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# TOWARD A METHODOLOGY FOR AUDITING

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The nature and practice of auditing is described within the context of the social, economic, and political dynamics of the last 100 years. Auditing developed upon a predominantly pragmatic foundation. Within the last decade, auditing scholars such as Mautz, Sharaf, Silvano, Newmann, and Carmichael have attempted to undergird auditing with theoretical substance. This attempt has been hampered by the absence of an appropriate methodology. Reflection suggests that for a discipline to reach maturity, it must embrace a methodology germane to its particular needs and activities. Efforts to find such a methodology have focused exclusively on the methods of the physical sciences with emphasis on the cognitive-descriptive aspects of theories. The disappointing results of these efforts strongly suggest that the search must take a new direction. An emerging, more powerful, methodology designed to cope more effectively with the almost infinite complexity of theory construction in the social sciences provides that new direction. These methods—which are based on value theory, decision theory, and game theory (Newmann, Morgenstern, Marschak, Churchman-Ackoff, Luce-Raiffa) as well as recent developments in the philosophy of science, especially the methodology of theory construction (Carnap, Hempel, Suppes, Leinfellner)—accord economic, social, and political aspects a viable role in theory construction. The application of these fresh techniques holds great promise for moving auditing toward its own customized methodology.

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## THE NATURE OF AUDITING

Auditing is defined as:

. . . a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and communicating the results to interested users (*A Statement of Basic Auditing Concepts*, 1973:2).

In essence, auditing encompasses two fundamental processes, namely, an investigative-evaluative process and a communicative process. These processes are guided largely by generally accepted auditing standards and procedures promulgated by the American Institute of Certified Public Accountants. Generally accepted accounting principles serve as the primary criteria by which assertions about an economic entity are evaluated. The communicative process makes known the results of the investigative-evaluative process to interested users in the form of an auditor's professional opinion.

The distinction between accounting per se and auditing should be made clear. Accounting involves management's generation of economic information about an entity. This management activity culminates in the creation of summary financial statements referred to as the Balance Sheet, the Income Statement, and the Statement of Changes in Financial Position. Auditing, on the other hand, investigates and evaluates the assertions contained in the financial statements for the purpose of forming a professional opinion about their credibility as management's representations of an entity.

## THE HISTORICAL EVOLUTION OF AUDITING

A brief survey of the historical evolution of auditing in the United States reveals how extensively the practice is embedded in the economic, social, and political dynamics operative during the century of its development. After the Civil War, the rapidly expanding American economy attracted large amounts of British capital. In fact, much of the early auditing performed in this country was done by visiting British auditors retained by British investors. Hence, American auditing initially was patterned after the British stewardship audit which emphasized detailed verification of bookkeeping accuracy in its search for defalcations, embezzlement, and fraud (Moyer, 1965:3).

With the industrial revolution came increased size and complexity of business entities, widespread public ownership of these entities (i.e., the corporation), and the corresponding separation of ownership and management (Brown-Salquist, 1972:6-7). Auditing practice responded dramatically to these changes during the first one-third of the 20th century. The auditor became increasingly concerned as to the credibility of management assertions about financial condition and entity earnings, and less preoccupied with defalcations, embezzlement, and fraud. Testing of a limited sample of clerical matter began to replace detailed verification, and the internal control procedures of the auditee became the key input in determining the necessary size of the sample (Brown, 1965: 16-17).

By the 1930's, auditing practice and its environment had developed to the point where they required explicit legal and political attention. The *Ultramares Corporation v. Touche, Niven & Company* case (1931) extended auditor liability for

the first time in the United States to third parties—not within the contractual relationship of the audit—who were injured by auditor fraud or gross negligence (Causey, 1973:64-65). This common law interpretation was given statutory status with the passage of the Securities Act of 1933 and the Securities Exchange Act of 1934. More importantly, these Acts, in lieu of more direct governmental controls, established the free enterprise system of the United States upon a regulatory foundation that embraced disclosure of material financial information (Chatfield, 1974:133-134). This regulatory posture solidified the social, economic, and political importance of the audit function in American society. Simultaneously, during the 1930's, auditing practitioners emerged as a viable force, having at least the rudiments of professionalism. The auditing profession accepted the primary responsibility for improving financial disclosure, and it initiated programs directed toward the continuing formulation of accounting principles, auditing standards and procedures, and ethical norms (*Statement on Auditing Standards No. 1*, 1973:200-205).

In the years that have followed, auditing practice has remained sensitive to social, economic, and political needs. It has continued to experience pragmatic refinement, yet the basic nature of the audit function in the United States has remained essentially as it emerged from the 1930's.

