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ANTECEDENCE OF ACCOUNTING THEORY.

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ORGANIZATION STRUCTURE AND BEHAVIOR:
ANTECEDENCE OF ACCOUNTING THEORY

Dissertation

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
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By

John Joseph Willingham, B. S., M. S.

************

The Ohio State University

1963

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Sincere appreciation is extended to the following persons:

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CHAPTER I
INTRODUCTION

This dissertation is an attempt at description and integration of environmental elements of the social science of accounting. It deals with the social foundations of accounting and their relevance to the theory and practice of the discipline. Insight into the nature of accounting is sought through the utilization of sociological concepts and techniques. The desired result is a precise description of an integrated, environmental foundation of accounting.

The following study is not intended to be a comprehensive theory of accounting but an investigation to attempt to discover the fundamental units with which accounting deals through theoretical model construction and examination of the manifestations of social factors revealed in accounting records and financial statements. This investigation can be termed pure accounting research in the following sense of the term:

Pure research is primarily concerned with the development of complete, valid, and coherent definitions, explanations and descriptions. It is essentially philosophical, and, as such, inquires into the nature of the subject being studied.1

Applied research, on the other hand, can be viewed as concerned with the solutions to practical problems. Applied accounting research deals with the practices of accountants and solutions to specific accounting problems. While this study utilizes the results of accounting practices, it focuses primarily upon the underlying elements which form these practices.

Scope

Consistent with the broad area examined, some limits normally imposed upon accounting research will not be honored. First of all, most accounting studies are confined to so-called "profit-seeking" businesses in spite of the fact that many organizations which are not "profit-seeking" in any sense of the term maintain accounting records and prepare financial statements. The dichotomy of "profit" and "non-profit" is artificial and furthermore may serve no purpose in the development of accounting structure. In fact, it is possible that it does disservice to the discovery of the basic elements of accounting. By easing this restriction, and viewing the social setting of accounting in the broadest of terms, it is the intention of the writer to attempt to reveal the social environment in which accounting exists and to separate the environmental facts from the judgmental doctrines developed by accountants. In its essence, accounting must be broad enough to include all types of entities, and this study will attempt to include as many types and varieties as possible.
A second characteristic of accounting research is that it seems to ignore human behavior that creates business activity. Accountants treat their subject as something mechanistic, and as abstract as mathematics. It cannot be denied that quantification is important to accounting but accounting is not an abstract science. It is rather an application of basic sciences to economic problems created by people and the social organizations people form and perpetuate. Therefore, behavioral aspects of accounting are emphasized in this examination.

Finally, no temporal limits are intended although empirical data are drawn from organizations existing at the present time. Conceptualizations embodied herein are also formulated from observations of extant organizations and present accounting and sociological thought.

The Concept of Entity

For practicing accountants, entities take the form of persons, partnerships, corporations, cooperatives, and so on. However great the disparity of form, an entity of some description is the prime subject of every accountant's work. Accounting could not exist without entities for which to account. Although the concept of entity is so basic to the science of accounting, little has been written on
the structure of an accounting entity. It has evidently been assumed by accountants that entities take such diverse and widely differing forms that they defy generalization. This writer feels that by careful definition one can generalize about accounting entities.

In this dissertation the word "organization" is substituted for the word "entity." This is done because all accounting entities take the form of social organizations or combinations of social organizations. That is, all entities subjected to accounting require people to activate their processes. Thus, "organization" taken in the strict sociological sense is used here to separate those entities for which one is able to account from non-human and inanimate entities for which no accounting can be accomplished.

Organization

A model of social organization which serves as a conceptualization of an accounting entity is developed in Chapter II. This model forms the foundation of this study. The purposes of it are twofold.

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First, it provides a generalization of an accounting entity. In this regard, the model presents a workable method of describing an accounting entity. As stated previously, few would deny that the prime requisite for accounting is an entity for which to account. Yet few accountants, if any, are able to describe an accounting entity as anything other than an abstract, artificial being. The descriptive model that follows avoids this and, in fact, emphasizes the reality that the entities for which accountants account are social organizations involving people. It further emphasizes the fact that purposive action on the part of incumbents of positions in organizations produce accountable behavior.

The second purpose of the model is to describe precisely the nature of organizational behavior and elaborate upon the nature of accountable behavior. The phenomenon of social organization can be viewed from many perspectives depending upon the goals of the research undertaken. The model that follows is one that the writer has developed from the writings of sociologists to aid in understanding the basic elements of accounting. The writer does not contend that accounting cannot be understood through use of any other approach, but merely that the social science approach is useful in this regard.

Chapters III and IV contain the description and results of an examination of the accounts and financial statements of a sample of
organizations. In Chapter III the characteristics of the organizations included and research methodology are described. The results derived from the empirical study are presented in Chapter IV.

The empirical research was undertaken to attempt to discover the nature of behavior admitted to the accounts and the nature of behavior reported in the financial statements of various kinds of organizations. An empirical examination of accounting journals and financial statements was made, not to determine contemporary accounting practice, but to attempt to find manifestations of the environmental elements of accounting articulated in the entity model presented in Chapter II. The objective was to determine whether such similarities existed among all types of organizations that generalizations could be made concerning the data admitted to organization accounts and financial statements and the data excluded from those accounts and statements.

A summary of the dissertation appears in Chapter V and implications of this approach to accounting appear in Chapter VI. Included in the final chapter are implications for training and education of accountants, and a brief example of the problem-solving potential of an organizational approach to accounting. Finally,
suggestions for integration of this foundation with accounting principles are presented along with suggestions for further study and theory construction.

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3The term "principles" is used here to denote the next logical level of thought in an integrated theory of accounting as it might be developed from the general to the specific. This usage is very similar to that of Robert T. Sprouse and Maurice Moonitz in A Tentative Set of Broad Accounting Principles for Business Enterprises, (American Institute of Certified Public Accountants Accounting Research Study No. 3) New York: American Institute of Certified Public Accountants, 1962.
CHAPTER II

THE ACCOUNTING ENTITY: A CONCEPTUAL MODEL

The Phenomenon of Social Organization

The interdependence of man as an aspect of human society is clearly revealed by the numbers and varieties of organizations that exist today. For most people, the term "organization" has a vague meaning. It may mean a group of persons or merely a name in any specific instance. This chapter first explores the phenomenon of interrelationship of persons, the patterns of interaction between persons, and the reciprocal nature of human behavior. The latter half of the chapter is then devoted to the more specific task of developing a model of social organization suitable for economic and accounting analyses.

Perhaps the most apparent characteristic of human behavior is conformity. Given a specific social situation any one person is apt to behave in much the same fashion as any other. There are "things one ought to do" and "things one ought not do." Sometimes individuals violate the "rules of behavior" but nevertheless the "rules" themselves are generally known to violators. In addition, any violator is probably at least vaguely aware of the sanctions that will be invoked against him following his violation. Thus buying and
selling, receiving and giving, collective bargaining between union and management, teaching and learning, and so on, are all carried on in about the same fashion regardless of the actors involved.

Any action of a person (A) oriented toward another person (B) and the reaction of the latter person (B) perceivable by the initiator (A) shall be termed interaction for purposes of this study. All human behavior cannot be termed interaction in that one can orient his behavior toward a non-human object. The additional requirement of perceptability of reaction by the initiating actor is simply to rule out action via mass media and reaction of the audience which cannot be perceived by the mass media actor. This study is concerned with behavior oriented toward humans and perceivable (to the initiator) response or reaction to this behavior. Thus it can be said that a buyer engages in interaction with a seller, a giver engages in interaction with a receiver, and so on.

It has been implied that there is a patterning of interaction, i.e., human relationships exist and remain fairly stable over periods of time regardless of the specific humans involved. This phenomenon of patterned behavior is here termed social structure. This term implies that human behavior is not a random process but is made up of relatively stable relationships that maintain for periods of time.

A further characteristic of interaction that bears mention is its reciprocal nature. One can buy only if another sells. One can give only if another receives. The reciprocal nature (in varying
degrees) of interaction so pervades the subject of human behavior that much has been written about it. Simmel, Malinowski, Weber, and Levi-Strauss\(^1\) each devoted much space in their works to this phenomenon. Becker titles a collection of lectures in sociology, *Man in Reciprocity*.\(^2\) The reader will soon realize that this reciprocal character of interaction is often apparent in this study.

**Bases of interaction patterns**

In the study of human organization the phenomenon of social structure is of primary importance inasmuch as formal organizations can be viewed as patterns of relationships. In order to understand why the patterns are as they are, it is necessary to know what guides interaction, i.e., what determines behavior. In this regard, Loomis states:

> Those who consider social systems to be normative orders of relations and interaction find the norm or guiding standard involved in a given relation or activity the most strategic element in the understanding and prediction of actions. Norms influence

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\(^1\)Coser and Rosenberg include in their book of readings, *Sociological Theory* (New York: The Macmillan Company, 1957), an entire section on reciprocity which includes a portion of the works of each of these authors.

the range of goal choices and govern the selection and application of facilities in the attainment of ends and goals. They are the basic element pattern­ing such activity as knowing, feeling, dividing functions, controlling, ranking, and sanction­ing. Norms are the "rules of the game." As used here, norms are more inclusive than written rules, regulations and laws; they refer to all criteria for judging the character or conduct of both individual and group actions in any social system. They constitute the standards determining what is right and wrong, appropriate and inappropriate, just and unjust, good and bad in social relationships. Some norms are general in nature and may not be violated by anyone; others apply only to particular actors and status-roles within the system and norms likewise vary in the extent to which actors deviate from them.3

Davis agrees when he notes, "...one of the most fruitful approaches to the study of society is through the analysis of norms."4

The concept of "norm" will be used as the basic building block of social structure and consequently, organization, in this study.

