAL</td>
<td>34</td>
<td>30</td>
<td></td>
<td>64</td>
</tr>
</tbody>
</table>
TABLE 17

RESULTS OF THE TWO-WAY ANALYSES OF VARIANCE
FUNCTION BY COUNTRY FOR THE TIME ORIENTATION

<table>
<thead>
<tr>
<th>Source of Variation:</th>
<th>df</th>
<th>Mss</th>
<th>F-Ratio</th>
<th>F-Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preference for Future &gt; Present</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>1</td>
<td>0.0149</td>
<td>0.3596</td>
<td>0.5510</td>
</tr>
<tr>
<td>Function</td>
<td>1</td>
<td>0.1507</td>
<td>3.6348*</td>
<td>0.0614</td>
</tr>
<tr>
<td>Country by Function</td>
<td>1</td>
<td>0.1041</td>
<td>2.5095</td>
<td>0.1185</td>
</tr>
<tr>
<td>Error</td>
<td>60</td>
<td>0.04231</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference for Present &gt; Past</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>1</td>
<td>0.0494</td>
<td>1.5509</td>
<td>0.2179</td>
</tr>
<tr>
<td>Function</td>
<td>1</td>
<td>0.1558</td>
<td>4.8905*</td>
<td>0.0309</td>
</tr>
<tr>
<td>Country by Function</td>
<td>1</td>
<td>0.0003</td>
<td>0.0099</td>
<td>0.9210</td>
</tr>
<tr>
<td>Error</td>
<td>60</td>
<td>0.03186</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference for Future &gt; Past</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>1</td>
<td>0.0319</td>
<td>1.0958</td>
<td>0.2994</td>
</tr>
<tr>
<td>Function</td>
<td>1</td>
<td>0.0717</td>
<td>2.4665</td>
<td>0.1216</td>
</tr>
<tr>
<td>Country by Function</td>
<td>1</td>
<td>0.0299</td>
<td>1.0287</td>
<td>0.3146</td>
</tr>
<tr>
<td>Error</td>
<td>60</td>
<td>0.0291</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Multivariate F from test for Equality of Mean Vectors on the Ten pairwise preferences:

<table>
<thead>
<tr>
<th>Source of Variation:</th>
<th>df</th>
<th>Mss</th>
<th>F-Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td></td>
<td>3.0249</td>
<td>0.0045</td>
</tr>
<tr>
<td>Function</td>
<td></td>
<td>2.1449</td>
<td>0.0374</td>
</tr>
<tr>
<td>Country by Function</td>
<td></td>
<td>0.9128</td>
<td>0.5289</td>
</tr>
</tbody>
</table>

---

*a* Degrees of freedom.

*b* Mean sum of squares computed on individual mean frequencies.

*c* Indicates that F is significant at the .05 level, or close.
APPENDIX IV

EXCERPTS FROM INTERVIEWS
ON THE BUDGETING PROCESS
Interviews with the Controller’s Department in France

Manufacturing Operating Results Analysis Manager:

Actuals are important for taking corrective action and therefore we should spend more time on them.... The emphasis here is mainly on analyzing variances between forecasts. We should analyze actuals versus the plan. We put numbers down on paper but we don't spend time on implementation. We give more importance to the future than we do to the present. We give our seal of approval to the past more than we analyze it, and therefore we do the future badly. We analyze much more the future than the past, but in terms of opportunities, not in terms of what a reasonable evolution would be. Since June we only look at 1978 but we have no analysis of 1977. We do not give enough attention to the actuals.

Pricing manager, previously Forecasting manager:

We spend too much time in planning and forecasting, not enough in looking at the actuals. It is not sufficient to scheme on paper. It is not enough to way what we want to achieve in the 3+4, it has to be translated into action. We go from forecast to forecast; as soon as 2+10 is over we start 3+9, and so on. It's too much!

Interviews with Top Management Level in France

Director of Manufacturing:

When discussing the budgeting process and his role in the process, he said:

I define the basic guidelines with A. and B.1 We start with a five year envelop and the first year evolves into the budget. We discuss this with the plant managers. There are numerous changes after the reviews with the European and the corporate management.