#### AN EPITHEORETICAL METHODOLOGY FOR AUDITING

Within the last fifteen years, attempts have been made to undergird, with theoretical substance, auditing's pragmatic foundation. Attention has been drawn to the incongruity apparent "in the existence of a professional group drawing its status primarily from the practice of auditing, but having no perceptible body of theory to support that practice" (Mautz-Sharaf, 1961:1). Unfortunately, attempts toward theory development in auditing have been hampered by the absence of an appropriate methodology. Efforts to delineate such a methodology rely almost exclusively upon the adaptation of methods utilized in the physical sciences, methods which emphasize the value-free, cognitive-descriptive aspects of theories. Physical science methodologies, however, do not function well with the basic nature of the audit function and its inherent relationship to its social, economic, and political environments. In short, auditing must free itself from the methodological limitations imposed by the physical sciences and embrace a methodology germane to its particular needs and activities.

Epitheoretical analysis provides such a methodology. It is specifically designed to cope with the multi-dimensional aspects of theory construction in the social sciences. Leinfellner contrasts this broadened methodology with the methods used in the physical sciences as follows:

. . . the dogma of a value-free science can be

regarded as another consequence of the mere syntactical and cognitive view of science. These dogmas have served as a strait jacket and have prevented any analysis of norms, values, obligations, ideologies and even religious aspects of science. In contrast to it, the epitheoretical method offers a systematic complementary approach to . . . analysis [of each of these aspects] of science which is an indispensable requirement for understanding social theories (Leinfellner, 1974: 9-10).

Fig. 1 provides an overview of the epitheoretical complementation of traditional axiomatic analysis within the context of theory construction in auditing. The stratification of the total scientific language into its theoretical and empirical components via axiomatization is a well established technique of the physical sciences (Hempel, 1970:142-152). As a process, axiomatization utilizes metatheoretical or metalinguistic analysis which employs a higher-level (and more abstract) theory or language in order to analyze a primary theory or language—i.e., the empirical language in Fig. 1 (Russell, 1940:62-63). Such stratification enables the specification of two formal aspects of a theory, namely, the vocabulary or semantic aspect and the grammar or syntactic aspect.

As was previously pointed out, however, auditing, like other social sciences, is permeated with objectives, norms, values, obligations, and paradigms. While these epitheoretical aspects fall outside the range of semantical and syntactical analysis, they are of critical importance to auditing theory construction. These nonformal aspects comprise the all-important background knowledge in which the more formal aspects of auditing theory (i.e., semantics and syntactics) are embedded. Epitheoretical aspects, which are depicted in Fig. 1 as the periphery surrounding the axiom center, have the nature of meta-level assumptions and are termed "postulates" in order to distinguish them from semantic and syntactic assumptions called "axioms." The postulates describe properties of the economic, social, and political environments along with interrelationships between these environments and auditing. Together, these nonformal postulates provide the critical perspective for theoretical systematization of auditing.

Epitheoretical analysis proceeds by first mapping the domain of auditing onto a scientific language. Empirical and theoretical propositions are given a hierarchical structuring in accordance with their generality and abstractness. As the schema emerges, additional, more fundamental, propositions (i.e., epi-level propositions) become evident and necessary to the theory of auditing. The established requirements of postulates (i.e., the characteristics normally associated with fundamental propositions, including consistency, coherence, contributiveness, independence, completeness, and economy) are then used to isolate and identify the subset of such