It should be noted that norms are not the only determinant of behavior. However, ignoring idiosyncratic behavior of individuals, norms are the major determinant. But it appears that patterns of behavior sometimes cannot be explained by the normative structure


alone. Specific individuals sometimes develop unique relationships among themselves that supplement or supplant the norms that would ordinarily govern the relationship. This phenomenon is what Haas terms "interpersonal structure." Interpersonal structure as a determinant of behavior will be ignored in this study since the emphasis of the study is on social organization in general which can be described without utilizing this concept. It should be emphasized, however, that interpersonal structure is often an important element of analysis used in explaining specific relationships.

Norm, role, position, organization

It is generally accepted that norms vary in generality. The emphasis here is on norms as they pertain to members of groups or organizations. In this regard, Haas states:

It appears, then, that in any group where the members interact repeatedly we can find sets of normative specifications for behavior (norms) which apply to distinct units of social interaction. Such "units of social interaction" refer to the interaction of the persons who occupy positions within the group. We may refer to a set of normative specifications for the behavior involved in a unit of social interaction as a role. Such specifications refer to the rights and obligations considered incumbent on the role players.


Two important and related points are made in the above quotation.

First, norms are defined more specifically as rights and obligations.

This definition is expanded and elaborated in the following:

The normative system lays down the formal rights and obligations in connection with a position. Though it permits a certain amount of legitimate variation within the limits imposed, it also lays down rules to be followed in case the individual oversteps the limits. A right is a legitimate expectation entertained by a person in one position with respect to the behavior of a person in another position. From the point of view of the other person this claim represents an obligation. "Right" and "obligation", therefore, are simply definitions of the same relationship.\(^7\)

The second important point made by Haas is that the concept of role is constructed of norms. A role is a reciprocal set of rights and obligations that pertain to social situations involving two actors.\(^8\) The types of rights and obligations prescribed and proscribed have been enumerated by Haas. He terms them "dimensions":

\(^9\)

The norms making up role specifications specify how each party should

\(^7\) Davis, op. cit., p. 87.

\(^8\) William J. Goode defines role in substantially the same manner in "Norms, Commitment and Conformity to Role-Status Obligations," American Journal of Sociology, LXVI, No. 3 (November, 1960), p. 249.

\(^9\) Haas, "Role Conception and Consensus: A Study of Disharmony in Hospital Work Groups."

\(^10\) Ibid.
physically act, how much authority each has with reference to the other, how much deference should be shown each by the other, and how each should feel toward the other, respectively.

These dimensions of role specifications are presented at this time for two reasons. First, they are presented to add depth and elaboration to the concepts of norm and role. Second, later in this chapter the task or activity dimension of role specifications will be singled out for special attention. It is subsequently suggested that data admitted to organization accounts result from behavior determined by this dimension of role specifications.

The reciprocal nature of the concept of role, and the fact that it pertains to a part of each of two actors' behavior in a specific situation are of paramount importance to the establishment of the concept of position. In defining position and integrating the concepts of norm, role, and position, Haas uses a doctor working in a hospital as an example.

While the roles played by a doctor do differ in many respects, yet they are clearly related to each other. If a person plays one of the roles he is also expected to play the others. Thus it seems useful to define position as a cluster of roles that are conceived of as belonging together. Position then serves as a summarizing concept for a plurality of roles. It refers to no more or no less than the normative specifications of which its roles are composed. Used in this sense, a person cannot "occupy" a position but he can "activate" it; i.e. - he can play the roles which make up the position.
To describe a position fully requires a "spelling out" of all the roles that make it up. A role may be viewed, then, as being a segment or part of each of two positions. In the course of describing a position by indicating the roles of which it is composed, there will be an explicating of at least some segments of the other positions involved. Using the above example of the doctor as the position under discussion, it will be noted that in the process of describing the doctor-nurse role one is at the same time defining and describing one part of both the position "doctor" and the position "nurse". The same would follow for the doctor-patient role, doctor-hospital administrator role, etc.

Haas' conceptual formulation and integration of the concepts of norm, role, and position is unique in sociological literature. The nearest formulation to that of Haas is the one by Merton. He uses the word "status" to mean precisely the same thing as "position" as used here and focuses on statuses (positions) rather than on relationships between statuses.

.....I begin with the premise that each social status involves not a single associated role, but an array of roles. This basic feature of social structure can be registered by the distinctive but not formidable term, role-set. To repeat, then, by role-set I mean that complement of

\[11\]

\[12\]
role-relationships in which persons are involved by virtue of occupying a particular social status. Thus, in our current studies of medical schools, we have begun with the view that the status of medical student entails not only the role of a student *vis-a-vis* his teachers, but also an array of other roles relating him diversely to other students, physicians, nurses, social workers, medical technicians, and the like.

Haas has carried his conceptual formulation further than Merton and as a result has developed an integrated concept of organization.

The essence of social organization of any group is just such interaction patterns and the positions and roles on which they rest. So to the extent that positions and resulting interaction patterns are present in a plurality of persons, social organization exists among them. This is the identifying feature or property of social organization.

In order to illustrate his conceptual formulation, Haas uses the diagram that is reproduced in Figure 1. It depicts the position of a doctor in a hospital work situation involving four other positions. Any other position in any other type of organizational setting could have been used; a shop steward in a labor union, a controller in a business organization, a teacher in a school, a guard in a prison, or a minister in a church. Any of these examples and an

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Figure 1.--A simplified representation of the position of doctor in a hospital work group.
infinite number of others might be substituted. The only purpose of the diagram is to reveal the elements of social organization in graphic form.

The diagram represents only a minute portion of an entire hospital organization. In fact, it represents only a small portion of an actual work group within a hospital. The diagram is simplified to show only parts of five positions when actually such a work group in an extant organization might include several times this number of positions and the roles might be so structured that it would require a multi-dimensional representation to portray them. However, the simplified picture is sufficient to portray the concept of social organization.

**Organization boundaries**

With imagination one can visualize this concept of social organization applied on a much larger scale. An entire "organization" might be portrayed in this fashion. It should be clear that the conceptual formulation presented does not prescribe organizational boundaries. In Figure 1 attention was focused on a doctor in a hospital work situation. It was noted that there are any number of other possible positions that could have been used to illustrate the concepts of role, position, and organization. For example, the position of salesman in a business organization could have been used. An illustration of such a position is presented in Figure 2. This
Figure 2.—A simplified representation of the position of salesman in a business organization.
representation is also simplified and it includes only two roles; salesman - sales manager role and salesman - customer role. Salesmen ordinarily engage in interaction with customers and therefore there is a definite role relationship. However, customer is not ordinarily considered a position in the same organization as salesman when the former buys from the latter. Salesman - customer roles like the one in Figure 2 exist in abundance and, consistent with the formulation of social organization, organization can exist to the same degree between two such positions as it does in the obviously intra-organizational illustration of the doctor.

Determining precisely where one organization ends and another begins becomes a matter of preference when Haas' conceptualization of the phenomenon of social organization is adopted. For some social science research purposes it might prove useful to define the position of customer as a part of the same organization as the salesman in Figure 2. For other purposes, it might be useful to define these two positions as positions in different organizations.

The fact that precise boundaries are not prescribed by the concept employed here strengthens the concept rather than weakens it. It is broad enough to include many types of analyses and perspectives. It enables one to visualize in general terms an entire economy or society as a giant and complicated web of relationships and interaction patterns. On the other hand, extremely detailed information can be derived about small pieces of this huge web of relationships,
e.g., a particular position of salesman in a particular business organization. Therefore, an organization for purposes of this study may be an entire business firm, a division of a firm, or only a small department within a division. It may be an entire government of a nation or only an agency of a government, etc. The writer is not concerned with whether any particular entity being studied or accounted for is an entire organization in the lay sense of the term organization or whether it is a combination of organizations. As long as the entity is clearly described such that it is apparent what boundaries have been chosen, it satisfies the definition of an organization. The accounting implications of this definition of organization are discussed later in this chapter.

An Organizational Model

The writer suggests that accounting accounts for exchange elements of interaction between organization representatives of different organizations. All interaction is not relevant to this study; only interaction admitted to the accounts. Since interaction is determined by role specifications (norms), the relevant determinants of accountable interaction can be isolated. On page 13 of this chapter, four dimensions of roles were enumerated. Of the four, task or activity was singled out as the one which included accountable behavior determinants. Accountants do not account for all activity of an organization, however, but only certain types of
activity elements of interaction. It is suggested that the type of organizational activity accounted for is exchange. An exchange will be defined for purposes of this study as:

.....a compromise of interests on the part of the parties in the course of which goods or other advantages are passed as mutual compensation reciprocally from the control of each to that of the others.\textsuperscript{15}

The relationship between organizational structure and organizational behavior (interaction) becomes apparent at this point in the analysis. Organizational structure is made up of roles and positions. Roles, which make up positions, determine interaction. The norms making up roles prescribe how an actor \textit{ought} to act. Actual performance rarely conforms precisely to the norms but it conforms to a high degree the majority of the time. Structure and behavior can be viewed as the "ought" and the "actual" respectively; or organizational behavior can be viewed as the dynamic perspective of the static concept of organizational structure.