When discussing the constraints on decision-making and the standardization of procedures imposed by the corporate management, he commented:

It is important to have rules followed by all in a multinational company to create an identity, a spirit, and allow coordination and communication. Therefore standardization is a must.

1 Respectively Finance director and Sales director.
Inasmuch as we know the reason, we can accept decisions which are not the best for us. ... Certain decisions which are profitable for Marquette may not be so for other parts of the group. We must coordinate at group level.

Controller:

He described his role in the French company as follows:

- To inform and to direct the company policy according to a medium-term marketing and finance strategy,
- To improve management processes,
- To 'have a finger in every pie' and to take the temperature in all areas of the company,
- To synthesize financial information and, in general,
- To be the right arm of the managing director.

Managing Director:

When talking about the constraints imposed by the corporate management, he said that:

The constraints are mainly on what product to make and where to make it. The final decision may not be profitable, (for the French company) but it is efficient from a global standpoint.

When talking about his responsibilities, he said:

I feel total responsibility in spite of the group strategy. For instance, England has been for a long time the most profitable location, so all large series production for tractors have been set up in England to maximize profits and small series in Beauvais.

When talking about planning, he commented with some irony, that:

We used to plan three years ahead; now as we cannot plan tomorrow, as it is too uncertain, we plan five years ahead and we forecast continuous improvements.

He made no other comments on budgeting or on the IPC requirements. When talking about his priorities, he said: "The first priority is to attain the financial objectives."

\(^2\)Meaning here the French company.

\(^3\)"Faire le touche-à-tout."
Interviews in the U.S. Controller's Department

Planning General Manager:

I always get a feel of how achievable the plan is. I use historical measurements; I also talk to the people who prepare the inputs.

If the actuals differ from the plan, I see if the plan is at stake. The planning process could be at stake. The biggest problem is to be forced into a position where there is too much "stretch", for instance 1978.

I prepare an income statement and a balance sheet at the end of the plan preparation stating what I think can be done. This is sent to C.  

I keep up to-date with the forecasts to see what goes wrong and identify the data used. ... I check the forecast to see if the plan "model assumptions" are in line with the forecast, rather than the "stretch" plan.

I feel in control and responsible for the results. The previous management changed all the numbers as a rule, now it is the exception, so the package became theirs.... D. 6 keeps the first package presented, i.e., before management modifications, to refer to it.

Detroit Finance Manager:

The Plan must be achieved, no matter what.

Our responsibility is to make the plan reasonable and achievable. The plants put in too much fat ... We look at ratios over five to seven years.

Assistant Controller:

The plan is a target. It is a very central item for top management. The 1979 plan was not reasonable. People refused to take into account environmental factors which we knew were there. They did not like that picture. -1979 is more reasonable.

4 Previously managing director of the U.S. company and EVP for the Americas at the time of the interviews.
5 Meaning the plan given to management, representing what the Planning G-manager thinks can be done.
6 Director of Finance.
Interviews at Top Management Level in the U.S.

Managing Director:

The planning process is a key process. The evolution of the plan is a critical process. There must be a constant evolution from the strategic plan to the annual plan.

Director of Manufacturing:

I set myself an internal target to work to, hopefully tighter than the official plan. I keep this target for myself, to avoid that my organization gets into trouble if the tighter target is not achieved. I inform E... only to help him bargain with the corporate management, but this target should not be communicated to corporate headquarters.

Interviews in the Sales Department in the U.S.

Sales Planning Manager:

I am absolutely responsible for my forecasts. There are major criticisms if the management is not told soon enough of a major change because of the effects on inventory. We are locked in for about 90 days. The ideal period is 120 days for manufacturing.

Marketing Development Manager:

When talking about forecasting industry volumes and market shares, he said:

- We can accurately forecast one month. In general, eighteen months should be forecasted reasonably well.
- If a forecast is bad, explanations are required ... they have a good memory!

7 Managing director at the time of the interview.
8 Top management.
END

21 09 82

FIN