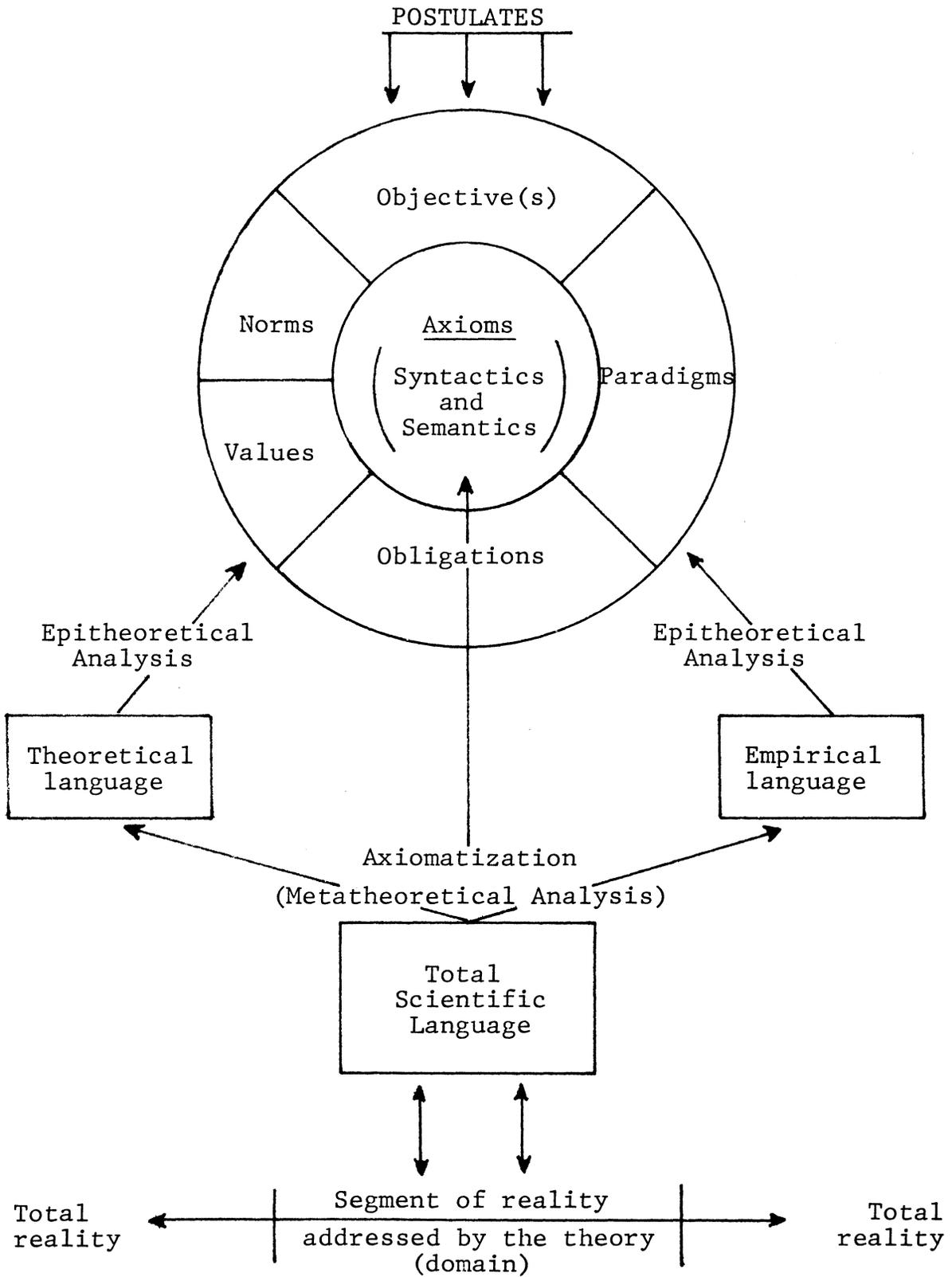


Figure 1. Framework for Axiomatization and its Epitheoretical Extension.

propositions which constitute the epitheoretical postulates of auditing. These postulates, in turn, provide normative guidance for the theoretical enrichment of auditing.

#### REFERENCES

- Brown, R.G. 1965. "Changing Audit Objectives and Techniques." *In* Readings in Auditing. 2d ed. James T. Johnson and J. Herman Brasseaux Eds. Cincinnati, South-Western Publishing Company.
- Brown, R.G. and Salquist, H. 1972. "Some Historical Auditing Milestones; An Epistemology of an Inexact Art." *In* Howard F. Stettler Ed. Auditing Looks Ahead. Lawrence, Kan., University of Kansas.
- Causey, D.Y., Jr. 1973. Duties and Liabilities of the CPA. Austin, Texas, Bureau of Business Research—The University of Texas.
- Chatfield, M. 1974. A History of Accounting Thought. Hinsdale, Ill., The Dryden Press.
- Hempel, C.G. 1970. "On the 'Standard Conception' of Scientific Theories." *In* Analyses of Theories and Methods of Physics and Psychology. Michael Radner and Stephen Winoker Eds. Minn. Stud. in the Phil. of Sci., Vol. IV. Minneapolis, University of Minnesota Press.
- Leinfellner, W. 1974. "A New Epitheoretical Analysis of Social Theories; A Reconstruction of Their Background Knowledge Including a Model of Statistical Decision Theory." *In* Developments in the Methodology of Social Sciences. W. Leinfellner and E. Köhler Eds. Dordrecht-Holland, D. Reidel Publishing Company.
- Mautz, R.K. and H.A. Sharaf. 1961. The Philosophy of Auditing. Evanston, Ill., American Accounting Association.
- Moyer, C.A. 1965. "Early Developments in American Auditing." *In* Readings in Auditing. 2nd ed. James T. Johnson and J. Herman Brasseaux Eds. Cincinnati, South-Western Publishing Company.
- Russell, B. 1940. An Inquiry into Meaning and Truth. London, George Allen and Unwin, Ltd.
- Statements on Auditing Standards No. 1. 1973. New York, American Institute of Certified Public Accountants.
- A Statement of Basic Auditing Concepts. 1973. Sarasota, Fla., American Accounting Association.
- Ultramares Corporation v. Touche, Niven & Company. 1931. 255 N.Y. 170; 174 N.E. 411.