Exchange elements of interaction defined above as exchanges are determined by norms. The precise prescriptions and proscriptions of the norms in a particular situation vary. For example, the phenomenon the economist terms the "free market" is essentially a situation

in which the norms require each of the two actors engaging in the exchange to try to exploit the other through a bargaining process. This is in contrast to a doctor-patient role. In the exchange dimension of a doctor-patient role, the norms require the doctor to ask a fair price (whatever that may be) and also require the patient not to bargain but only to pay it. In each of the two examples there are more "rules" or norms than suggested. The additional ones elaborate upon the rights and responsibilities and also the sanctions to be invoked in case one party breaches the norms. In both examples cited the norms are explicit in our society in the form of laws and punishments for breach of the laws.

The relationship between organizational structure and organizational behavior (interaction) acts to present a complete and integrated concept of human social organization. This is true regardless of the purposes of the analyses undertaken. The activity of an entity flows from the structure of it. The particular activity element of interaction on which attention is focused here is exchange.

Intra- and inter-organizational exchange

The writer previously alluded to the problem of organization boundaries. It is possible to have intra-organizational exchanges as well as inter-organizational exchanges. Furthermore, it is possible that an inter-organizational exchange for an organization will become an intra-organizational exchange when boundaries are
changed, and vice versa. Accounting is concerned only with exchanges between different organizations necessitating the presentation of criteria for determining boundaries between organizations. Criteria for determining organizational boundaries are important for the determination of just which exchanges will be admitted to the accounts of a specific organization and which will not. However, it should be emphasized that once again the concept of social organization is flexible enough that it includes, for example, accounting for a division of a company as well as for the company as a whole. Which of the two (division or company) is the subject of the accounting is also solely determined by the boundaries. Setting boundaries for organizations will be accomplished by separating types of positions. Since positions are constructed of half roles, they can be typed by the existence of normative elements. In this case, the typology involves the norms governing the task or activity elements of roles and consequently, positions.

A dichotomy of organization positions

For sake of simplicity only two types of positions will be considered; representative positions and non-representative positions. In all organizations there exist positions that require the incumbent to "represent the organization," or "speak on behalf of the organization." At the same time there are positions in almost every organization that expressly deny the incumbent the right of
"representing the organization." Technically, following the conceptual formulation developed thus far, it can be said that a non-representative position includes only intra-organizational half roles. On the other hand, while a representative position may also include intra-organizational half roles, it includes one or more inter-organizational half roles.

The incumbent of a representative position may represent an organization in many ways. This study is only concerned with positions that include the prescription that the incumbent engage in exchange with incumbents of like positions in other organizations. Exchange representative positions exist in all organizations. In business organizations they are often termed purchasing agents and salesmen; in churches it is apt to be the position of minister; in a tax collecting agency of government it would include the position of tax collector; and in a branch of a bank it would include the position of a loan officer, among others.

A diagram presenting a simplified illustration of inter-organizational exchange representative roles appears in Figure 3. Three simple organizations are depicted each with only three positions; one exchange representative position and two non-exchange representative positions. Figure 3 shows clearly the suggested data of accounting; the exchange elements of interaction between exchange representatives of different organizations. For example, focusing on Organization B in the diagram, it is suggested that exchanges
Figure 3.—A simplified representation of Inter-organizational exchange representative roles.
completed by the incumbents of exchange representative positions (shown as one position in Figure 3) are the only phenomena admitted to the accounts of Organization B. In this regard, at least one author agrees with this writer.

"...it is the writer's conviction that transactions are the essence of business activity. ...a transaction will be defined as a defacto exchange of value between the entity under observation and another party." 16

An empirical test of the above is attempted in the following chapters. The accounting journals of a sample of organizations are examined to determine whether exchanges are the data admitted to the accounts of organizations and if they are the only data admitted to the accounts.

A conduit concept of organizations

The development of the concept of organization and Figure 3 suggest that organizations function as conduits for the passage of goods and services. The goods and services that flow between and among organizations in a society are not only material or economic. Much of the goods and services are spiritual, intellectual or academic, and perhaps of other description. This conceptual formulation of organization presents a society as consisting not only of a fine

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division of labor among its individuals but among its organizations as well. Each organization in a society is highly specialized to perform some service or provide some utility or good. ¹⁷

In our present society one good or service is not traded directly for another by an organization. Whether the good or service is primarily economic or religious, educational or recreational, a medium of exchange is used to facilitate the transfer. For purposes of this study, Weber's definition of a medium of exchange is used.

"An object offered in exchange will be called a 'medium of exchange' so far as it is typically accepted, primarily by virtue of the fact that the recipients estimate that they will, within the relevant space of time, be able to offer it in another exchange to procure other goods which satisfy their wants, regardless of whether it is exchangeable for all other goods or only for certain specific goods." ²⁰

This definition allows for the existence of many media of exchange in any given society. It is realistic in that there are many media in present-day societies. The use of grain in farming regions is an example of a "specialized" medium of exchange. However, there is only one universally accepted medium; money. Samuelson states


Without the use of money our present division of labor and exchange would be impossible. To be sure, we could imagine a state of barter, where one kind of merchandise is traded directly for another. In primitive cultures it is not uncommon for food to be traded for weapons, or aid in the building of a house exchanged for aid in clearing a field. Even in the most advanced industrial economies, if we strip exchange down to its barest essentials and peel off the obscuring layer of money, we find that trade between individuals or nations largely boils down to barter—transforming one good into another by exchange rather than by physical transmutation. 19

Because money is universally accepted by organizations and individuals, it is the common denominator of exchange. If this is true, one would expect accounting to collect the results of exchanges of an organization in terms of money. The fact that money is the common denominator for accounting is a commonplace in the accounting profession.

Chapter Summary

This chapter has presented an integrated entity theory of accounting. It has articulated a few of the notions about business entities accountants have held for quite some time. ....accountants have for years treated the general business partnership as an entity separate and distinct from the partners as individuals.....

A similar recognition by the commercial world, not yet matched by full legal sanction, is present with respect to single proprietorships. The individual as a business unit is not identical with the same individual as a private person. From a non-accounting source comes the following accounting commonplace:

It is often said that the most important feature of the corporation is the principle of limited liability. This feature is itself derived, in our legal system, from the more basic right of the corporation to exist as an entity apart from the individuals who are associated in the organization.

Every entity for which an accounting can be rendered is in reality a social organization. An accounting cannot be rendered for any other form of entity. An individual as a proprietor of a business is a member of a business organization for which an accounting can be rendered. This same individual may hold the position of father in a familial organization for which an accounting can be rendered. His church, the corporation in which he holds stock, the school his children attend, etc., can also be subjected to an accounting. From the organization structure (norms, roles, positions)

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of various kinds of organizations comes interaction, and one dimension of interaction is activity. The activity dimension includes exchanges which are measured in money. The writer submits that these few social elements are the essence and foundation of the social science of accounting.
CHAPTER III

DESCRIPTION OF THE EMPIRICAL STUDY
OF ORGANIZATION ACCOUNTS
AND STATEMENTS

The empirical study was undertaken for the purpose of testing a portion of the theoretical construction developed in Chapter Two. It was submitted by the writer that exchanges are the phenomena admitted to the formal accounting records of organizations. It is this portion of the theoretical construction that was tested.

Both journals and financial statements were studied to determine the validity of the generalization about data collected in organization accounts. These particular items were chosen for examination because accounting journals are the books of original entry and all collected data, or some elements of all collected data, ultimately appear in the aggregate in the financial statements. Journals of an organization provide a chronology of occurrences admitted to the accounting system. Nothing is injected into an accounting system at any other point. Consequently, journals of an
organization provide an aggregate of accountable occurrences which should yield to generalization about types of behavior admitted to accounting systems.¹

Characteristics of Organizations Studied

To effect a formal test of the proposition that organizations consider only exchanges for admittance to the accounting system, a random sample of organizations from an over-all population would have been necessary. This was not feasible in this investigation for a number of reasons. The major difficulty was in determining a population from which to draw a sample. This was a practical impossibility given the definition of organization developed in Chapter Two. Secondly, time and money limitations prohibited a statistically precise investigation.

In lieu of statistical precision, the author chose to select each organization carefully with the intention of allowing the reader to judge the perceptibility of the writer in his choice of subjects. The sample was then selected with the objective of obtaining a wide range of "types" of organizations. The writer acknowledges that the results of the empirical study do not constitute a formal proof of

¹The term "journal" is used throughout this dissertation as "the record(s) containing the original accounting entries." The form of any specific journal (book, file, or the form used in mechanized or computer accounting systems) is of no consequence here.
any proposition. However, the study does provide a rigorous test of the proposition concerning data admitted to organization accounts.

Due to the previously cited limitations of the study, only a few examples of each "type" of organization were chosen for examination. It is the writer's opinion that the small number of organizations is not as serious a handicap to the study as the fact that no suitable typology of organizations has yet been developed for use in empirical investigations such as this one.\(^2\) The most common typology is that of merely distinguishing profit-seeking from non-profit-seeking organizations. This dichotomy was rejected because of the large variety of non-profit-seeking organizations. There are several other typologies that were considered but none seemed to divide organizations into homogeneous, mutually exclusive types. In order to proceed in the most satisfactory fashion, the following approach was adopted:

Four basic categories of persons can be distinguished in relation to any given formal organization: (1) the members or rank-and-file participants; (2) the owners or managers of the organization; (3) the clients or, more generally, the "public-in-contact," which means the people

\(^2\)For description of an effort to develop an empirically validated typology of organizations, see, J. Eugene Haas, "Toward an Empirically Derived Taxonomy of Organizations," unpublished manuscript.
who are technically "outside" the organization yet have regular direct contact with it, under whatever label—patient, customer, law violator, prisoner, enemy soldier, student; and (4) the public-at-large, that is, the members of the society in which the organization operates. We propose to classify organizations on the basis of _cui bono_—who benefits: Which of these four categories is the prime beneficiary of their operations? It must be emphasized that the prime beneficiary is not the only beneficiary, for each of the various groups who make contributions to an organization does so only in return for certain benefits received.³

Although it is often difficult to determine the prime beneficiary of any given organization, the above typology was adopted because it appeared to be the best extant typology of formal organizations.

Application of the _cui bono_ criterion yields four types of organizations:

(1) "mutual benefit associations," where the prime beneficiary is the membership; (2) "business concerns," where the owners are prime beneficiary; (3) "service organizations," where the client group is the prime beneficiary; and (4) "commonweal organizations," where the prime beneficiary is the public-at-large.⁴

Twenty organizations were included in the study. Five of each of the four types were selected. Each organization was "pre-typed"


⁴Ibid., p. 43.
by the writer and then substantiated by the interviewee of each organization. In all cases there was substantial agreement in the two determinations. The specific organizations studied are presented below by type.

**Mutual benefit associations**

1. **Alpha Gamma Chapter of Sigma Chi Social Fraternity.**--This organization is one of 130 chapters and has a membership of approximately 100 Ohio State University students who are provided fraternity fellowship plus meals and lodging at minimum cost. The student-members are the prime beneficiaries of this organization.

2. **Central Ohio Co-operative Milk Producers, Inc.**--Approximately 1,200 milk producers in the Central Ohio area comprise the membership of this organization. It is a co-operative that bargains with dairies on behalf of its farmer-members for the purpose of establishing a fair price for milk. The farmer-members are the prime beneficiaries.

3. **Ohio Society of Certified Public Accountants.**--This is the professional organization of Certified Public Accountants of Ohio. The organization provides public relations and educational services for its more than 2,700 members who are the prime beneficiaries.

4. **The Ohio State University Research Foundation.**--The foundation is the contract research administration organ of the Ohio State University. The 60 staff members of the organization administrate
practically all sponsored research of the university staff. There are about 1,000 to 1,500 researchers from the university staff who are the prime beneficiaries of this organization.

5. Sub-District No. 1, District No. 27, United Steelworkers of America, AFL-CIO.—This organization negotiates contracts, advises and handles grievances for approximately 7,000 union members in 23 local unions in the Central Ohio area. The union members are the prime beneficiaries of this organization.

Business concerns

1. City National Bank and Trust Company of Columbus, Ohio.—The 500 employees and eight locations of this organization provide the usual banking and trust services for many thousands of people in the Central Ohio area. The prime beneficiaries are the 1,180 shareholders. This organization emphasizes customer service and customers are viewed by management as second only to shareholders in benefits received.

2. Columbus and Southern Ohio Electric Company.—This is an electric utility company employing 2,100 persons. Common stock of the corporation is traded on the New York Stock Exchange. The 20,000 shareholders of the organization are the prime beneficiaries.

3. The Commercial Paste Company.—This is a small manufacturer of adhesives located in Columbus, Ohio. It has about 40 employees and only a few shareholders. The shareholders are the prime beneficiaries of the organization.
4. Mutual Investing Foundation MIF Fund.--This is an open-end investment company commonly known as a "mutual fund." The objective of the organization is to enable small investors to diversify their holdings. The company emphasizes growth of current income for its 20,000 shareholders who are the prime beneficiaries.

5. Nationwide Life Insurance Company.--This stock life insurance company is a subsidiary of Nationwide Corporation which holds approximately 99 per cent of the stock. Nationwide Life is one of four associated Nationwide insurance companies. The organization is comprised of 6,000 employees and 7,000 agents. The prime beneficiaries of the organization are the many shareholders of Nationwide Corporation and the minority shareholders of Nationwide Life Insurance Company.

Service organizations

1. City of Columbus, Ohio Public School District.--A total of 4,500 employees in 138 schools provide elementary and secondary education for approximately 90,000 children in the Columbus area. The students and the public-at-large are both benefited by this organization. The students are considered prime beneficiaries because they receive direct and immediate benefits from this organization.

2. Doctor's Hospital.--This is an osteopathic hospital located in Columbus, Ohio. This organization employs 500 people and carries
a staff of 130 osteopaths. The hospital operates as a trust on a "non-profit" basis. Ten trustees administer the trust. The patients are the prime beneficiaries of the organization.

3. The Edward Orton Jr. Ceramic Foundation.--This organization of 40 employees manufactures and sells standard pyrometric cones for use in the "kiln fired" ceramics industry. All profits are used for research for the benefit of this industry through grants for fellow­ships, equipment, and special projects at universities and colleges. The customers of this organization are the prime beneficiaries. Customers benefit by having pyrometric cones available for use in their manufacturing activities and by the research financed by the organization. Orton's customers and the entire industry are synon­ymous since Orton is the only manufacturer of pyrometric cones in the United States and these cones are necessary for manufacture of certain ceramics products.

4. Franklin County, Ohio Chapter of the National Multiple Sclerosis Society.--This organization includes approximately 250 volunteers and a small number of salaried employees. It provides orthopedic equipment, medicines and drugs, transportation to medical facilities, counseling, and therapeutic services to persons afflicted with multiple sclerosis. In addition, it contributes money to the National Multiple Sclerosis Society to support research into this disease. Multiple sclerosis patients are the prime beneficiaries of this organization.
5. Ohio Bureau of Unemployment Compensation.--Compensation for unemployed workers is administered by this agency of the government of the State of Ohio. The prime beneficiaries are unemployed workers. Funds for the operation of this organization are derived from state unemployment compensation taxes levied on employers. Employers also benefit through the employment services offered by the organization.

Commonweal organizations

1. Battelle Memorial Institute.--This is a research organization with approximately 2,300 employees. Basic and applied research projects are carried out under its sponsorship and for government and industry. Battelle operates as a corporation for the purpose of doing research in the physical and social sciences. The general public is the prime beneficiary of this organization. The benefit is derived from the use of products of the research.

2. Maple Grove Methodist Church.--This religious organization located in Columbus, Ohio is a part of the Ohio Area, North Central Jurisdictional Conference of the Methodist Church. The organization has approximately 2,450 members including staff that support extensive missionary activities in other countries and carry on missionary activities among the people of the community in which it is located. The community in general is the prime beneficiary of this organization.

3. The Ohio Historical Society.--This organization of about 1,000 members collects, preserves, administers and researches historical facts and objects concerning Ohio and the Midwest. Although it
is not primarily an agency of the government of the State of Ohio, it is the administrator and operator of all state historical sites, restorations, museums, and preserves. It receives funds from the State of Ohio to carry out these duties. All properties and research results are available to the public-at-large which is the prime beneficiary of this organization.

4. The Ohio Penitentiary. This is Ohio's only maximum security prison. There are approximately 600 employees and 4,400 inmates in the institution. Its objectives are confinement and rehabilitation of criminals. Society is the prime beneficiary of the operations of this organization.

5. Village of Marble Cliff, Ohio. This municipality provides its 622 residents with sewerage, water and street service, and police and fire protection. The citizens are the prime beneficiaries of this organization.

In each of the four groups of organizations listed above, an attempt was made by the writer to present variety. No sub-typology is intended in any one of the groupings but organizations were selected with the hope of including organizations with many different kinds of products and services. Obviously, not all industries and pursuits were included, but a wide range was presented. It is the writer's opinion that sufficient variety exists among the organizations selected that generalizations concerning all organizations can be made from this sample. While it is to be expected that some
deviations will occur in given organizations, it is suggested that behavior exhibited by this sample of organizations will also be exhibited among a very large percentage of organizations in general.

Data Collection

Data characteristics

Three types of data were collected from each organization included in the investigation. General organization characteristics, partly presented in the preceding section, constituted the first type. The characteristics included major product or service, number of members, organization objectives, affiliations with other organizations and prime beneficiary.

The second type of data collected was information the organization admitted to its accounting journals. The writer typed this data in an inductive manner as the study proceeded. This study of accounting journals was limited to collection of journal entries involving different combinations of accounts. The relative frequency of different entries encountered in a given organization's journals was not recorded.

Finally, information contained in financial statements was collected. Amounts and valuations of items were almost totally ignored in this regard as the emphasis was placed on categories of information presented and nature of information included under each financial statement caption.
The time period covered by the examination has no precise boundaries. In each case the writer took the information for the last completed fiscal year prior to the study. Since the research was carried out during the last six months of 1962, all collected data pertain to the calendar years 1961 and 1962.

Methods of collection

General characteristics of each organization were derived through informal interviews with accounting officers of the organizations. A simple interview form was used as a general guide to the desired information but a formal questionnaire was not employed. Additional general information was derived in some cases from printed brochures and miscellaneous printed matter. Accounting officers were the sources of the information used for typing each organization using the *cui bono* criterion.

Accounting journal and financial statement data were collected by examination of the journals and financial statements. The financial statements used were those covering the last completed fiscal period as described above. Accounting journal data also came from the last completed fiscal period prior to the date of the examination by the writer.
Research Results

The results of the empirical examination are presented in the following chapter. Data collected in organization journals are presented first with generalizations about this data. Data reported in organization financial statements follow the results of the journal study.
CHAPTER IV

RESULTS OF THE EMPIRICAL STUDY OF ORGANIZATION ACCOUNTS AND STATEMENTS

Generalizations resulting from the empirical examination of the accounts of 20 selected organizations are presented in this chapter in two parts; data admitted to accounting journals, and data reported in financial statements. In both parts the emphasis is upon the underlying behavior manifested in data admitted to organization accounting journals and reported in organization financial statements. Because interest was focused upon behavior the record of which gains admittance to journals and financial statements, conventional accounting classifications of assets, liabilities, owners' equity, income and expense were largely ignored. The writer developed typologies of data which were substituted for conventional classifications. Conventional types of data are reconciled with basic types of behavioral activity, i.e., interaction, manifested in the accounts.

Data Admitted to Accounting Journals

Two types of data were found in the journals of the sample of organizations. Although the two were completely different, one type
was found to be dependent upon the other. The first type discovered can be described as data resulting from social relations between members of the organization and members of other organizations. This type of journal data might be termed elements of "external" interactions. The second type of data found in organization journals was data which reflected reclassifications of "external" data. This latter type of data appeared to result from internal social relationships and physical changes within an organization. Internal reclassifications were found to be dependent upon external data in that this data was being reclassified due to internal changes. The only original data admitted to organization accounting journals resulted from interaction between members of the organization under study and members of other organizations.

**Exchange elements of interaction**

Without exception, the only original data admitted to organization journals were exchange elements of interaction as described in Chapter II. In no case was there any original recorded item in an organization journal that could not be considered an exchange. However, the items exchanged were not always readily apparent from entries in journals. For example, "contributions" received by the
church appeared to have no offset. However, in interviewing an
official of the church it was learned that contributors are given
service in the form of an intangible sense of satisfaction plus all
of the religious services provided by the church. While this ex-
change is not primarily an economic one, an exchange did in fact take
place in this interaction process. In all cases, interviewees indi-
cated that every entry of original data included in a journal repre-
seated an exchange.

The primacy of economic considerations in exchange relationships
is not an issue here. Norms governing exchange relationships vary in
this respect. In some exchange relationships the norms prescribe that
each party demand equal economic consideration in an exchange. In
others, norms prescribe other considerations as primary. In the church
"contribution" example noted above, religious norms apparently took
precedence over economic norms. In that instance the norms emphasized
the act of giving. The giver was supposed to receive satisfaction from
the act of giving which was his return. The question can be raised as
to the point when such an act ceases to be an exchange and becomes an
outright gift. The best response to this question, albeit not a pre-
cise answer, is
All except the "purest" charitable organizations depend to some extent on the returns they receive for purveying some kind of a product, be it a commodity, or a service like education or music.¹

In instances encountered in the study where economic norms did not appear to be the primary prescriptions of the exchange relationship, determination of the economic results of exchanges became more objective. However, in spite of the difficulty of economic measurement, it appeared that all such behavioral relationships reflected in organization accounting journals did in fact constitute exchanges.

Items exchanged by organizations fell into two categories. The first category consisted of goods and services and the second consisted of money and credit. Credit includes promises of money and releases from promises of money. The criterion used to establish this typology was essentially one of form. Goods and services exist in such a state that they can be consumed. Money and credit represent goods and services with no particular form. Money and credit cannot be consumed but must be exchanged for goods and services of the desired form in order to be utilized.

Determination of whether a particular item in a journal had been received or given by the organization became readily apparent. It was discovered, as it was in another different type of study, that

¹Parsons, loc. cit., p. 40.
The "debits" have in common that they are values received in exchanges. This feature is inherent in the data and not based on mere form or convention.

The "credits", by way of observable apposition, are values given in exchange.2

Given the two types of phenomena that were found to be exchanged, and given the above definitions of "debit" and "credit," the following four "ideal" types of exchanges result:

1. Receipt of money or credit in exchange for goods or services.

   Money or credit accounts
   Goods or services accounts

   Dr.  Cr.
   $ XXX  $ XXX

2. Receipt of money or credit in exchange for money or credit.

   Money or credit accounts
   Money or credit accounts

   XXX  XXX

3. Receipt of goods or services in exchange for money or credit.

   Goods or services accounts
   Money or credit accounts

   XXX  XXX

4. Receipt of goods or services in exchange for goods or services.

   Goods or services accounts
   Goods or services accounts

   XXX  XXX

All four types of exchanges were discovered in organization journals but the last type was not observed in its ideal form. Examples of exchanges reported in organization journals are presented below arranged by type of exchange.

1. Receipt of money or credit in exchange for goods or services.--Receipts reported in this type of exchange took the form of cash, promises of future payment and releases of the organization from promises of future payment. Most observed entries representing goods and services given were for the products or services of the particular organization being studied although sales of equipment and other goods were not uncommon. Typical entries of this type were recording "sales" of product or service, recording interest income and recording sales of plant and equipment.

2. Receipt of money or credit in exchange for money or credit.--This type of exchange includes the acquisition and disposition of cash and credit. Entries of this type included receiving cash from debtor customers, creditor banks, mortgage companies, shareholders and other creditors. Also included were payments of cash to creditors to reduce the credit and payments to debtors to establish debtors' debt. Typical entries included recording a bank loan, recording the issuance of capital stock and recording amounts from "customers" received on account. Other typical entries were recording payment of amounts due suppliers, recording payment of bank loans, recording payment of dividends to shareholders, recording loans to "customers."
3. Receipt of goods or services in exchange for money or credit.--Goods received by the organizations included buildings and equipment, office and manufacturing supplies, food products and many other types of industrial and consumer goods. Services included insurance protection, individual labor, the use of money for periods of time, governmental protection of rights and transportation. Given in exchange for these goods and services were cash, and promises to pay money at future dates. These promises took the form of notes, bonds, mortgages and capital stock. Although an organization might give another organization a release from a promise to pay in exchange for receipt of goods and services, this was encountered only once. Typical entries of this kind were; purchase of materials on account, recording the payroll for a period, investment of goods and services in the organization by "owners," payment of insurance premiums, payment of interest on loans and recording period "net income."

4. Receipt of goods or services in exchange for goods or services.--This type of exchange was not observed in an organization journal in its pure or ideal form. In every observed instance, there was cash or credit involved in the exchange. Typical entries of this type are made to record "trade-ins." Equipment was traded in on a new piece of equipment. Goods were received and goods plus cash or a promise to pay cash in the future were given. The relative rarity of this type of exchange is evidence of the importance of a medium of
exchange and credit in modern society. In a barter society this would be the only type of exchange possible.

**Other data admitted to organization journals**

Data other than exchanges recorded in organization journals did not readily fit into a typology. All phenomena encountered were alike in that they represented changes in external elements of interactions, i.e., none presented new behavior not previously recorded in an organization journal. All journal entries other than those representing exchanges were for the purpose of transferring previously recorded amounts from one accounting classification to another. Many such transfers resulted from erroneous or temporary classifications of items exchanged. In fact, except for one type of entry to be discussed subsequently, all other entries in organization journals were made to reclassify data resulting from prior exchanges due to temporary or erroneous classification. Erroneous classification of exchange data was accidental and necessitated correcting entries. Correcting entries encountered are too numerous to relate but they affected many accounting classifications of data.

Temporary classification of exchange data was found to be necessary in all organizations. For example, the purchase of a fire insurance policy to cover a three year period necessitated recording the receipt ("debiting") of the protection and recording the payment ("crediting") of cash. Regardless of the initial classification of the value of the insurance protection, it was necessary for
organizations purchasing it to transfer amounts from one insurance protection category to another. This was because the organizations separated goods and services from which benefit had been derived from goods and services from which no benefit had as yet been derived. As benefit was received from the insurance policy over time, amounts were transferred from "prepaid insurance" to "expired insurance." Reclassification of temporarily classified goods and services is known as "amortization" in accounting terminology. Other goods and services amortized by the organizations examined included plant and equipment, supplies, materials, "goodwill," costs of incorporation, leasehold improvements and research costs.

Other discovered reclassifications of data due to temporary initial classification at time of exchange included the transference of amounts from interest expense (a service received by many organizations that can be described as the "use of money for a specified period of time") to construction costs of a new plant (imputed interest), and transference of total construction costs to finished plant and equipment upon completion of the construction. In addition, catastrophic losses were also reflected in journals as reclassifications.

Finally, some organizations followed the practice of reclassifying data subsequent to initial recording into more detailed categories, e.g., breakdowns by departments of the organizations. Reclassifications of data by departments within an organization would
have represented exchanges if the departments had been considered the organizations subjected to the accounting. In many cases the organizations chosen for this study included other organizations within them or were themselves a part of a larger organization. This is clearly illustrated by the United Steelworkers of America Organization. Sub-District No. 1 of District No. 27 was chosen as the specific organization for this study. Sub-District No. 1 includes 27 local unions for which accountings are rendered. Any one of these smaller segments could have been chosen as an organization for purposes of the study. Sub-District No. 1 is also a part of two larger organizations; District No. 27, and the International organization. Either of these might also have been chosen as a subject of the empirical investigation. Situations such as this one provide evidence to support the importance of organization boundaries as discussed in Chapter II.

The one journal entry discovered that was not an exchange or a reclassification of exchange data was the recording of "unrealized appreciation or depreciation" on investments of the mutual fund. The mutual fund organization regularly adjusted the value of investments in other organizations to market value. This was accomplished by increasing or decreasing the amount in the investments account and doing likewise with an account named "unrealized appreciation or depreciation on investments." This entry was similar to transfers of amounts
because of erroneous or temporary initial classification in that it was dependent upon previously recorded exchange data. That is, appreciation or depreciation was only recorded on investments that had been previously purchased and recorded. However, this entry was unlike the transfer entries in that the total assigned an item received was being increased or decreased. Transfers merely reclassified originally assigned amounts. The writer acknowledges that this entry constitutes a possible exception to the generalization that the only original data admitted to organization accounting systems are exchanges. Resolution of this matter appears to depend upon whether the admittance of appreciation in value constitutes an original piece of data. The writer is of the opinion that it does not because such entries as this depend upon a journal record of a prior exchange for their existence.

Summary of organization journal study

The major conclusion drawn from this study was that there is an amazing degree of consensus among organizations concerning phenomena to be admitted to accounting systems. Organizations only admit exchange elements of interactions between organization representatives of different organizations. Once a particular exchange had been admitted to an organization accounting journal, items received and/or given were sometimes reclassified at a future date. These reclassifications resulted from temporary and erroneous initial
classifications of exchange data. These generalizations were found to be universally true except for the one entry found in the records of the mutual fund organization.

While the only new data admitted to organization journals were exchange elements of interactions between organization representatives of different organizations, it was discovered that not all such phenomena were recorded in journals. Several organizations included in the empirical study used "cash basis" accounting. In these cases only exchanges involving cash were admitted to journals. In two instances, it was discovered that persons had "donated" their labor. The value of this service was not admitted to the journals. This latter situation was probably due to a lack of ability to place a value on the labor. The former situation was probably due to lack of a need for sophisticated financial data. Nevertheless, some exchanges were not admitted to organization journals.

There are other exchanges that are universally ignored by organizations. Lease agreements are not reflected in the accounts of organizations yet it seems clear that with the signing of a lease the lessee receives the use of the leased item and the lessee gives a promise to pay money at future dates to the lessor. In spite of this, organizations ordinarily reflect leases in the accounts only as rental payments are made. Leases are used here as an example to illustrate the possibility that there are many exchanges not admitted to organization accounting journals. This study covered items
appearing in organization journals and did not attempt to determine other data that might have been included. The result of limiting the study to recorded data was that only the most obvious omissions came to the fore.

The final conclusion resulting from the organization journal study concerned the nature of debits and credits. Debits represented items received in exchanges and credits represented items given in exchanges. These two terms provide a fundamental distinction in accounting; separating items given and received in exchange elements of interactions between organization representatives of different organizations.

Data Reported in Organization Financial Statements

The financial statement portion of the empirical study was limited to an analysis of income statements and balance sheets. Other statements were prepared by some organizations but these two statements were the only ones universally prepared. The following results were derived from a study of balance sheets and income statements prepared by the organizations studied in light of the results of the organization accounting journal study which established the substance of accounting data. Financial statements were re-casted giving consideration to the journal study findings in order to determine the underlying meaning of accounting statements for organizations in general.
Income statements

Income statements included in the study reported three distinct categories of information. The categories of information are discussed below in the order in which they appeared in the statements examined.

1. Revenue.--The most common term used to describe this first category was revenue but others included; "gross income," "sales," "dues," "gross charges to customers," "gross earnings," and "receipts." The last term was used only by organizations using cash basis accounting. In every case, the writer determined that the amounts reported in this section of the income statements were intended to represent a measure of the total value of products and services rendered to individuals outside the organization or to other organizations. The type of exchange that resulted in these amounts was type one as previously described in the section of this chapter dealing with exchanges. This type of exchange involved a receipt of money or credit in exchange for rendering goods or services and was recorded by debiting money or credit accounts and crediting goods or services accounts. The accounts credited in recording this type of exchange were revenue accounts variously termed as previously indicated.

2. Expense.--The total amount of this category of information was offset against revenue in each income statement examined. "Expense" was the most common term used to describe these items but
"costs of operations," and "expenditures" were also found. The latter term was used only in connection with cash basis accounting systems. The writer determined that the aggregate of these amounts approximated goods and services received and consumed in the process of rendering the goods and services represented by the revenue amounts. These amounts resulted from type three exchanges as previously described, and from reclassification entries in journals. Type three exchanges record the receipt of goods or services in exchange for money or credit. Total receipts of goods and services for a given period of time and expenses for the same period were not synonymous because it was discovered that inventories of certain goods and services were maintained by organizations. These items included materials, supplies, insurance protection and plant and equipment. Consequently, reclassifications of received goods and services from "unused" to "used" were sometimes used to derive the amounts reported as expenses in income statements. Expenses represented total goods and services received and consumed in rendering products and services for a period.

3. Net Income.--This amount represented the difference between revenue and expense and was variously termed "net gain," "balance," "net operating surplus," and "excess of income over expense," as well as net income. The terminology suggested that this amount was an excess of some description. However, examination of all income statements revealed that all goods and services consumed were valued
and listed under expenses except those provided by owners, members, or, in general, that category of providers that serve an organization without demanding a prescribed price for its services but instead agree to accept as payment any difference between the value of goods and services consumed from all other providers and the aggregate value of goods and services rendered to outsiders by the organization for a period of time. Net income was determined to have all the characteristics of the items listed as expenses except that the aggregate amount of this service was not prescribed but resulted as a residual. The type of the services consumed represented by net income was the use of money for a period of time. In other cases net income combined the use of money and labor services. This conclusion with respect to the nature of net income of an organization resulted from the organization journal study. In completing that portion of the empirical investigation, the writer encountered "closing entries." These journal entries ostensibly served to periodically remove balances from revenue and expense accounts. Organizations followed the conventional practice of preparing income statements for specified periods of time rather than allowing such data to accumulate over the lifetime of the organization. Thus, balances were periodically reduced to zero to facilitate periodic reporting. Because revenue never equaled expense (except coincidentally), a balancing amount was credited (or debited if expenses exceeded revenue) to a credit account; one of the accounts used by each organization to record
the organization's liability to that category of service suppliers that agreed to accept as payment whatever difference between revenue and expense might develop. The fact that such service suppliers did agree to this arrangement in organizations included in the study was not verified. The writer felt this to be unnecessary because it is common knowledge (especially in "profit-seeking" organizations) that individuals do take such risks.

In summary, income statements of organizations report approximations of the aggregate value of goods and services rendered to other organizations or persons and an equal approximation of the amount of goods and services (often in different physical form) consumed in rendering the output of the organization.

**Balance sheets**

Whereas it was determined that income statements of organizations reported change, balance sheets reported static listings of data. Income statements were prepared by the organizations to show goods and services consumed and given to other organizations for a period of time. Balance sheets, on the other hand, were prepared as of a given instant in time to show unconsumed resources, money and credit available for future exchange, and unresolved claims in the form of credit given by the organization in prior exchanges. The content of balance sheets is discussed below under more conventional accounting classifications of assets and equities.
1. **Assets**.--This category of data was termed assets in every case except one in which the term "resources" was used. The information contained on this section of balance sheets listed: (1) total goods and services received by the organization and unconsumed as of the date of preparation of the balance sheet, and (2) total money and credit (receivables including investments) under control of the organization as of the balance sheet date. Although there were sub-categories of assets in some organization balance sheets, these breakdowns did not distinguish items in the manner indicated above except that money and credit were usually listed first and goods and services were listed last. However, the two types of assets were mixed together in the average situation.

Unconsumed goods and services represented the aggregate amount of these specific items available for future use by the organization while money and credit represented the aggregate amount of additional goods and services that could be acquired, i.e., goods and services with no particular form.

2. **Equities**.--This category of data was generally divided into two parts; (1) "liabilities," and (2) "capital." Capital was also termed "members equity," "reserves," and "net worth," in specific instances. However, the writer could discover no inherent difference in these two sub-categories of equities. In total, equities equalled assets in aggregate amount and represented unresolved claims against the organization given in prior exchanges.
Assuming organizations are as they were conceptualized in Chapter II, such claims can only originate through exchanges and must necessarily equal assets in aggregate amount.

Summary of organization financial statement study

The study of organization financial statements was undertaken primarily for the purpose of gaining a better understanding of the phenomena with which accounting deals. Because of this purpose, a detailed examination of all items reported was not undertaken. Instead, broad characteristics of data included in organization financial statements were enumerated within the framework of the results of the journal study which established the nature of data admitted to organization accounts. Because data admitted to accounting journals is ultimately reported in organization financial statements, the statements bear the characteristics of this data. Assuming the date of accounting are exchanges as established by the journal study, certain elements of organization financial statements take on added meaning. New financial statement constructions are presented below in a manner that emphasizes the added meanings.

1. Income Statement.--The following is a suggested general form for organization income statements.
Statement of Organization Accomplishment
For the year ended December 31, 19--

Goods and services provided customers $100

Goods and services consumed in serving customers

<table>
<thead>
<tr>
<th>Service</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services of employees - labor</td>
<td>$25</td>
</tr>
<tr>
<td>Services of employees - management</td>
<td>20</td>
</tr>
<tr>
<td>Services of creditors</td>
<td>11</td>
</tr>
<tr>
<td>Services of &quot;owners&quot;</td>
<td>9</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>15</td>
</tr>
<tr>
<td>Services of governments</td>
<td>10</td>
</tr>
<tr>
<td>Buildings and equipment (estimated)</td>
<td>8</td>
</tr>
<tr>
<td>Other goods and services</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$100</td>
</tr>
</tbody>
</table>

The basic change effected in the construction above is in the terminology. The conventional income statement uses terminology that emphasizes the contributor of goods or services and not the good or service provided. The construction above uses terminology that emphasizes the good or service from the organization's standpoint. For example, the term "wages" is sometimes used in income statements. This term emphasizes the payment to workers rather than the services of workers the organization has received and consumed. "Taxes" is another term that carries the same emphasis.

The writer suggests that the above income statement construction and terminology clarify the nature of this statement. The construction was not meant to preclude variations a particular organization might deem relevant to its particular situation or operations. Rather, the construction is proposed as a general form for organization income statements.
2. **Balance Sheet**.--The following is a suggested general form for organization balance sheets.

**Statement of Organization Resources**

**December 31, 19--**

**Organization Resources**

**Money and Credit:**

- Cash \( \$ \ 50 \)
- Claims against other organizations and persons resulting from services rendered \( \$ \ 100 \)
- Claims against other organizations and persons resulting from investment \( \$ \ 150 \)

**Total** \( \$ \ 300 \)

**Goods and Services:**

- Materials and supplies \( \$ \ 200 \)
- Services (Insurance protection, etc.) \( \$ \ 100 \)
- Land, Buildings and equipment (receipts less disposals and estimated consumption to date) \( \$ \ 400 \)

**Total** \( \$ \ 700 \)

**Total Resources** \( \$ \ 1,000 \)

**Claims Against the Organization**

- Suppliers \( \$ \ 50 \)
- Banks \( \$ \ 100 \)
- Bondholders \( \$ \ 150 \)
- Employees \( \$ \ 200 \)
- Governments \( \$ \ 50 \)
- "Owners" - Through investment in the organization \( \$ \ 200 \)
- Through services rendered to the organization \( \$ \ 250 \)

**Total claims against the organization** \( \$ \ 1,000 \)
The changes effected in this balance sheet construction are the same as those effected in the suggested income statement. Again, the objective was clarification of the characteristics of the reported data.

In both suggested statements, and in this dissertation as a whole, the subjects of value and valuation of phenomena were totally ignored. It was observed in the course of the empirical study that items exchanged were valued equally and that financial statements reflected this equality. The propriety of such a valuation system is discussed in Chapter VI.

In summary, the empirical study tended to prove the validity of at least a portion of the theoretical construction of accounting entities and behavior developed in Chapter II. The structural aspects of the entity model resulted from generally accepted sociological concepts and were considered valid by the writer. The empirical test of the behavioral aspects not only indicate the soundness of these aspects but lend credence to the structural aspects. Because of the results of the empirical study the writer suggests that the basic phenomena of the social science of accounting are exchange elements of interaction between organization representatives of different organizations measured in money.
CHAPTER V

SUMMARY

Restatement of the Problem

This dissertation was an attempt at pure accounting research. There were two basic, interrelated problems involved in the study. The primary problem was development of a complete, valid description of the social environment, i.e., the basic elements of accounting. Integration of the basic elements of accounting was also an aspect of this problem. The writer not only attempted to describe the social environment of accounting but in addition attempted to describe the relationships among the basic elements that form the social foundation of the science. A second problem was one of investigation of the usefulness of a social science approach to construction of accounting theory.

This study was limited to development of social foundations of accounting and their relevance to accounting principles and practice. Because of the basic character of the study, the problem can be viewed in a broader perspective as an attempt at detailed description of the economic aspects of organizations as they exist in contemporary
American society. Accounting forms the basic economic record of an organization and thus manifests organization behavior with economic implications.

The scope of the problems outlined above and presented in Chapter I was broadened in comparison with most accounting studies. "Non-profit-seeking" organizations as well as "profit-seeking" organizations were included as relevant subjects which accounting theory must take into account.

In summary, the problem of this dissertation was description and integration of the basic elements of accounting for entities of every extant type through the use of general social science concepts.

Summary of Methodology

Conceptual formulation and empirical investigation were combined to provide the approach toward solution of the problem. Chapter II presented a conceptual model of an accounting entity. The model was developed from generally accepted sociological concepts associated with the study of complex organizations. This theoretical construction provided a detailed description of the phenomenon of social organization. All entities subjected to accounting were viewed as social organizations as represented by the conceptual model. The structural aspects of accounting entities were clearly set forth in this manner.
Organization behavior was described in the conceptual formulation in Chapter II as the dynamic perspective of organization structure and was presented as resulting from the nature of the structural relationships. It was divided into general types and the type manifested by accounting was singled out for special attention.

Chapters III and IV presented the description and results of the empirical investigation of behavior manifested in accounting systems. Twenty organizations were included in the investigation. The writer examined the accounting journals and financial statements of each of the organizations in order to determine the types of data admitted to organization accounting systems. The organizations were selected with the intention of getting a complete range of types of organizations in order that generalizations could be made from the results.

In summary, the methodology of this dissertation consisted of construction of a theoretical model of the structure of an accounting entity and an empirical test of accounting behavior emanating from this structure. The suggestion as to the type of behavior admitted to accounting journals and statements was empirically tested by examining the accounting journals and financial statements of a sample of organizations. Data admitted to the accounting systems of the sample of organizations were typed in the course of the examination and the discovered types were compared to the concepts derived from the conceptual model.
Summary of Conclusions

Social organizations are the subjects of accounting. Inanimate and non-human entities are never subjects of accounting. Accounting entities can be successfully described as social organizations and this dissertation accomplished this with the conceptual model of an accounting entity presented in Chapter II.

Behavior "flows" from the structure of a social organization and accounting quantitatively accounts for certain elements of this behavior. Specifically, behavior manifested in accounting systems of organizations are exchange elements of interaction between representatives of different organizations as described in detail in Chapter II. Exchange behavior is the "raw material" of accounting.

The results of exchange behavior were quantitatively represented and measured in money by the organizations included in the empirical study. The results of this dissertation suggest that the essence of the science of accounting is composed of exchange elements of interaction between representatives of different organizations measured in money.

An additional result of this study was that sociology as the generalizing social science was shown to be useful in understanding the more specific social science of accounting. Although accounting is often associated with quantitative sciences its essence is to be found in the study of human behavior.
CHAPTER VI

IMPLICATIONS OF A SOCIAL SCIENCE APPROACH TO ACCOUNTING

Practical Implications

Practical applications of accounting concepts derived by a social science approach are directly dependent upon the validity and usefulness of the concepts produced by the approach. Examples of the practical usefulness of this approach are presented in the first half of the chapter. Implications of the approach used in this dissertation for accounting theory are then discussed.

Accounting Education

This dissertation has presented evidence which supports the claim that there are fundamental accounting concepts having roots in sociology. A basic understanding of accounting depends in part upon knowledge of human behavior. As professional men, accountants are relied upon by the public to determine appropriate and inappropriate financial reporting habits of organizations. The information reported by organizations consists of economic results of organization behavior. In order to judge the appropriateness of financial reports of organizations an understanding of the behavior mirrored in financial statements is desirable if not required.
In addition to the study of social science it seems appropriate that the student of accounting encounter social science concepts in the accounting curriculum. In the past, accountants have undergone training in an apprenticeship fashion much as tradesmen. Concepts and generalizations have been sparse. The emphasis has been on "doing" rather than learning. While there is certainly an art connected with the practice of accounting, this study has strongly suggested that there is a basic framework in which the art is practiced. Inclusion of environmental foundations of accounting in accounting curricula could provide a useful basis from which the art of accounting practice could develop.

**Accounting practice - general**

The practice of accounting can be viewed as the art of problem solution. Judgments are ever present in the process of problem solution. Many recurring problems of accounting deal with the basic foundations of accounting as described and integrated in this study. It might appear to the layman, for example, that the use of money as the common denominator of economic behavior could provide few problems. Yet, some of the most bothersome problems of contemporary accounting are problems involved with the use of money. The value of money is apparently unstable and consequently renders differing valuations of identical phenomena over periods of time. Reconciliation of such a situation is difficult and subject to individual judgment.
The data of accounting (exchange) represent another problem area of accounting. This study produced a definition of accounting data. Heretofore there has been no general definition of phenomena to be admitted to the accounting systems of organizations. Consequently, accountants have had no accepted guide to use in considering new instances of organization behavior for inclusion in the accounts.

Finally, accounting is beset with problems that revolve about the most basic element of accounting; the entity. The organization to be subjected to accounting is not always precisely defined such that it can be unequivocally identified. Problems of this kind arise whenever two or more organizations combine or when financial statements are prepared for two or more "separate" organizations as if they were one.

**Accounting practice - an example of problem-solving potential**

It is not unusual for two or more corporations to combine into one. When this occurs, accounting problems arise in connection with valuation of items in the accounting records of the successor corporation. This type of problem has been resolved in the past by reference to legal forms of such combinations of corporations. However, in 1957 the American Institute of Certified Public Accountants
recognized such combination problems as entity problems.\(^1\) Legal forms were not considered relevant. Interpretation of the American Institute of Certified Public Accountants' view has, in this writer's view, been most successfully accomplished by Schrader.\(^2\) He suggests that when two businesses combine there are three possible successor entities; (1) a new entity whose life begins immediately at combination date upon termination of the lives of the two old ones, (2) an entity which is just a continuation of the two old ones whose histories joined at combination date, and (3) an entity which is just a continuation of one of the two forming the combination, with the other ceasing to exist at combination date. Each of the three possible successor entities produces a different method of valuation of items in the accounting records of the successor entity.

The method to use in deciding just which of the three alternative successor entities actually results in a given situation is uncertain. The writer suggests that this determination can be made using the concepts of social organization developed in Chapter II.

\(^1\)Committee on Accounting Procedure, The American Institute of Certified Public Accountants, Accounting Research Bulletin Number 1, New York: The American Institute of Certified Public Accountants, 1957.

Determination would have to be accomplished after the combination date when an analysis of the successor social organization could be undertaken. The decision would be made by comparison of roles and positions prior to combination with those after combination. If no structural relationships that existed prior to combination exist after combination, possibility (1) must have occurred. If most or all organization relationships that existed prior to combination exist after combination, possibility (2) must have occurred. Finally, if the structural relationships of one of the organizations forming the combination dominate the successor organization, possibility (3) must have occurred. If such a practice was adopted by the accounting profession the accounts of certain organizations might more nearly approximate the reality of their situations.

The proposed solution of business combination problems is only one of the practical applications that might result from development of the basic social environment of accounting. It serves to illustrate the use that might be made of generalizations about accounting environment. It also demonstrates the need for conceptual foundations in accounting curricula inasmuch as accounting practice derives from accounting education.

Implications for Accounting Theory

If accounting theory is defined as a body of thought organized in a logical manner, then this succession of concepts must have a
beginning. The writer has attempted to define and describe a logical starting point for accounting theory formulation. Two aspects of the resultant body of theory that would develop from the foundation are discussed at this time.

The historical character of accounting

Evidence has been marshalled to support the claim that the data of accounting are exchanges. Behavior is a dynamic concept in that behavior is ongoing through time. Exchange behavior is no exception. Accounting has been presented as a chronology of the past. The complete history of an organization is not recorded in the accounting system, but a portion of this history, namely exchange history, is recorded. Due to this character of accounting data, accounting theory must deal entirely with historical matter.

It is often said that organization managers are not interested in the past. In order to manage they must know the future. This argument often proceeds to suggest that historical accounting data are useless. It is suggested by this writer that this latter statement does not follow from the former. The future can be viewed only through history, and the same data that were considered important enough to include in the historical record are those that will be important in the future. Organization managers need to know the results of future exchanges. An important guide to these future
results can be found in the chronology of past exchanges because the past is the primary basis for prediction of the future.

Impingement of non-economic factors upon exchange behavior was not discussed in any detail. It was suggested in Chapter IV that money is the common denominator of exchange but not all exchanges are dominated by economic considerations. Perhaps accounting systems should reflect other behavior to supplement the reflection of exchange behavior. A thorough study of the history of a very old organization might reveal the ordinal importance of various types of organizational behavior upon the economic future of the organization.

To gain full recognition of the importance of historical accounting data, one need only think of trying to plan the future of an existing organization about which nothing is known except perhaps a name. Without knowing the existing organization structure and past organizational behavior it would be virtually impossible to gain even the faintest notion about the future. Accounting provides a history for an organization and, while it may be incomplete, it is often the only information recorded by an organization.

Theory formulation from the environmental foundation

Further development of accounting theory from the environmental foundation set forth should begin with definition and description of the means of ascribing values to phenomena exchanged by organizations.
The empirical examination of journals and financial statements disclosed that virtually all organizations used money as the common denominator of exchange behavior. Furthermore, items exchanged were valued at the same aggregate amounts, i.e., items given in exchange were assigned the same value as items received, and vice versa. This equality is ostensibly inherent in exchange. Economic norms of exchange representative positions of organizations apparently require equality of value as a prerequisite to the consummation of any particular exchange. However, in some types of organizations, economic norms are subordinated to other norms. The result is that value received and value given in a particular exchange are difficult to equate.

Contemporary American society apparently defines value in an exchange framework, i.e., the "marketplace" determines value. This societal definition is mirrored in the accounts and statements of organizations in our society. To determine the accuracy of this reflection would require extensive research into societal value determination. This limited empirical study suggested the exchange mechanism as the determiner of economic value in our contemporary society. However, new norms may replace the present ones and society may presently be in the process of replacing exchange with a different determiner of value.
It should be emphasized that value and exchange appear to be so closely associated that if value is determined in some other fashion, then economic behavior takes some form other than exchange. Although this subject should be investigated, present evidence indicates that phenomena exchanged by organizations are, and will continue to be, valued at the same aggregate amounts. In the language of accountants, "historical cost" remains the only valid measure of value of any particular item received or given in exchange by an organization. Valuation is inextricably tied to exchange.

Due to the fact that organizations valued items given in exchange equally with items received in exchange, hypothetical financial statements were constructed in Chapter IV utilizing this concept of equality. These constructions yielded some insight into the content of such phenomena as revenue, expense, income, assets and equities. Income statements and balance sheets report results of exchange and other activity. Since these financial statements are prepared from the data collected in accounting journals, the nature of the collected data is reflected in them. Description and definition of these concepts embodied in financial statements represent the next logical step in the development of a theory of accounting.
The purpose of this dissertation was not to develop a complete theory of accounting and therefore these concepts were not thoroughly investigated. However, certain tentative generalizations concerning them did result.

1. **Revenue, expense and income.**--Revenue was determined to be goods and services rendered to customers. It represented an outflow of goods and services. This is contrary to the commonly held belief that revenue is an inflow of assets. Expense was determined to be goods and services received and consumed in rendering goods and services to customers, i.e., an inflow of goods and services which has been consumed in rendering the outflow. Conventionally, expense categories in income statements contain all such consumption except consumption of services of "owners." Net income was found to be this latter element of organization consumption.

2. **Assets and equities.**--The balance sheet appeared from the study to be a listing of residuals, i.e., organization resources unconsumed at a given instant in time, plus a listing of claims against an organization by organization members. The equality of the aggregate amounts of these two listings appeared to be unimportant. This equality was not a basic concept itself but was derived from the equality of each exchange engaged in by an organization. While the resources listed by a given organization at a given instant in time did represent potential service to be consumed in the future,
the aggregate amount of this service potential revealed little con­
cerning the future accomplishment of the organization. It appeared
that the only reason for an organization to carry such balances was
that certain goods or services could not be economically acquired in
smaller quantities. The frequency of the appearance of equipment
and buildings in organization balance sheets provided evidence of
this phenomenon.

These generalizations about income statements and balance sheets
are tentative. Research into the character of these phenomena should
be undertaken. Schrader3 has studied the concepts of revenue, ex­
pense and income and his conclusions were substantially the same as
those of this writer.

Schrader's work dealt only with business organizations but his
conclusions appear to be valid for all organizations. Revenue and
expense are valid concepts for "non-profit-seeking" organizations as
well as "profit-seeking" organizations. A different emphasis may be
placed on results, but any organization can report income.

The writer submits that a social organization approach to ac­
counting is both theoretically and pragmatically useful. Such an
approach is an aid in problem solution (the art of accounting), and
provides a sound foundation upon which a general theory of account­
ing can be constructed.

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AUTOBIOGRAPHY

I, John Joseph Willingham, was born in Charleston, Illinois, March 29, 1935. I obtained my secondary school education at Eastern Illinois State High School, Charleston, Illinois, and my undergraduate training at Eastern Illinois University, which granted me the Bachelor of Science degree in 1957. From The Pennsylvania State University, I was awarded the Master of Science degree in 1959. I received the certificate of Certified Public Accountant from the University of Illinois in 1960. In September, 1960, I was appointed Instructor in Accounting at The Ohio State University. I held this position for three years while completing the requirements for the Doctor of Philosophy degree.

I have accepted a position as Assistant Professor of Accounting at The Pennsylvania State University.